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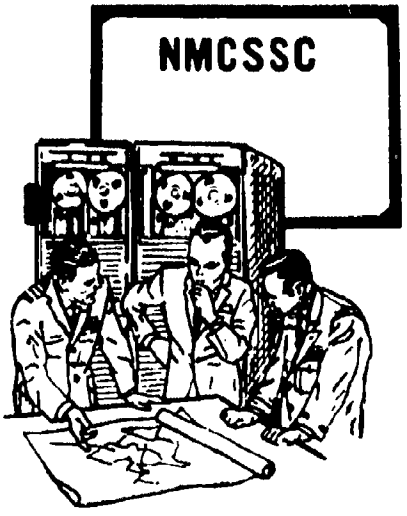

DEFENSE COMMUNICATIONS AGENCY

COMPUTER SYSTEM MANUAL
CSM PSM 9A-67
VOLUME I, PART C
29 FEBRUARY 1972

THE NMCSSC QUICK-REACTING GENERAL WAR GAMING SYSTEM (QUICK)

DATA INPUT SUBSYSTEM

Part A -AD743783

PROGRAMMING SPECIFICATIONS MANUAL

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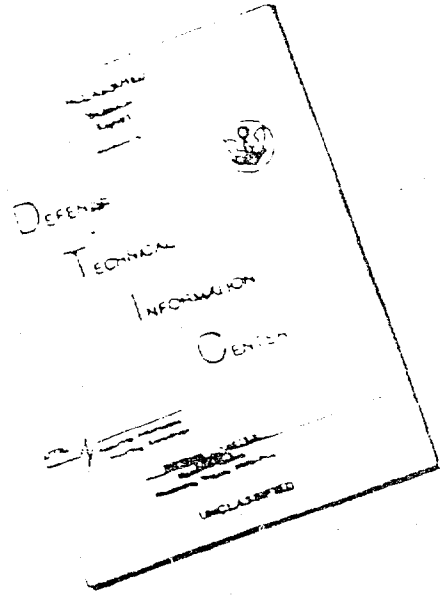

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13. ABSTRACT

This is one of three volumes describing the computer programming specifications for the Quick-Reacting General War Gaming System (QUICK). This volume addresses computer programs of the QUICK Data Input Subsystem. It is intended to serve as the basis for program maintenance activities. Accordingly, it describes the program functions and contains flow charts for each program and subprogram of the Data Input Subsystem.

Based upon suitable data base and user control parameters, QUICK will generate individual bomber and missile plans suitable for war gaming, and simulate the planned events. The generated plans are of a form suitable for independent review and revision. Subsequently, the planned events are simulated; various statistical summaries are produced to reflect the results of the war game. A variety of force postures and strategies can be accommodated.

QUICK is documented extensively in a set of Computer System Manuals (series 9-67) published by the National Military Command System Support Center (NMCSSC), Defense Communications Agency (DCA), The Pentagon, Washington, DC 20301 .

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NATIONAL MILITARY COMMAND SYSTEM SUPPORT CENTER

Computer System Manual Number CSM PSM 9A-67

19 February 1971

THE NMCSSC QUICK-REACTING GENERAL WAR GAMING SYSTEM (QUICK)

Programming Specifications Manual

Volume I - Data Input Subsystem

Part C

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ABSTRACT

The computerized Quick-Reacting General War Gaming System (QUICK) will accept input data, automatically generate global strategic nuclear war plans, simulate the planned events, and provide statistical output summaries. QUICK has been programmed in FORTRAN for use on the NMCSSC CDC 3800 computer system.

The QUICK Programming Specifications Manual (PSM) consists of three volumes: Volume I, Data Input Subsystem; Volume II, Plan Generation Subsystem; Volume III, Simulation and Data Output Subsystems. The Programming Specifications Manual complements the other QUICK Computer System Manuals to facilitate maintenance of the war gaming system. This volume, Volume I, provides the programmer/analyst with a technical description of the purpose, functions, general procedures, and programming techniques applicable to the programs of the Data Input Subsystem and to the utility programs/routines which support the system. This volume is in three parts: Part A provides a description of the programs/subroutines; Parts B and C contain the associated program listings. Companion documents are:

1. GENERAL DESCRIPTION
   Computer System Manual CSM GD 9A-67
   A nontechnical description for senior management personnel

2. ANALYTICAL MANUAL
   Computer System Manual CSM AM 9A-67 (three volumes)
   Provides a description of the system methodology for the nonprogrammer analysts

3. USER'S MANUAL
   Computer System Manual CSM UM 9-67 (two volumes)
   Provides detailed instructions for applications of the system

4. OPERATOR'S MANUAL
   Computer System Manual CSM OM 9A-67
   Provides instructions and procedures for the computer operators

```
      PROGRAM QUIKBASE                                                  1000
CSUBR      QUIKBASE  16APR71  ***************************************** 1000
C                                                                       2000
C                                                                       3000
CUSE       OPTIONS   START    ***************************************** 4000
      COMMON / OPTIONS/ NCON(8),INTAPE,NOUT1,NOUT2,NPR,NUM,NOPSET       1000
     1  ,ISETSIZ                                                        2000
CEND       OPTIONS   ***************************************************4000
C                                                                       5000
CUSE       HIST      START    ***************************************** 6000
      COMMON/HIST/NOPSUSD(10), NUSED                                    1000
CEND       HIST      ***************************************************6000
C                                                                       7000
  100 FORMAT(8(A8,2X))                                                  8000
  101 FORMAT(1X,*FIRST CONTROL CARD WRONG*,2X,8(A8,2X))                 9000
  102 FORMAT(1X,*OPTION ILLEGAL OR MISSPELLED*,                        10000
     1       2X, 8(A8,2X))                                             11000
  103 FORMAT( A4)                                                      12000
  104 FORMAT( 1X,*PROGRAM QUIKBASE WILL RUN ON OPTION *,               13000
     1 A8,/,1X, *INPUT ON * , I3,/,1X, *RUN IDENTIFICATION = *, 2A8)   14000
  105 FORMAT(1X, * OUTPUT ON TWO TAPES *, I3, *AND* ,I3)               15000
  106 FORMAT( 1X, * OUTPUT WILL BE ON TAPE * , I3, * ONLY *)           16000
  107 FORMAT( 1H1)                                                     17000
  108 FORMAT(1X,* ALL DATA ITEMS WILL BE PRINTED* )                    18000
  109 FORMAT(1X,*NO DATA ITEMS WILL BE PRINTED* )                      19000
  110 FORMAT( 1X,*SETS WILL BE DEFINED TO BE*,I6,* CARDS LONG*  )      20000
  111 FORMAT(1X,* A NEW SET WILL BE INITIATED EVERY                    21000
     1TIME THE *, 1X, A8,A5, * CHANGES*)                               22000
  112 FORMAT(1X,* A NEW SET WILL BE INITIATED AT EACH                  23000
     1OCCURRANCE OF THE WORD BEGINSET OR NEWSET *)                     24000
  113 FORMAT(4X,4I1)                                                   25000
  114 FORMAT(1X,* TAPE OPTION SELECTED BUT NO                          26000
     1 TAPE NUMBERS GIVEN *)                                           27000
  115 FORMAT(1X, * BUFFERED TAPE OPTION SELECTED                       28000
     1  BUT NO TAPE NUMBERS GIVEN*)                                    29000
  116 FORMAT(1X, * ALL INPUT WILL BE FROM CARDS * )                    30000
  117 FORMAT(1X,* CARD IMAGE TAPE INPUT FROM UNITS*, 4I4)              31000
  118 FORMAT(1X,*BUFFERED TAPE INPUT WILL BE FROM UNITS*4I4)           32000
  119 FORMAT(1X,* UPDATED SETS WILL BE PRINTED *)                      33000
  120 FORMAT(1X, * PRINT OPTIONS WILL BE SELECTED BY NEXT CARD * )     34000
  121 FORMAT(1X, * PROCESSOR QUIKBASE COMPLETED *)                     35000
  122 FORMAT(1X, 8(A8,2X))                                             36000
C                                                                      37000
C     TO MAKE NEW MASTER AND CHECKTAPES 08 JAN 71                      37100
C                                                                      38000
      EQUIVALENCE (XN,NODATE)                                          39000
      DIMENSION NUT(4)                                                 40000
      EQUIVALENCE(NUT(1),N1),(NUT(2),N2),(NUT(3),N3),(NUT(4),N4)       41000
      DIMENSION MUT(4)                                                 42000
      EQUIVALENCE(MUT(1),M1),(MUT(2),M2),(MUT(3),M3),(MUT(4),M4)       43000
C     CLEAR  ARRAY TO BLANKS                                           44000
      DO 20 I = 1, 10                                                  45000
   20 NOPSUSD(I) = 1H                                                  46000
      NUSED = 0                                                        47000
C    READ DATA CARD TO DEFINE THE RUN                                  48000
      PRINT 107                                                        49000
```

```
     70 READ 100,NCON                                                    50000
        PRINT 122, NCON                                                  51000
C       CHECK FOR  PROPER DATA CARD                                      52000
        IF( NCON(1).EQ.6HOPTION ) GO TO 2                                53000
C       CHECK FOR END OF QUIKBASE RUN                                    54000
        IF(NCON(1) .NE. 3HEND) GO TO 1                                   55000
        PRINT 121                                                        56000
        WRITE(44,121)                                                    57000
        STOP                                                             58000
      1 PRINT 101,NCON                                                   59000
        CALL ABORT                                                       60000
C       CHECK SECOND FIELD OF DATA CARD FOR SELECTED OPTION              61000
      2 IF(NCON(2) .EQ.6HSETIO) GO TO 300                                62000
    201 IF(NCON(2).EQ.6HUPDATE   ) GO TO 400                             63000
    202 IF(NCON(2).EQ.6HQUIKBSS  ) GO TO 500                             64000
    203 IF(NCON(2).EQ.6HPRNTDS   ) GO TO 600                             65000
        IF( NCON(2) .EQ. 8HPRNTDATA  ) GO TO 600                         66000
        IF(NCON(2) .EQ. 7HPRINTDB ) GO TO 600                            67000
        PRINT 102,NCON                                                   68000
        CALL ABORT                                                       69000
    400 IF( NCON(7) .NE. 1H      ) GO TO 401                             70000
        XN=GETDATE(X)                                                    71000
        NCON(7) = NDDATE                                                 72000
    401 NOUT1=6                                                          73000
        NOUT2=0                                                          74000
C       CHECK TO SEE IF SECOND COPY OF SETIO TAPE REQUESTED              75000
        IF( NCON(4). EQ. 6HBACKUP ) NOUT2 = 8                            76000
        NPR=1                                                            77000
C       CHECK TO SEE IF PRINT IS TURNED OFF                              78000
        IF(NCON(3).EQ.7HNOPRINT) NPR=2                                   79000
C       NPR = 1 PRINT UPDATES                                            80000
C       CHECK TO SEE IF PRINT CARDS WILL BE READ                         81000
        IF(NCON(3).EQ.8HPRINTALL) NPR=3                                  82000
C       NPR=2 =NOPRINT                                                   83000
C       NPR = 3 = MCERUAL SELECTION OF PRINTS                            84000
        NOPTAP=0                                                         85000
        DECODE(4,103,NCON(5)) NRUN                                       86000
        IF(NRUN.NE.4HTAPE )GO TO 402                                     87000
C       CHECK TO SEE IF CARD IMAGE DATA ON TAPE                          88000
        DECODE(4,113,NCON(5)) N1,N2,N3,N4                                89000
        IF(N1.LT.2.OR.N1.GT.5) GO TO 403                                 90000
C       CHECK FOR LEGAL TAPE NUMBERS                                     91000
        NOPTAP=NOPTAP + 1 $ REWIND N1                                    92000
        IF(N2.LT.2.OR.N2.GT.5) GO TO 403                                 93000
        NOPTAP=NOPTAP+1  $ REWIND N2                                     94000
        IF(N3.LT.2 .OR. N3.GT.5) GO TO 403                               95000
        NOPTAP=NOPTAP+1  $ REWIND N3                                     96000
        IF(N4.LT.2.OR.N4.GT.5) GO TO 403                                 97000
        NOPTAP=NOPTAP+1  $ REWIND N4                                     98000
C       CHECK TO SEE IF TAPE NUMBERS WERE GIVEN                          99000
    403 IF(NOPTAP.LE.0) PRINT 114                                        100000
    402 DECODE (4,103,NCON(6)) NRUN                                      101000
C       CHECK TO SEE IF BUFFER DATA WILL BE REQUESTED                    102000
        IF( NRUN.NE. 4HBUFF) GO TO 404                                   103000
        DECODE(4,113,NCON(6)) M1,M2,M3,M4                                104000
        NOPTAP=0                                                         105000
```

```
C     DO LOOP TO CHECK LOGICAL TAPES REQUESTED FOR BUFFERED TAPE          106000
      DO 405 I=1,4                                                       107000
      IF(MUT(I).LT.2.OR.MUT(I).GT.5) GO TO 406                           108000
      MOPTAP=MOPTAP+1                                                    109000
      REWIND MUT(I)                                                      110000
  405 CONTINUE                                                           111000
  406 IF(MOPTAP.LE.0) PRINT 115                                          112000
C     CHECK TO SEE IF ANY TAPE NUMBERS GIVEN                             113000
  404 CONTINUE                                                           114000
      INTAPE=1                                                           115000
      REWIND INTAPE                                                      116000
      PRINT 104, NCON(2), INTAPE, NCON(7)                                117000
C     IF STATEMENTS ARE TO SELECT CORRECT PRINT FORMATS                  118000
      IF(NOPTAP.EQ.0.AND.MOPTAP.EQ.0) PRINT 116                          119000
      IF(NOPTAP.GE.1) PRINT 117, (MUT(I),I=1,NOPTAP)                     120000
      IF(MOPTAP.GE.1) PRINT 118, (MUT(I),I=1,MOPTAP)                     121000
      IF(NOUT2.GT.0) PRINT 105,NOUT1,NOUT2                               122000
      IF(NOUT2.LE.0 ) PRINT 106,NOUT1                                    123000
      IF(NPR.EQ.1) PRINT 119                                             124000
      IF(NPR.EQ.2) PRINT 109                                             125000
      IF(NPR.EQ.3) PRINT 120                                             126000
      PRINT 107                                                          127000
      NUSED = NUSED + 1                                                  128000
      NOPSUSD(NUSED) = 8HUPDATE                                          129000
      CALL FASTSET                                                       130000
      GO TO 70                                                           131000
    3 CONTINUE                                                           132000
      PRINT 102,NCON                                                     133000
      CALL ABORT                                                         134000
  300 DECODE( 4, 103, NCON(3)) NRUN                                      135000
      INTAPE = 60                                                        136000
C   INPUT TO BOOTSTRAP ON CARDS OR ON TAPE 10                            137000
      IF( NRUN .EQ. 4HTAPE  ) INTAPE = 10                                138000
      NPR = 1                                                            139000
C     CHECK TO SEE IF PRINT IS TURNED OFF                                140000
      IF( NCON(4) .EQ. 8HNOPRINT   )NPR = 2                              141000
C     OUT PUT FROM SETID ON TAPE1 (AND OPTIONALLY OUTAPE 9 ALSO)         142000
      NOUT2= 0                                                           143000
C     CHECK TO SEE IF SECOND COPY OF UPDATE TAPE WANTED                  144000
      IF(NCON(5).EQ.8HBACKUP     ) NOUT2=9                               145000
      NOUT1 = 1                                                          146000
C     CHECK TO SEE IF RUN IDENT IS GIVEN                                 147000
      IF(NCON(6).NE.1H    ) GO TO 6                                      148000
      XN=GETDATE(X)                                                      149000
      NCON(6)=NODATE                                                     150000
    6 CONTINUE                                                           151000
      NOPSET = 4                                                         152000
C     CHECK TO SEE HOW SETS WELL BE GENERATED                            153000
      IF(NCON(7) .EQ. 8HMANUAL  ) NOPSET = 5                             154000
      IF(NCON(7) .EQ.8HMAXSET  ) NOPSET = 1                              155000
      NUM=1                                                              158000
      PRINT 104,NCON(2),INTAPE,NCON(6)                                   159000
C     IF STATEMENTS TO CHOSE APPROPRIATE PRINTS                          160000
      IF(NOUT2.GT.0) PRINT 105,NOUT1,NOUT2                               161000
      IF(NOUT2.LE.0) PRINT 106,NOUT1                                     162000
      IF(NPR.EQ.1) PRINT 108                                             163000
```

```
      IF(NPH.EQ.2) PRINT 109                                              164000
      IF( NOPSET .EQ. 1) PRINT 110, ISETSIZ                               165000
      NTEMP=IP                                                            166000
C     IF STATEMENTS TO SET UP PROPER OPTION PRINT                         167000
      IF(NOPSET.EQ.4) NRUN=BHSIDE OR                                      170000
      IF(NOPSET.EQ.4) NTEMP=BHCLASS                                       171000
      IF(NOPSET.NE.1.AND.NOPSET.NE.5) PRINT 111,NRUN,NTEMP                172000
      IF(NOPSET.EQ.5) PRINT 112                                           173000
      NUM = 1                                                             174000
      NUSED = NUSED + 1                                                   175000
      NOPSUSD(NUSED) = BHSETID                                            176000
      CALL SETID                                                          177000
      GO TO 7C                                                            178000
  500 CONTINUE                                                            179000
      CALL MAKEBAS                                                        180000
      GO TO 7C                                                            181000
  600 CONTINUE                                                            182000
      IATAPE = 7                                                          183000
      CALL PRONLY                                                         184000
      GO TO 7C                                                            185000
      END                                                                 186000
```

IDENT QUIKBASE

PROGRAM LENGTH		01503
ENTRY POINTS	QUIKBASE	00423
BLOCK NAMES		
	OPTIONS	00017
	HIST	00013
EXTERNAL SYMBOLS		
	QQUENTRY	
	THENQ.	
	QQUSTOPS	
	QQQUICT.	
	ABORT	
	GETDATE	
	FASTSET	
	SETIU	
	MAKEBAS	
	PRONLY	
	NEW.	
	TSM.	
	DEC.	
	STM.	
	SLC.	
	SLI.	
	QNSINGL.	

X00005	ABORT	00532	00576	01232								
P01473	CNVRTI.	00642	00655	00657	00660	00661	00757	00772	00774	00775	00776	01044
		01045	01046	01075	01115	01133	01134	01147	01240	01322	01323	01324
		01337	01340	01353	01405	01434	01435					
P00014	CHFMT.	00423	00423	00423	00423	00423	00423	00423	00423	00423	00423	00423
		00423	00423	00423	00423	00423	00423	00423	00423	00423	00423	00423
		00423										
X00015	DEC.	00637	00652	00754	00767	01235						
P00001	DICT.	00425	00427	00441	00444	00447	00453	00456	00461	00465	00470	00503
		00506	00511	00514	00517	00522	00526	00531	00533	00566	00572	00575
		00577	00605	00640	00645	00653	00664	00700	00713	00726	00741	00747
		00752	00755	00762	00770	01001	01020	01030	01033	01037	01042	01050
		01057	01062	01070	01102	01110	01122	01130	01136	01144	01151	01156
		01161	01166	01171	01176	01201	01204	01207	01216	01222	01226	01231
		01233	01236	01243	01274	01320	01326	01334	01342	01350	01355	01362
		01365	01372	01375	01402	01407	01431	01437	01444	01447	01460	01463
		01470										
P01474	ENDING.	00517										
P00000	EXIT.	01474										
X00007	FASTSET	01215										
P00014	FORMAT.	00430	00471	00475	00534	00540	00544	00550	00554	00560	00600	00615
		00623	00627	00646	00763	01212	01246	01254	01262	01270	01303	01307
		01410	01414	01421	01454							
X00006	GETDATE	00604	01273									
P00445	GG00CCC.	00437										
P00457	GG00001.	00445										
P00471	GG00002.	00457										
P00507	GG00003.	00501										
P00515	GG00004.	00507										
P00532	GG00005.	00520										
P00576	GG00006.	00564										
P00646	GG00007.	00636										
P00665	GG00010.	00651										
P00753	GG00011.	00745										
P00763	GG00012.	00753										
P01002	GG00013.	00766										
P01034	GG00014.	01026										
P01051	GG00015.	01040										
P01063	GG00016.	01055										
P01103	GG00017.	01066										
P01123	GG00020.	01106										
P01137	GG00021.	01126										
P01152	GG00022.	01142										
P01162	GG00023.	01154										
P01172	GG00024.	01164										
P01202	GG00025.	01174										
P01210	GG00026.	01202										
P01232	GG00027.	01220										
P01244	GG00030.	01234										
P01327	GG00031.	01316										
P01343	GG00032.	01332										
P01356	GG00033.	01346										
P01366	GG00034.	01360										
P01376	GG00035.	01370										

```
P01410  GG00036.   01400
P01440  GG00037.   01427
P01450  GG00040.   01442
P01475  I          00431  00431  01004  01005  01010  01016  01021  01073  01074  01076  01113
                   01114  01116
P00670  IF0000C1.  00666
P00703  IF0000C2.  00702
P00716  IF0000C3.  00715
P00731  IF0000C4.  00730
P01010  IF0000C5.  01007
P01053  IF0000C6.
P01425  IF0000C7.
C00010  INTAPE     01034  01035  01045  01244  01245  01250  01251  01323  01465  01466
C00016  ISETSIZ    01404  01404
P00520  .I         00500
P00474  .1000C1
P00475  .1000C2    00473
P00500  .1000C3
P00501  .1000C4    00477
P00537  .1000C5
P00540  .1000C6    00536
P00543  .1000C7
P00544  .1000C8    00542
P00547  .1000C9
P00550  .1000C10   00546
P00553  .1000C11
P00554  .1000C12   00552
P00557  .1000C13
P00560  .1000C14   00556
P00563  .1000C15
P00564  .1000C16   00562
P00603  .1000C17
P00604  .1000C18   00602
P00617  .1000C19
P00621  .1000C20   00616
P00625  .1000C21
P00627  .1000C22   00624
P00632  .1000C23
P00634  .1000C24   00631
P00650  .1000C25
P00651  .1000C26   00647
P00673  .1000C27   00667
P00674  .1000C28   00671  00672
P00706  .1000C29   00702
P00707  .1000C30   00704  00705
P00721  .1000C31   00715
P00722  .1000C32   00717  00720
P00734  .1000C33   00730
P00735  .1000C34   00732  00733
P00745  .1000C35   00743
P00753  .1000C36   00744
P00765  .1000C37
P00766  .1000C38   00764
P01013  .1000C39   01007
```

```
P01014  .100040  01012  01012
P01026  .100041  01024
P01034  .100042  01025
P01055  .100043
P01063  .100044  01052  01054
P01066  .100045  01064
P01103  .100046  01065
P01106  .100047  01104
P01123  .100048  01105
P01126  .100049
P01137  .100050  01124  01125
P01142  .100051  01140
P01152  .100052  01141
P01154  .100053
P01162  .100054  01153
P01164  .100055
P01172  .100056  01163
P01174  .100057
P01202  .100058  01173
P01250  .100059
P01252  .100060  01247
P01256  .100061
P01260  .100062  01255
P01264  .100063
P01266  .100064  01263
P01272  .100065
P01273  .100066  01271
P01305  .100067
P01307  .100068  01304
P01312  .100069
P01314  .100070  01311
P01332  .100071
P01343  .100072  01330  01331
P01346  .100073  01344
P01356  .100074  01345
P01360  .100075
P01366  .100076  01357
P01370  .100077
P01376  .100078  01367
P01400  .100079
P01410  .100080  01377
P01414  .100081  01413
P01416  .100082  01413
P01421  .100083  01420
P01423  .100084  01417
P01427  .100085
P01440  .100086  01424  01426
P01442  .100087
P01450  .100088  01441
P00534  .2       00474
P00433  .20
P00540  .201
P00544  .202
P00550  .203
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P01220  .3
P01234  .300        00537
P00600  .400        00543
P00612  .401        00603
P00753  .402        00650
P00742  .403        00673   00706   00721   00734
P01034  .404        00765
P01021  .405
P01023  .406        01013
P01462  .500        00547
P01301  .6          01272
P01465  .600        00553   00557   00563
P00445  .70         01217   01461   01464   01471
P00014  ..100       00450
P00371  ..100C00    00433
P00372  ..100C01    00472
P00373  ..100C02    00476
P00374  ..100C03    00535
P00375  ..100C04    00541
P00376  ..100C05    00545
P00377  ..100C06    00551
P00400  ..100C07    00555
P00401  ..100C08    00561
P00402  ..100C09    00601
P00403  ..100C10    00616
P00404  ..100C11    00624
P00405  ..100C12    00630
P00406  ..100C13    00647
P00407  ..100C14    00764
P00410  ..100C15    01212
P00411  ..100C16    01247
P00412  ..100C17    01255
P00413  ..100C18    01263
P00414  ..100C19    01271
P00415  ..100C20    01304
P00416  ..100C21    01310
P00417  ..100C22    01410
P00420  ..100C23    01414
P00421  ..100C24    01421
P00422  ..100C25    01454
P00022  ..101       00523
P00036  ..102       00567   01223
P00053  ..103       00641   00756   01237
P00056  ..104       01043   01321
P00105  ..105       01131   01335
P00120  ..106       01145   01351
P00132  ..107       00442   01205
P00136  ..108       01363
P00146  ..109       01167   01373
P00156  ..110       01403
P00172  ..111       01432
P00213  ..112       01445
P00233  ..113       00654   00771
P00237  ..114       00750
```

```
P00055  ..115     01031
P00074  ..116     01060
P00304  ..117     01071
P00316  ..118     01111
P00330  ..119     01157
P00340  ..120     01177
P00352  ..121     00504   00512
P00362  ..122     00462
P00007  M1        00773
P00010  M2        00775
P00011  M3        00776
P00012  M4        00777
X00011  MAKEBAS   01462
P01476  MOPTAP    01003   01014   01015   01023   01053   01103   01117
P00007  MUT       01006   01011   01016   01115
P00003  N1        00656   00665   00670   00676
P00004  N2        00660   00701   00703   00711
P00005  N3        00661   00714   00716   00724
P00006  N4        00662   00727   00731   00737
C00000  NCON      00454   00466   00471   00471   00475   00475   00527   00534   00534   00540   00540
                  00544   00544   00550   00550   00554   00554   00560   00560   00573   00600   00600
                  00610   00611   00615   00623   00627   00627   00641   00654   00756   00771   01044
                  01046   01227   01237   01254   01262   01270   01277   01300   01303   01307   01307
                  01322   01324
P00013  NDDATE    00610   01277
C00015  NOPSET    01301   01302   01305   01306   01312   01313   01376   01376   01411   01412   01416
                  01416   01423   01423   01425   01425   01440   0144C
C00000  NOPSUSO   00434   00434   01214   01456
P01477  NOPTAP    00635   00674   00675   00707   00710   00722   00723   00735   00736   00742   01051
                  01063   01077
C00011  NOUT1     00612   00613   01132   01132   01146   01146   01266   01267   01335   01336   01352
                  01352
C00012  NOUT2     00614   00617   00620   01123   01123   01134   01137   01137   01260   01261   01264
                  01265   01327   01327   01340   01343   01343
C00013  NPR       00621   00622   00625   00626   00632   00633   01152   01152   01162   01162   01172
                  01172   01252   01253   01256   01257   01356   01356   01366   01366
P01500  NRUN      00643   00646   00750   00763   01241   01246   01415   01433
P01501  NTEMP     01411   01422   01435
C00014  NUM       01314   01315   01450   01451
C00012  NUSED     00436   01210   01210   01211   01213   01213   01451   01452   01453   01455   01455
P00003  NUT       01075
X00012  PRONLY    01467
X00004  QBQDICT.  00000   00424
X00001  QBQENTRY  00426
X00003  QBQSTOPS  00516
X00021  QNSINGL.  01472
P00423  QUIKBASE  00423
X00013  REW.      00677   00712   00725   00740   01017   01036
X00010  SETID     01457
X00020  SLI.      00452
X00017  SLO.      00464   00525   00571   01225
X00018  STH.      00440   00460   00502   00510   00521   00565   00746   01027   01041   01056   01067
                  01107   01127   01143   01155   01165   01175   01203   01221   01317   01333   01347
                  01361   01371   01401   01430   01443
```

```
X00002  THEND.    00443  00455  00467  00505  00513  00530  00574  00644  00663  00751  00761
                  01000  01032  01047  01061  01101  01121  01135  01150  01160  01170  01200
                  01206  01230  01242  01325  01341  01354  01364  01374  01406  01436  01446
P01077  TS00003.  01073
P01117  TS00004.  01113
X00014  TSM.      00446
P00433  WS00001.  00435
P01005  WS00002.  01022
P01074  WS00003.  01100  01100
P01114  WS00004.  01120  01120
P01502  X         00606  01275
P00013  XN        00607  01276
   00376 SYMBOLS
```

```
      SUBROUTINE ADDSET(I)                                              1000
CSUBR     ADDSET    START     ********************************************* 4000
CUSE      SETIDD    START     ********************************************* 2000
      COMMON/SETIDD/ID(50),INDEX,JNDEX,IAUTO                            1000
CENU      SETIDD    ********************************************************2000
      J=ILOOK(JNDEX,I)                                                  3000
C     IS SET NUMBER STORED IN ID ARRAY                                  4000
      IF (J .EQ.0)1,2                                                   5000
C     IS ARRAY FULL                                                     6000
    1 IF(JNDEX.EQ.50)3,5                                                7000
    3 PRINT 4,I                                                         8000
    4 FORMAT(2X,14HID OVERFLOW,I=,I5)                                   9000
      RETURN                                                           10000
    5 JNDEX=JNDEX+1                                                    11000
      ID(JNDEX)=I                                                      12000
    2 RETURN                                                           13000
      END                                                              14000
```

IDENT ADDSET

PROGRAM LENGTH		00104
ENTRY POINTS	ADDSET	00012
BLOCK NAMES		
	SETIDD	00065
EXTERNAL SYMBOLS		
	THEAD.	
	QBODICT.	
	ILOCK	
	STH.	
	QNSINGL.	

```
P00012  ADDSET      00012
P00046  BEGIN.      00065   00073   00077
P00045  CNVRTI.     00032
P00003  CNFMT.      00035
P00001  DICT.       00014   00017   00027   00034   00051   00052
P00066  ENDING.     00015   00035   00043   00046   00047   00047   0005C   00050
P00000  EXIT.       00071
P00003  FORMAT.
P00020  FP00001.    00064
P00031  FP00002.    00062   00063
P00040  FP00003.    00060   00061
P00102  GETPL.      00053
P00072  GETPU.      00056   00076
P00035  GG00000.    00025
P00103  I           00020   00031   00040
C00064  IAUTO
C00000  ID          00042
X00003  ILOOK       00016
C00062  INDEX
P00046  INITIAL.    00015
P00023  .1
P00043  .2          00022
P00025  .3
P00036  .5          00024
P00003  ..4         00030
P00103  J           00021
C00063  JNDEX       00020   00023   00023   00036   00036   00037   00041   00041
P00065  PF00002.    00057
X00002  QBQDICT.    00000   00013
X00005  QNSINGL.    00044
X00004  STH.        00026
X00001  THEND.      00033
   00040 SYMBOLS
```

```
      SUBROUTINE BUFFIT(IDONE)                                          1000
CSUBR      BUFFIT    START     ****************************************  6000
C***  THE FUNCTION OF SUBROUTINE BUFFIT IS TO BUFFER IN COMPLETE ITEMS  2000
C***  THAT ARE TO BE ADDED TO THE DATABASE.  THESE ITEMS ARE            3000
C***  RETURNED TO SUBROUTINE NEWDATA VIA THE ARRAY INSTUFF 8 WORDS      4000
C***  AT A TIME.                                                        5000
CUSE       ITSTUFF   START     ****************************************  6000
      COMMON/ITSTUFF/ITSTUFF(56)                                        1000
CEND       ITSTUFF   ********************************************************6000
CUSE       MYTAPES   START     ****************************************  7000
      COMMON/MYTAPES/INUNIT,JTIN,LOUT,KTAPEOUT,KINCARDS                 1000
CEND       MYTAPES   ********************************************************7000
CUSE       MYGOODS   START     ****************************************  8000
      COMMON/MYGOODS/NLINE,ISET,JSET,NEWDATE                            1000
CENU       MYGOODS   ********************************************************8000
CUSE       MYINPUT   START     ****************************************  9000
      COMMON/MYINPUT/INSTUFF(10)                                        1000
CENU       MYINPUT   ********************************************************9000
CUSE       NEWSET    START     ****************************************  10000
      COMMON/NEWSET/NEWSET                                              1000
CENU       NEWSET    ********************************************************10000
      DATA(IGO=1),(MIN=1),(MAX=8)                                       11000
      IF(IGO) 1,6                                                       12000
C***  BUFFER IN NEXT ITEM                                               13000
 1    BUFFER IN (INUNIT,0)(ITSTUFF(1),ITSTUFF(56))                      14000
C***  IS BUFFER OPERATION COMPLETE                                      15000
 2    IF(UNIT,INUNIT) 2,3,15,16                                         16000
 3    CONTINUE                                                          17000
C***  DETERMINE SET NUMBER FOR THIS ITEM                                18000
      MYSET=NUMGET(ITSTUFF(8),8)                                        19000
 4    IGO=0                                                             20000
C***  IS THE SET NUMBER CORRECT                                         21000
      IF(MYSET.EQ.NEWSET.OR.MYSET.EQ.ISET) 5,12                         22000
C***  REMOVE SET NUMBER BEFORE TRANSFERING ITEM TO THE DATABASE         23000
 5    ITSTUFF(8)=BM                                                     24000
C***  IS THE CURRENT LINE IN BUFFER AREA BLANK                          25000
    6 DO 100 LIM = 1,8                                                  26000
      MMIN = MIN + LIM-1                                                27000
      IF (ITSTUFF(MMIN).EQ.IM ) 100,7                                   28000
  100 CONTINUE                                                          29000
      IF (MAX .GE. 56) 10,110                                           30000
  110 MIN = MAX + 1   $   MAX = MIN + 7   $   GO TO 6                   31000
C***  MOVE PROPER 8 WORDS TO INSTUFF ARRAY                              32000
 7    N=0                                                               33000
      DO 8 I=MIN,MAX                                                    34000
      N=N+1                                                             35000
 8    INSTUFF(N)=ITSTUFF(I)                                             36000
C***  HAS ALL DATA BEEN TRANSFERRED                                     37000
      IF(MAX.GE.56) 11,9                                                38000
C***  CALCULATE INDEXES FOR NEXT 8 WORDS                                39000
 9    MIN=MAX+1                                                         40000
      MAX=MIN+7                                                         41000
      RETURN                                                            42000
C***  RE-INITIALIZE INDEX NUMBERS, A BLANK LINE HAS BEEN DETECTED IN    43000
C***  THE INPUT BUFFER AREA                                             44000
 10   MIN=1                                                             45000
```

```
      MAX=8                                                              46000
      GO TO 1                                                            47000
C***  A NEW SET OF DATA HAS BEEN ENCOUNTERED, RE-INITIALIZE INDEX NUMBER 48000
   12 BACKSPACE INUNIT                                                   49000
   13 IDONE =1                                                           50000
C***  TRANSFER OF ALL DATA IN INPUT BUFFER AREA HAS BEEN COMPLETED,      51000
C***  RE-INITIALIZE INDEX NUMBERS                                        52000
   11 IGO=1                                                              53000
   14 MIN=1                                                              54000
      MAX=8                                                              55000
      RETURN                                                             56000
C***  END OF FILE HAS BEEN ENCOUNTERED, REWIND INPUT TAPE                57000
   15 REWIND INUNIT                                                      58000
      GO TO 13                                                           59000
C***  A PARITY ERROR HAS BEEN DETECTED, PRINT ERROR MESSAGE AND          60000
C***  TERMINATE PROGRAM                                                  61000
   16 PRINT 17,INUNIT                                                    62000
   17 FORMAT(1H1,10X,19HPARITY ERROR ON LTN ,I3,15H JOB TERMINATED  )    63000
      END                                                                64000
```

IDENT BUFFIT

PROGRAM LENGTH		00223
ENTRY POINTS	BUFFIT	00025
BLOCK NAMES		
	ITSTUFF	00070
	MYTAPES	00005
	MYGOODS	00004
	MYINPUT	00017
	NEWSET	00001
EXTERNAL SYMBOLS		
	TMEND.	
	QBUDICT.	
	NUMGET	
	QBUIFUNI	
	BSP.	
	REW.	
	BFI.	
	STM.	
	QNSINGL.	

P00162	BEGIN.	00176	00204	00210						
X00007	BFI.	00035								
X00005	BSP.	00132								
P00025	BUFFIT	00025								
P00161	CNVRTI.	00154								
P00215	COUNT.	00107	00110							
P00006	CRFMT.	00157								
P00001	DICT.	00027	00036	00042	00046	00133	00145	00151	00156	00165	00166
P00177	ENDING.	00030	00125	00142	00157	00162	00163	00163	00164	00164	
P00000	EXIT.	00202								
P00006	FORMAT.	00060	00062							
P00134	FP00001.	00174	00175							
P00213	GETPL.	00167								
P00203	GETPU.	00172	00207							
P00157	GG00001.	00147								
P00216	I	00105	00107							
P00006	IDONE	00135								
P00055	IF00001.									
P00003	IGO	00031	00052	00137						
P00162	INITIAL.	00030								
C00000	INSTUFF	00115	00115							
C00000	INUNIT	00033	00033	00040	00040	00131	00131	00143	00143	00153	00153
C00001	ISET	00056	00056							
C00000	ITSTUFF	00037	00037	00047	00061	00061	00067	00067	00113	00113	
P00072	.100									
P00126	.10	00075	00076							
P00033	.1	00032	00130							
P00077	.110	00075								
P00136	.11	00120	00121							
P00131	.12	00057								
P00134	.13	00146								
P00140	.14									
P00143	.15	00044								
P00147	.16	00044								
P00040	.2	00043								
P00045	.3	00043								
P00051	.4									
P00060	.5	00054	00057							
P00062	.6	00032	00102							
P00103	.7	00071								
P00113	.8									
P00122	.9	00121								
P00006	..100C00	00060								
P00007	..100C01	00070								
P00010	..1T	00152								
C00002	JSET									
C00001	JTIN									
C00004	KINCARDS									
C00003	KTAPECUT									
P00217	LIM	00063	00065	00072						
C00002	LOUT									
P00005	MAX	00074	00077	00101	00105	00117	00122	00124	00130	00142	
P00004	MIN	00064	00100	00104	00106	00123	00127	00141			
P00220	MMIN	00066	00066								

```
P00221  MYSET       00050   00052   00055
P00222  N           00104   00111   00112   00114
C00003  NEWDATE
C00000  NEWSET      00053   00053
C00000  NLINE
X00003  NUMGET      00045
P00176  PS000C2.    00173
X00002  QBQDICT.    00000   00026
X00004  QBQIFUNI    00041
X00011  QNSINGL.    00160
X00006  NEW.        00144
X00010  STM.        00150
X00001  THEND.      00155
P00117  TS000C2.    00106
P00064  WS000C1.    00073
P00111  WS000C2.    00116
  00106 SYMBOLS
```

```
      SUBROUTINE CARUCK                                                 1000
CSUBR      CARDCK    START     ***************************************** 12000
CUSE       OPTIONS   START     ***************************************** 2000
      COMMON / OPTIONS/ NCON(8),INTAPE,NOUT1,NOUT2,NPR,NUM,NOPSET       1000
     1  ,ISETSIZ                                                        2000
CEND       OPTIONS   ********************************************************* 2000
C***  THIS SUBROUTINE CHECKS FOR PROPER SEQUENCE OF INPUT DATA CARDS    3000
C     AND WRITES THE DATA TO TAPE KINCARDS                              4000
      DIMENSION INCARD(8)                                               5000
CUSE       MYTAPES   START     ***************************************** 6000
      COMMON/MYTAPES/INUNIT,JTIN,LOUT,KTAPEOUT,KINCARDS                 1000
CEND       MYTAPES   ********************************************************* 6000
CUSE       ITP       START     ***************************************** 7000
      COMMON/ITP/ITP                                                    1000
CEND       ITP       ********************************************************* 7000
CUSE       NOERRORS  START     ***************************************** 8000
      COMMON/NOERRORS/NOERRORS,NAMEOF,NRPHONE,IWANTBU                   1000
CEND       NOERRORS  ********************************************************* 8000
      NOERRORS=IOLDSET=IOLDLINE=0                                       9000
      LASTREP = -100                                                    10000
      LASTADD = -200                                                    11000
C***  READ FIRST OPTION CONTROL CARD                                    12000
  100 READ 3002,(INCARD(I),LCOMTEST,(INCARD(I),I=2,8))                  13000
      IF(LCOMTEST.EQ.1HX) 41,6                                          14000
C***  IS THIS AN OPTION CONTROL CARD OR A NEW DATA CARD                 15000
   41 CONTINUE                                                          16000
      ISET = NUMGET(INCARD(2),8)                                        17000
      JIMSET = ISET                                                     18000
      LINENO = NUMGET(INCARD(3),8)                                      19000
      DECODE(8,400,INCARD(1)) ITST                                      20000
      IF(ITST .EQ. 1HA)  GO TO 411                                      21000
      IF( ITST .EQ. 1HR) GO TO 111                                      22000
      IF( ITST .NE. 1HD) GO TO 77                                       23000
  333 INCARD(1) = 6HDELETE                                              24000
      LASTREP = -100                                                    25000
      LASTADD = -200                                                    26000
      GO TO 3                                                           27000
  411 INCARD(1) = 6HADDAFTER                                            28000
      LASTADD = ISET * 10000 + LINENO                                   29000
      IF (INCARD(7) .EQ. 6HNEWSET)  JIMSET = NUMGET(INCARD(8),8)        30000
      GO TO 3                                                           31000
  111 INCARD(1) = 7HREPLACE                                             32000
      LASTREP = ISET * 10000 + LINENO                                   33000
      LASTADD = -200                                                    34000
    3 CONTINUE                                                          35000
      CALL AUDSET(JIMSET)                                               36000
C***  CHECK FOR PROPER SEQUENCING OF SET AND LINE NUMBERS               37000
      IF(ISET-IOLDSET)6,61,4                                            38000
4     IOLDSET=ISET                                                      39000
      IOLDLINE=0                                                        40000
61    IF(LINENO.GT.IOLDLINE) 5,6                                        41000
5     IOLDLINE=LINENO                                                   42000
C***  WRITE CARD IMAGES OUT ON TAPE                                     43000
    6 ITP = 10                                                          44000
      CALL WRARRAY(INCARD,8)                                            45000
      PRINT  600,(INCARD(I),LCOMTEST,(INCARD(I),I=2,8))                 46000
```

```
C***  AN OPTION CONTROL CARD WITH 4HLAST IN THE FIR_. FOUR COLUMNS          47000
C***  SIGNIFIES THE END OF THE INPUT CARDS                                  48000
      IF(INCARD(1).Eq. 4HLAST) 7,100                                        49000
    7 CONTINUE                                                              50000
      NAMEOF = INCARD(2)                                                    51000
      ITP = 10                                                              52000
      CALL TERMTAP                                                          53000
      NRPHONE=INCARD(3)                                                     54000
      RETURN                                                                55000
C***                          POSSIBLE SEQUENCE ERROR                     56000
    8 IF (LASTREP - LASTADD)  9, 5, 9                                       57000
C***                          CONTROL CARD SEQUENCE ERROR                 58000
    9 NOERRORS = NOERRORS + 1                                               59000
C***  PRINT CARD IMAGES THAT ARE OUT OF SEQUENCE                            60000
      PRINT 200 ,(INCARD(1),LCOMTEST,(INCARD(I),I=2,8))                     61000
      GO TO 100                                                             62000
   77 NOERRORS=NOERRORS+1                                                   63000
C***  PRINT INCORRECT CONTROL CARD                                          64000
      PRINT 3001,(INCARD(1),LCOMTEST,(INCARD(I),I=2,8))                     65000
      GO TO 100                                                             66000
  400 FORMAT( A1,7X)                                                        67000
300   FORMAT(8(A8,2X))                                                      68000
 600  FORMAT(5X,A8,1X,A1,7(A8,2X))                                          69000
  200 FORMAT(//* CONTROL NUMBERS OUT OF SEQUENCE *,A8,1X,A1,7(A8,2X)///)    70000
 3001 FORMAT(//* INCORRECT CONTROL CARD *,A8,1X,A1,7(A8,2X)////)            71000
 3002 FORMAT(A8,1X,A1,7(A8,2X))                                             72000
      END                                                                   73000
```

IDENT CARDCK

PROGRAM LENGTH		00373
ENTRY POINTS	CARDCK	00121
BLOCK NAMES		
	OPTIONS	00017
	MTTAPES	00005
	ITP	00001
	NOERRORS	00004
EXTERNAL SYMBOLS		
	THEND.	
	QBUDICT.	
	NUMGET	
	ADDSET	
	WHARRAY	
	TERMTAP	
	TSM.	
	DEC.	
	STM.	
	QNSINGL.	

X00004	ADDSET	00232									
P00355	BEGIN.	00355									
P00121	CARDCK	00121									
P00354	CNVRTI.	00137	00141	00144	00171	00262	00263	00266	00320	00321	00324	00341
		00342	00345									
P00013	CRFMT.	00353	00353	00353	00353	00353	00353					
X00010	DEC.	00166										
P00001	DICT.	00123	00135	00151	00155	00162	00167	00174	00221	00233	00253	00257
		00272	00302	00315	00330	00336	00351					
P00356	ENDING.	00124	00305									
P00000	EXIT.	00356										
P00013	FORMAT.	00152	00175	00200	00203	00206	00212	00216	00225	00273		
P00152	GG00000.	00133										
P00175	GG00001.	00165										
P00273	GG00002.	00255										
P00331	GG00003.	00313										
P00352	GG00004.	00334										
P00361	I	00143	00145	00146	00264	00265	00267	00322	00323	00325	00343	00344
		00346										
P00003	INCARD	00140	00146	00156	00163	00170	00207	00213	00216	00222	00226	00254
		00261	00266	00273	00275	00303	00317	00324	00340	00345		
P00355	INITIAL.	00124										
C00010	INTAPE											
C00000	INUNIT											
P00362	IOLDLINE	00126	00242	00244	00247							
P00363	IOLDSET	00126	00236	00241								
P00364	ISET	00157	00213	00226	00235	00240						
C00016	ISETSIZ											
C00000	ITP	00250	00251	00277	00300							
P00365	ITST	00172	00175	00200	00203							
C00003	IWANTBU											
P00133	.100	00274	00331	00352								
P00177	.100001											
P00200	.100002	00176										
P00202	.100003											
P00203	.100004	00201										
P00205	.100005											
P00206	.100006	00204										
P00220	.100007											
P00224	.100008	00217										
P00225	.111	00202										
P00232	.3	00211	00224									
P00206	.333											
P00240	.4											
P00154	.41											
P00212	.411	00177										
P00246	.5	00307										
P00250	.6	00153										
P00243	.61	00236										
P00275	.7											
P00332	.77	00205										
P00306	.8	00237	00244	00245								
P00311	.9	00310										
P00013	..100000	00153										

```
P00014  ..100001   00176
P00015  ..100002   00201
P00016  ..100003   00204
P00017  ..100004   00206
P00020  ..100005   00212
P00021  ..100006   00216
P00022  ..100007   00225
P00023  ..100008   00274
P00050  ..200      00316
P00030  ..300
P00071  ..3001     00337
P00110  ..3002     00136
P00024  ..400      00170
P00036  ..600      00260
P00366  JIMSET.    00160   00223   00234
C00001  JTIN
C00004  KINCARDS
C00003  KTAPEOUT
P00367  LASTADD    00132   00211   00215   00231   00307
P00370  LASTREP    00131   00210   00230   00306
P00371  LCOMTEST   00142   00152   00263   00321   00342
P00372  LINENO     00164   00214   00227   00243   00246
C00002  LOUT
C00001  NAMEOF     00276   00276
C00000  NCON
C00000  NOERRORS   00127   00127   00311   00311   00312   00332   00332   00333
C00015  NOPSET
C00011  NOUT1
C00012  NOUT2
C00013  NPR
C00002  NRPHONE    00304   00304
C00014  NUM
X00003  NUMGET     00154   00161   00220
X00002  QBQDICT.   00000   00122
X00012  QNSINGL.   00353
X00011  STH.       00256   00314   00335
X00006  TERMTAP    00301
X00001  THEND.     00150   00173   00271   00327   00350
X00007  TSH.       00134
X00005  WRARRAY    00252
P00144  WS00001.   00147
P00265  WS00002.   00270
P00323  WS00003.   00326
P00344  WS00004.   00347
   00136 SYMBOLS
```

```
      SUBROUTINE COPYDB                                                  1000
CSUBR      COPYDB    START     ************************************************  15000
CUSE       MYIDENT   START     ************************************************  2000
      COMMON/MYIDENT/MYIDENT                                             1000
CEND       MYIDENT   ************************************************************  2000
CUSE       ITP       START     ************************************************  3000
      COMMON/ITP/ITP                                                     1000
CEND       ITP       ************************************************************  3000
CUSE       OPTIONS   START     ************************************************  4000
      COMMON / OPTIONS/ NCON(8),INTAPE,NOUT1,NOUT2,NPR,NUM,NOPSET        1000
     1  ,ISETSIZ                                                        2000
CEND       OPTIONS   ************************************************************  4000
      DIMENSION JUNK(10)                                                 5000
      MYIDENT=8HDATADUP                                                  6000
      ITP = NOUT1                                                        7000
      CALL SETREAD                                                       8000
      MYIDENT=8HDATADUP2                                                 9000
      ITP = NOUT2                                                       10000
      CALL SETWRITE                                                     11000
    1 ITP = NOUT1                                                       12000
      CALL RDARRAY(JUNK,10)                                             13000
      ITP = NOUT2                                                       14000
      CALL WRARRAY(JUNK,10)                                             15000
      IF(JUNK(1).EQ.8HENDINPUT) 2,1                                     16000
    2 ITP = NOUT1                                                       17000
      CALL TERMTAP                                                      18000
      ITP = NOUT2                                                       19000
      CALL TERMTAP                                                      20000
      RETURN                                                            21000
      END                                                               22000
```

IDENT COPYDB

PROGRAM LENGTH		00070
ENTRY POINTS	COPYDB	00020
BLOCK NAMES		
	MYIDENT	00001
	ITP	00001
	OPTIONS	00017
EXTERNAL SYMBOLS		
	QBUDICT,	
	SETREAD	
	SETWRITE	
	RDARRAY	
	WRARRAY	
	TERMTAP	

```
P00065  BEGIN.      00065
P00020  COPYDB      00020
P00001  DICT.       00022  00031  00037  00043  00050  00057  00063
P00066  ENDING.     00023  00064
P00000  EXIT.       00066
P00015  FORMAT.     00024  00032  00052
P00065  INITIAL.    00023
C00010  INTAPE
C00016  ISETSIZ
C00000  ITP         00027  00027  00035  00035  00041  00041  00046  00046  00055  00055  00061
                    00061
P00040  .1          00053
P00054  .2
P00015  ..1QQC00    00024
P00016  ..1QQC01    00032
P00017  ..1QQC02    00053
P00003  JUNK        00044  00051  00052
C00000  MYIDENT     00025  00025  00033  00033
C00000  NCON
C00015  NOPSET
C00011  NOUT1       00026  00026  00040  00040  00054  00054
C00012  NOUT2       00034  00034  00045  00045  00060  00060
C00013  NPR
C00014  NUM
X00001  QBQDICT.    00000  00021
X00004  RDARRAY     00042
X00002  SETREAD     00030
X00003  SETWRITE    00036
X00006  TERMTAP     00056  00062
X00005  WRARRAY     00047
   00035 SYMBOLS
```

```
      SUBROUTINE COUNTDS(MYDESIG  )                                      1000
CSUBR      COUNTDES  02AUG71  ********************************************* 17000
CUSE       KKSET     START    ********************************************* 2000
      COMMON/KKSET/KKSET                                                 1000
CENU       KKSET    ********************************************************* 2000
      DATA(KKSET=1)                                                      3000
CUSE       IDESIGS   START    ********************************************* 4000
      COMMON/IDESIGS/IDESIGS(250), DESIGNO(250,3)                        1000
      TYPE INTEGER DESIGNO                                               2000
CENU       IDESIGS  ********************************************************* 4000
CUSE       NODESIGS  START    ********************************************* 5000
      COMMON/NODESIGS/NODESIGS(2),KKMIN(2)                               1000
CENU       NODESIGS ********************************************************* 5000
      DATA (NODESIGS = 0,0), (KKMIN = 1, 126)                            6000
      DATA(IFIRST=1)                                                     7000
C     IS THIS THE FIRST CALL ON ROUTINE                                  8000
      IF(IFIRST .LE. 0) GO TO 19                                         9000
 17   IFIRST=0                                                           10000
      DO 18 K1 = 1, 250                                                  11000
      DO 18 K2=1,3                                                       12000
 18   DESIGNO(K1,K2)=0                                                   13000
 19   CONTINUE                                                           14000
      II = KKSET                                                         15000
      DECODE (8,100,MYDESIG)LDES,KDESIG                                  16000
C     CHECK FOR REGION ONE                                               17000
      IF (KDESIG.LT.500)1,2                                              18000
    1 IREG = 1                                                           19000
      GO TO 5                                                            20000
C     CHECK FOR REGION TWO                                               21000
    2 IF (KDESIG.LT.800)3,4                                              22000
    3 IREG = 2                                                           23000
      GO TO 5                                                            24000
    4 IREG = 3                                                           25000
    5 KK = KKMIN(II)                                                     26000
      MAX=KK+NODESIGS(II)-1                                              27000
C     LOOP TO CHECK FOR NEW DESIG                                        28000
      DO 20 J=KK,MAX                                                     29000
      IF(LDES.EQ.IDESIGS(J)) 11,20                                       30000
 20   CONTINUE                                                           31000
      J=MAX+1                                                            32000
      NODESIGS(II)=NODESIGS(II)+1                                        33000
      IDESIGS(J) = LDES                                                  34000
   11 DESIGNO(J,IREG) = DESIGNO(J,IREG) + 1                              35000
      RETURN                                                             36000
  100 FORMAT (A2,I3,3X)                                                  37000
      END                                                                38000
```

IDENT COUNTDS

PROGRAM LENGTH		00247
ENTRY POINTS	COUNTDS	00011
BLOCK NAMES		
	KKSET	00001
	IDESIGS	01750
	NODESIGS	00004
EXTERNAL SYMBOLS		
	THEND.	
	@@QDICT.	
	DEC.	
	QNSINGL.	

```
P00204  BEGIN.      00217   00225   00231
P00131  CNVRTI.     00045   00046
P00011  COUNTDS     00011
P00004  CRFMT.      00130
X00003  DEC.        00042
C00372  DESIGNS     00031   00032   00125   00125   00126
P00001  DICT.       00013   00043   00051   00207   00210
P00220  ENDING.     00014   00127   00204   00205   00205   00206   00206
P00000  EXIT.       00223
P00004  FORMAT.
P00044  FPG0001.    00216
P00234  GETPL.      00211
P00224  GETPU.      00214   00230
P00052  GG00000.    00041
C00000  IDESIGS     00105   00106   00123   00123
P00003  IFIRST      00015   00022
P00236  II          00040   00073   00117
P00132  IN00001.    00030   00134   00144   00146   00160
P00133  IN00004.    00124   00162   00172   00202
P00204  INITIAL.    00014
P00237  IREG        00056   00065   00071   00176
P00055  .1
P00020  .100001     00016
P00021  .100002     00017
P00124  .11         00107
P00021  .17
P00031  .18
P00037  .19         00020
P00110  .20         00106
P00061  .2          00053   00054
P00064  .3
P00070  .4          00062   00063
P00073  .5          00060   00067
P00004  ..100       00044
P00240  J           00101   00105   00110   00115   00122   00167
P00241  K1          00023   00034   00141
P00242  K2          00026   00154
P00243  KDESIG      00047   00052   00061
P00244  KK          00075   00100
C00002  KKMIN       C00002  00074   00074
C00000  KKSET       00003   00037   00037
P00245  LDES        00046   00104   00122
P00246  MAX         00100   00112   00114
P00004  MYDESIG     00044
C00000  NODESIGS    00003   00076   00076   00117   00120   00121
P00134  P00000.U    00136
P00146  P00001.U    00151
P00162  P00002.U    00164
P00217  PF00002.    00215
X00002  QBQDICT.    00000   00012
X00004  QNSINGL.    00130
X00001  THEND.      00050
P00212  TS00003.    00103
P00140  UP00000.    00024   00035   00134   00141   00142   00143   00145   00145
```

```
P00153  UP000C1.  00027  00147  00154  00155  00156  00160  00161
P00166  UP000C2.  00102  00111  00116  00162  00167  00170  00171  00173  00173
P00175  UP000C4.  00057  00066  00072  00176  00177  00200  00202  00203
P00025  WS000C1.  00036
P00031  WS000C2.  00033
P00104  WS000C3.  00113  00115
   00074 SYMBOLS
```

```
      SUBROUTINE FASTSET                                                    1000
CSUBR     FASTDATA  ZUSER71  ***************************************       21000
CUSE      ITP       START    ***************************************       2000
      COMMON/ITP/ITP                                                        1000
CENU      ITP       ***************************************************     2000
CUSE      MYTAPES   START    ***************************************       3000
      COMMON/MYTAPES/INUNIT,JTIN,LOUT,KTAPEOUT,KINCARDS                     1000
CENU      MYTAPES   ***************************************************     3000
      DATA(KTAPEOUT = 7)                                                    4000
C***  LIN 1 IS THE INPUT DATA TAPE                                          5000
C***  LIN 2 IS RESERVED FOR ADDING DATA FROM TAPE                           6000
C***  LIN 3 IS RESERVED FOR ADDING DATA FROM TAPE                           7000
C***  LIN 4 IS RESERVED FOR ADDING DATA FROM TAPE                           8000
C***  LIN 5 IS RESERVED FOR ADDING DATA FROM TAPE                           9000
C***  LIN 6 IS THE OUTPUT DATA TAPE                                         10000
C***  LIN 7 IS THE QUICK DATA BASE TAPE                                     11000
C***  LIN 8 IS RESERVED FOR COPY OF LIN=6                                   12000
CUSE      ICKTST    START    ***************************************       13000
      COMMON/ICKTST/ICKTST                                                  1000
CENU      ICKTST    ***************************************************     13000
CUSE      TWORD     START    ***************************************       14000
      COMMON/TWORD/TWORD,ITWORD                                             1000
      EQUIVALENCE (TWORD,ITWORD)                                            2000
CENU      TWORD     ***************************************************     14000
CUSE      ERRORM    START    ***************************************       15000
      COMMON/ERRORM/JERR,IERSW                                              1000
CENU      ERRORM    ***************************************************     15000
      DATA(JERR=9),(IERSW=0)                                                16000
C***  LIN 9 IS RESERVED FOR WRITING OUT ERROR MESSAGES                      17000
CUSE      NOERRORS  START    ***************************************       18000
      COMMON/NOERRORS/NOERRORS,NAMEOF,NRPHONE,IWANTBU                       1000
CENU      NOERRORS  ***************************************************     18000
      DIMENSION NERRS(15)                                                   19000
CUSE      NOPRINT   START    ***************************************       20000
      COMMON/NOPRINT/NOPRINT                                                1000
CENU      NOPRINT   ***************************************************     20000
CUSE      MYIDENT   START    ***************************************       21000
      COMMON/MYIDENT/MYIDENT                                                1000
CENU      MYIDENT   ***************************************************     21000
CUSE      SETIDO    START    ***************************************       22000
      COMMON/SETIDO/ID(50),INDEX,JNDEX,IAUTO                                1000
CENU      SETIDO    ***************************************************     22000
CUSE      OPTIONS   START    ***************************************       23000
      COMMON / OPTIONS/ NCON(8),INTAPE,NOUT1,NOUT2,NPR,NUM,NOPSET           1000
     1  ,ISETSIZ                                                           2000
CENU      OPTIONS   ***************************************************     23000
      ENTRY FASTDATA                                                        24000
      CALL INITFAST                                                         25000
      JTIN=INTAPE                                                           26000
       LOUT = NOUT1                                                         27000
      JERR=9                                                                28000
      CALL ALCCDIR                                                          29000
      NOPRINT = 1                                                           30000
      MYIDENT = 8HQUIKBASE                                                  31000
      CALL INITAP                                                           32000
      MYIDENT=8HDATAJB                                                      33000
```

```
      ITP = JTIN                                                        34000
      NOPRINT = 1                                                       35000
      CALL SETREAD                                                      36000
      ITP=LOUT                                                          37000
      MYIDENT=8HDATAUSUP                                                38000
      CALL SETWHIT                                                      39000
      MYIDENT=8HSCRATCH                                                 40000
      KINCARDS = ITP = 10                                               41000
      CALL SETWHIT                                                      42000
      MYIDENT = 8HSCRATCH                                               43000
      ICKTST = 0                                                        44000
      IAUTO = 1                                                         45000
      INDEX = 0                                                         46000
      JNDEX = 0                                                         47000
C     IF NO PRINT WANTED TURN OFF IAUTO                                 48000
      IF(NPR.EQ.2) IAUTO = 0                                            49000
      ITP = JERR                                                        50000
C     IF PRINT IS TO BE CONTROLLED BY CARDS READ HERE                   51000
      IF(NPR.EQ.3) CALL INPNTCL                                         52000
      CALL SETWHIT                                                      53000
      NOPRINT=1                                                         54000
      CALL PAGESKP                                                      55000
C***  CALL SUBROUTINE TO READ AND CHECK SEQUENCE OF                     56000
C***  UPDATE OPTION CONTROL CARDS                                       57000
      CALL CARDCK                                                       58000
C***  ARE THERE ANY ERRORS                                              59000
      IF(NOERRORS.GT.0) 1,2                                             60000
C***  CALL UPDATE SUBROUTINE NEWDATA TO INITIALIZE FOR                  61000
C***  SUBSEQUENT CALLS FROM NEWBASE AND NEWDIR                          62000
2     CALL NEWDATA                                                      63000
C***  CALL SUBROUTINE MAKEIT TO START PROCESSING DATA BASE UPDATE       64000
      CALL MAKEIT(KTAPEOUT)                                             65000
C***  CHECK TO SEE IF ANY ERRORS OCCURRED DURING UPDATING               66000
C***  OF THE DATA BASE                                                  67000
      CALL PAGESKP                                                      68000
      IF(IERSW.GT.0) 3,6                                                69000
    3 ITP = JERR                                                        70000
      ITWORD = 8HALLGONE                                                71000
C     LOOP TO WRITE END MARKER ON ERROR FILE                            72000
      DO 4 I = 1, 20                                                    73000
    4 CALL WRWORD                                                       74000
      CALL TERMTAP                                                      75000
      MYIDENT = 8HSCRATCH                                               76000
      CALL SETREAD                                                      77000
      NUMJERR = 10000                                                   78000
C     LOOP TO PRINT ERRORS                                              79000
      DO 10 I = 1, NUMJERR                                              80000
      CALL RDARRAY(NERRS,10)                                            81000
C     CHECK TO SEE IF ALL ERRORS PRINTED                                82000
      IF( NERRS(1) .EQ. 8HALLGONE          ) GO TO 11                   83000
      PRINT 300, (NERRS(L), L = 1, 10)                                  84000
   10 CONTINUE                                                          85000
   11 CONTINUE                                                          86000
      NE = I / 2                                                        87000
      PRINT 7776, NE                                                    88000
      WRITE(44,7776) NE                                                 89000
```

```
      CALL TERMTAP                                                    90000
      GO TO 8                                                         91000
C     CONTINUE                                                        92000
6     PRINT 400                                                       93000
      WRITE (44,400)                                                  94000
    8 CONTINUE                                                        95000
      CALL PRTCONT                                                    96000
C     CHECK TO SEE IF COPY OF UPDATE TAPE WANTED                      97000
      IF( NOUT2 .EQ. 0)  GO TO 7974                                   98000
 7973 CONTINUE                                                        99000
C     CHECK TO SEE IF ERRORS PREVENT COPY BEING MADE                  100000
      IF(IERS%.GT.0) GO TO 7977                                       101000
      CALL COPYDB                                                     102000
 7974 PRINT 7777                                                      103000
      WRITE(44,7777)                                                  104000
      RETURN                                                          105000
 7977 PRINT 7978                                                      106000
 7978 FORMAT(1X, * NO BACKUP CREATED BECAUSE OF ERRORS *)             107000
      GO TO 7974                                                      108000
C                                                                     109000
1     PRINT 200,NOERRORS                                              110000
      WRITE(44,200),NOERRORS                                          111000
      WRITE(44,205),NAMEOF,NRPHONE                                    112000
 200  FORMAT(5X,I8,43H SEQUENCE ERRORS OR INCORRECT CONTROL CARDS  )  113000
 205  FORMAT(5X,28HPLEASE PRINT STANDARD OUTPUT,/5X,                  114000
     *9HAND CALL ,A8,16H - PHONE NUMBER  ,A8)                         115000
  300 FORMAT( 1X, 10A8)                                               116000
 400  FORMAT(5X,35HNO ERRORS DETECTED FOR THIS UPDATE   )             117000
 7776 FORMAT(5X,I8,24H DATA ERRORS THIS UPDATE)                       118000
 7777 FORMAT(41H ***** PROCESSOR FASTDATA COMPLETED *****)            119000
      STOP                                                            120000
      END                                                             121000
```

IDENT FASTSET

PROGRAM LENGTH		00500
ENTRY POINTS	FASTDATA	00143
	FASTSET	00136
BLOCK NAMES		
	I:P	00001
	MYTAPES	00005
	ICKTST	00001
	TWORD	00001
	ERRCNN	00002
	NOERRORS	00004
	NOPRINT	00001
	MYIDENT	00001
	SETIOO	00065
	OPTIONS	00017
EXTERNAL SYMBOLS		
	THEND.	
	Q8USIOPS	
	Q8WDICT.	
	INITFAST	
	ALOCDIR	
	INITAP	
	SETREAD	
	SETWRIT	
	INPRICL	
	PAGESKP	
	CARDCK	
	NEWDATA	
	MAKEIT	
	WRWORD	
	TERMTAP	
	RDARRAY	
	PRTCONT	
	COPYOB	
	STM.	
	ONSINGL.	

```
X00005  ALOCDIR   00157
P00470  BEGIN.    00470
X00013  CARDCK    00243
P00467  CNVRTI.   00322  00341  00351  00437  00447  00457  00460
X00022  COPYOB    00404
P00022  CRFMT.    00431  00463  00463  00463  00463  00463  00463
P00001  DICT.     00140  00145  00150  00160  00166  00176  00204  00213  00234  00236  00242
                  00244  00251  00253  00256  00271  00275  00301  00306  00315  00326  00337
                  00343  00346  00353  00355  00361  00364  00367  00372  00374  00405  00410
                  00413  00416  00421  00425  00430  00434  00441  00444  00451  00454  00462
                  00465
P00471  ENDING.   00141  00146  00422  00465
P00000  EXIT.     00471
P00143  FASTDATA  00143
P00136  FASTSET   00136
P00022  FORMAT.   00163  00167  00201  00205  00214  00264  00276  00310
P00327  GGOOOC0.  00313
P00344  GGOOOC1.  00335
P00354  GGOOOC2.  00344
P00365  GGOOOC3.  00357
P00373  GGOOOC4.  00365
P00414  GGOOOC5.  00406
P00422  GGOOOC6.  00414
P00431  GGOOOC7.  00423
P00442  GGOOO10.  00432
P00452  GGOOO11.  00442
P00463  GGOOO12.  00452
P00474  I         00267  00272  00304  00327  00332
C00064  IAUTO     00220  00220  00225  00226
C00000  ICKTST    00216  00217
C00000  ID
C00001  IERSW     C00001  00257  00257  00400  00400
C00062  INDEX     00221
X00006  INITAP    00165
X00004  INITFAST  00147
P00470  INITIAL.  00141  00146
X00011  INPRTCL   00233
C00010  INTAPE    00151  00151
C00000  INUNIT
C00016  ISETSIZ
C00000  ITP       00172  00172  00200  00200  00207  00210  0023C  00230  00263  00263
C00000  ITWORD    00265  00265
C00003  IWANTBU
P00327  .10
P00432  .1        00247
P00225  .1000C1
P00227  .1000C2   00224
P00233  .1000C3
P00235  .1000C4   00232
P00312  .1000C5
P00313  .1000C6   00311
P00377  .1000C7
P00400  .1000C8   00376
P00403  .1000C9
```

```
P00404  .100010   00401  00402
P00332  .11       00312
P00250  .2        00246  00247
P00262  .3
P00270  .4
P00357  .6        00260  00261
P00400  .7973
P00406  .7974     00377  00431
P00423  .7977     00403
P00373  .8        00356
P00022  ..100000  00163
P00023  ..100001  00167
P00024  ..100002  00201
P00025  ..100003  00205
P00026  ..100004  00214
P00027  ..100005  00264
P00030  ..100006  00276
P00031  ..100007  00311
P00043  ..200     00435  00445
P00056  ..205     00455
P00100  ..300     00316
P00104  ..400     00362  00370
P00115  ..7776    00340  00347
P00125  ..7777    00411  00417
P00032  ..7978    00426
C00000  JERR      00022  00155  00156  00227  00227  00262  00262
C00003  JNOEX     00222
C00001  JTIN      00152  00152  00171  00171
C00004  KINCARDS  00210  00211
C00003  KTAPEOUT  00022  00254
P00475  L         00320  00321  00323
C00002  LOUT      00154  00154  00177  00177
X00015  MAKEIT    00252
C00000  MYIDENT   00164  00164  00170  00170  00202  00202  00206  00206  00215  00215  00276
                  00277
C00001  NAMEOF    00456  00456
C00000  NCON
P00476  NE        0033   00341  00350
P00003  NERRS     0033   00310  00322
X00014  NEWDATA   00250
C00000  NOERRORS  00245  00245  00436  00436  00446  00446
C00000  NOPRINT   00161  00162  00173  00174  00237  00240
C00015  NOPSET
C00011  NOUT1     00153  00153
C00012  NOUT2     00375  00375
C00013  NPR       00223  00223  00231  00231
C00002  NRPHASE   00460
C00014  NUM
P00477  NUMJERR   00303  00330
X00012  PAGESKP   00241  00255
X00021  PRTCONT   00373
X00003  Q8QDICT.  00000  00137  00144
X00002  Q8QSTOPS  00404
X00024  QNSINGL.  00406
```

```
X00020  RDARRAY   00305
X00007  SETREAD   00175  00300
X00010  SETWRIT   00203  00212  00235
X00023  STM.      00314  00336  00345  00360  00366  00407  00415  00424  00433  00443  00453
X00017  TERMTAP   00274  00354
X00001  TMENU.    00325  00342  00352  00363  00371  00412  0042C  00427  00440  00450  00461
P00330  TSQQUC2.  00304
C00000  TWORD
X00016  WRWORD    0027C
P00270  WSQQQC1.  00273
P00305  WSQQQC2.  00331  00331
P00321  WSQQQC3.  00324
  00163 SYMBOLS
```

```
      FUNCTION ILOOK(IN,I)                                                  1000
CSUBR     ILOOK     START     ***************************************       27000
C      ILOOK=1,FOUND.     ILOOK=0  NOT FOUND.                               2000
CUSE      SETIDD    START     ***************************************       3000
      COMMON/SETIDD/ID(50),INDEX,JNDEX,IAUTO                                1000
CEND      SETIDD    ***************************************************     3000
C     CHECK TO SEE IF ALL ITEMS ARE TO BE PRINTED                           4000
      IF(INDEX.EQ.9999)2,4                                                  5000
    4 DO 1 J=1,IN                                                           6000
      IF(ID(J) .EQ. I)2,1                                                   7000
    1 CONTINUE                                                              8000
      ILOOK=0                                                               9000
      RETURN                                                                10000
    2 ILOOK=1                                                               11000
      RETURN                                                                12000
      END                                                                   13000
```

IDENT ILOCK

PROGRAM LENGTH		00070
ENTRY POINTS	ILOCK	00003
BLOCK NAMES		
	SETIDD	00065
EXTERNAL SYMBOLS		
	QBQDICT.	

```
P00030  BEGIN.      00050   00057   00063
P00001  DICT.       00005   00033   00034
P00051  ENDING.     00006   00024   00026   00030   00031   00031   00032   00032
P00000  EXIT.       00055
P00016  FPQQQC1.    00046   00047
P00021  FPQQQC2.    00042   00043
P00066  GETPL.      00035   00044
P00056  GETPU.      00040   00062
P00003  I           00016
C00064  IAUTO
C00000  ID          00015   00015
P00003  ILOCK       00003
P00003  IN          00021
C00062  INDEX       00007   00007
P00030  INITIAL.    00006
P00020  .1          00017
P00025  .2          00011   00017
P00012  .4          00010
P00067  J           00013   00014   00020
C00063  JNDEX
P00044  PFQQQC2.    00041
P00050  PFQQQC3.    00045
X00001  QBQQICT.    00000   00004
P00021  TSQQQC1.    00013
P00027  VALUE.      00024   00026   00054
P00014  WSQQQC1.    00022   00022
   00032 SYMBOLS
```

```
      SUBROUTINE INITFAST                                                    1000
CSUBR      INITFAST  START     ***************************************     28000
CUSE       DIRECTRY  START     ***************************************     2000
      COMMON/DIRECTRY/IDEF,LASTLIST,NDIMDIR,NDIMLIST,ATTNAME(500),          1000
     1       IFORMAT(500),ICODE(500),DEFAULT(500),IDEFAULT(500),            2000
     2         N1(500),FN1(500),N2(500),FN2(500),LISTCHEK(500),             3000
     3         GLOB(500),LISTVALS(2000)                                     4000
               EQUIVALENCE(N1,FN1),(N2,FN2),(DEFAULT,IDEFAULT)              5000
               TYPE LOGICAL LISTCHEK,GLOB                                   6000
      TYPE INTEGER ATTNAMX                                                  7000
               TYPE INTEGER ATTNAME                                         8000
               EQUIVALENCE(LOG1,LISTCHEK),(LOG2,GLOB)                       9000
CEND       DIRECTRY  ***************************************************     2000
               DATA(NDIMDIR=500),(NDIMLIST=2000)                            3000
C     ATTNAME = BCD NAME OF ATTRIBUTE                                        4000
C     DEFAULT = UNDEFINED VALUE FOR ATTRIBUTE                                5000
C     GLOB    = TRUE WHEN GLOBAL DEFINITION IN FORCE.                        6000
C     ICODE   = CODE SPECIFYING TYPE OF VALUES                               7000
C     IDEF    = INDEX OF LAST DEFINED ATTRIBUTE IN TABLES                    8000
C    IFORMAT  = INPUT/OUTPUT CONVERSION FOR VALUES(FORTRAN CONV.)            9000
C     LASTLIST= INDEX OF LAST ENTRY IN LISTVALS                              10000
C     LISTCHEK= TRUE FOR LIST CHECKING,FALSE FOR RANGE CHECKING              11000
C     LISTVALS= CONTAINS ALLOWABLE VALUES FOR LIST CHECKING                  12000
C     N1      = LOWEST LEGAL VALUE(RANGE CHECK) OR INDEX IN LISTVALS         13000
C               OF BEGIN OF LIST OF ALLOWED(LIST CHECK)                      14000
C     N2      = HIGHEST LEGAL VALUE(RANGE CHECK) OR INDEX IN LISTVALS        15000
C               OF END OF ALLOWED LIST(LIST CHECK)                           16000
CUSE       ERRCOM    START     ***************************************     17000
      COMMON/ERRCOM/JERR,IERS#                                               1000
CEND       ERRCOM    ***************************************************     17000
      DATA(JERR=9),(IERS#=0)                                                 18000
CUSE       ICKTST    START     ***************************************     19000
      COMMON/ICKTST/ICKTST                                                   1000
CEND       ICKTST    ***************************************************     19000
CUSE       ICONTROL  START     ***************************************     20000
      COMMON/ICONTROL/ICOM                                                   1000
CEND       ICONTROL  ***************************************************     20000
CUSE       IDESIGS   START     ***************************************     21000
      COMMON/IDESIGS/IDESIGS(250), DESIGNO(250,3)                            1000
      TYPE INTEGER DESIGNO                                                   2000
CEND       IDESIGS   ***************************************************     21000
CUSE       IENDSET   START     ***************************************     22000
      COMMON/IENDSET/IENDSET                                                 1000
CEND       IENDSET   ***************************************************     22000
      DATA(IENDSET = 0)                                                      23000
CUSE       ITP       START     ***************************************     24000
      COMMON/ITP/ITP                                                         1000
CEND       ITP       ***************************************************     24000
CUSE       ITSTUFF   START     ***************************************     25000
      COMMON/ITSTUFF/ITSTUFF(56)                                             1000
CEND       ITSTUFF   ***************************************************     25000
CUSE       IWSIDE    START     ***************************************     26000
      COMMON/IWSIDE/IWSIDE(4)                                                1000
CEND       IWSIDE    ***************************************************     26000
      DATA(IWSIDE=4HBLUE,3HRED)                                              27000
CUSE       JDESTEST  START     ***************************************     28000
```

```
      COMMON/JDESTEST/JDESTEST                                          1000
CEND      JDESTEST  ********************************************************* 28000
CUSE      KKSET     START     ********************************************** 29000
      COMMON/KKSET/KKSET                                                1000
CEND      KKSET     ********************************************************* 29000
CUSE      MPRTOPT   START     ********************************************** 30000
      COMMON/MPRTOPT/MPRTOPT                                            1000
CEND      MPRTOPT   ********************************************************* 30000
      DATA (MPRTOPT=0)                                                  31000
CUSE      MYGOODS   START     ********************************************** 32000
      COMMON/MYGOODS/NLINE,ISET,JSET,NEWDATE                            1000
CEND      MYGOODS   ********************************************************* 32000
      DATA(ISET = 0)                                                    33000
      DATA( JSET = 0)                                                   34000
CUSE      MYIDENT   START     ********************************************** 35000
      COMMON/MYIDENT/MYIDENT                                            1000
CEND      MYIDENT   ********************************************************* 35000
CUSE      MYINPUT   START     ********************************************** 36000
      COMMON/MYINPUT/INSTUFF(10)                                        1000
CEND      MYINPUT   ********************************************************* 36000
CUSE      MYOUT     START     ********************************************** 37000
      COMMON/MYOUT/OUTSTUFF(10)                                         1000
      TYPE INTEGER OUTSTUFF                                             2000
CEND      MYOUT     ********************************************************* 37000
CUSE      MYPRINT   START     ********************************************** 38000
      COMMON/MYPRINT/ISTAR,NDEFINE,NUNDEF                               1000
      TYPE LOGICAL NDEFINE,NUNDEF                                       2000
CEND      MYPRINT   ********************************************************* 38000
      DATA(ISTAR = 1H  )                                                39000
CUSE      MYTAPES   START     ********************************************** 40000
      COMMON/MYTAPES/INUNIT,JTIN,LOUT,KTAPEOUT,KINCARDS                 1000
CEND      MYTAPES   ********************************************************* 40000
      DATA(JTIN=1),(LOUT=6),(KTAPEOUT=7),(KINCARDS=8)                   41000
C***  LIN 1 IS THE INPUT DATA TAPE                                      42000
C***  LIN 2 IS RESERVED FOR ADDING DATA FROM TAPE                       43000
C***  LIN 3 IS RESERVED FOR ADDING DATA FROM TAPE                       44000
C***  LIN 4 IS RESERVED FOR ADDING DATA FROM TAPE                       45000
C***  LIN 5 IS RESERVED FOR ADDING DATA FROM TAPE                       46000
C***  LIN 6 IS THE OUTPUT DATA TAPE                                     47000
C***  LIN 7 IS THE QUICK DATA BASE TAPE                                 48000
C***  LIN 8 IS RESERVED FOR SEQUENCE CHECKING OF CONTROL CARDS          49000
C***  LIN 9 IS RESERVED FOR WRITING OUT ERROR MESSAGES                  50000
CUSE      NEWSET    START     ********************************************** 51000
      COMMON/NEWSET/NEWSET                                              1000
CEND      NEWSET    ********************************************************* 51000
      DATA(NEWSET = 0)                                                  52000
CUSE      NODESIGS  START     ********************************************** 53000
      COMMON/NODESIGS/NODESIGS(2),KKMIN(2)                              1000
CEND      NODESIGS  ********************************************************* 53000
CUSE      NOERRORS  START     ********************************************** 54000
      COMMON/NOERRORS/NOERRORS,NAMEOF,NRPHONE,IWANTBU                   1000
CEND      NOERRORS  ********************************************************* 54000
CUSE      NOPRINT   START     ********************************************** 55000
      COMMON/NOPRINT/NOPRINT                                            1000
CEND      NOPRINT   ********************************************************* 55000
CUSE      NOTEST    START     ********************************************** 56000
```

```
      COMMON/NOTEST/NOTEST                                                  1000
CEND      NOTEST    ************************************************      56000
CUSE      PRTOPT    START     ************************************************ 57000
      COMMON/PRTOPT/NPRTOPT                                                 1000
CEND      PRTOPT    ************************************************      57000
CUSE      SETIDO    START     ************************************************ 58000
      COMMON/SETIDO/ID(50),IMDEX,JNDEX,IAUTO                                1000
CEND      SETIDO    ************************************************      58000
CUSE      TWORD     START     ************************************************ 59000
      COMMON/TWORD/TWORD,ITWORD                                             1000
      EQUIVALENCE (TWORD,ITWORD)                                            2000
CEND      TWORD     ************************************************      59000
          DATA(NDIMDIR=500),(NDIMLIST=2000)                                 60000
      DATA(KKSET=1)                                                         61000
      DATA(IFIRST=1)                                                        62000
      DATA (NCDESIGS = 0,0),(KKMIN = 1,101)                                 63000
      DATA (NPRTOPT=0)                                                      64000
      DATA(NDEFINE = 1),(NUNDEF = 1)                                        65000
      IDEF=0                                                                66000
      LASTLIST=0                                                            67000
C     LOOP TO CLEAR DIRECTORY                                               68000
      DO 1 I=1,NDIMDIR                                                      69000
      ATTNAME(I)=0                                                          70000
      IFORMAT(I)=0                                                          71000
      ICODE(I)=0                                                            72000
      IDEFAULT(I)=0                                                         73000
      N1(I)=0                                                               74000
      N2(I)=0                                                               75000
      LISTCHEK(I)=0                                                         76000
      GLOB(I)=0                                                             77000
    1 CONTINUE                                                              78000
      DO 2 I=1,NDIMLIST                                                     79000
    2 LISTVALS(I)=0                                                         80000
      END                                                                   81000
```

IDENT INITFAST

PROGRAM LENGTH		00055
ENTRY POINTS	INITFAST	00004
BLOCK NAMES		
	DIRECTRY	11654
	ERRCNM	00002
	ICKTST	00001
	ICONTROL	00001
	IDESIGS	01750
	IENDSET	00001
	ITP	00001
	ITSTUFF	00070
	INSIDE	00002
	JDESTEST	00001
	KRSET	00001
	MPRTOPT	00001
	MYGOODS	00004
	MYIDENT	00001
	MYINPUT	00012
	MYOUT	00012
	MYPRINT	00003
	MYTAPES	00005
	NEWSET	00001
	NODESIGS	00004
	NOERMSGS	00004
	NOPRINT	00001
	NOTEST	00001
	PRTOPT	00001
	SETIDD	00065
	TWORD	00001
EXTERNAL SYMBOLS		
	Q3U1004C	
	Q8QDICT.	

```
C00004  ATTNAME   00020   00021
P00047  BEGIN.    00050
P00053  COUNT.    00016   00017   00041   00042
C02740  DEFAULT
C00372  DESIGNC
P00001  DICT.     00006
P00051  ENDING.   00007   00046   00047
P00000  EXIT.     00052
C03724  FN1
C04710  FN2
C05714  GLOB      00033
P00054  I         00013   00017   00036   00041
C00064  IAUTO
C00000  ICKTST
C01754  ICODE     00023
C00000  ICOM
C00000  ID
C00000  IDEF      0001C   00011
C02740  IDEFAULT  00024
C00000  IDESIGS
C00000  IENDSET   00003
C00001  IERSW     C00001
P00003  IFIRST
C00770  IFOPT     00022
C00062  INDE
P00004  INITFAST  00004
P00047  INITIAL.  00007
C00000  INSTUFF
C00000  INUNIT
C00001  ISET      00003
C00000  ISTAR     00003
C00000  ITP
C00000  ITSTUFF
C00000  ITWORD
C00003  IWANTBU
C00000  IWSIDE    00003
P00034  .1
P00043  .2
C00000  JDESTEST
C00000  JERR      00003
C00063  JNDEX
C00002  JSET      00003
C00001  JTIN      00003
C00004  KINCARDS  C00004
C00002  KKMIN     C00002
C00000  KKSET     00003
C00003  KTAPECUT  C00003
C00001  LASTLIST  00012
C05674  LISTCHEK  00030
C05734  LISTVALS  00043   00044
C05674  LOG1
C05714  LOG2
C00002  LOUT      C00002
C00000  MPRTOPT   00003
```

```
C00000  MYIDENT
C03724  N1          00025
C04710  N2          00026
C00001  NAMEOF
C00001  NDEFINE     00004
C00002  NDIMDIM     00003   00003   00014   00014
C00003  NDIMLIST    C00003  C00003  00036   00037
C00003  NEWDATE
C00000  NEWSET      00003
C00000  NLINE
C00000  NODESIGS    00004
C00000  NOERRORS
C00000  NOPRINT
C00000  NOTEST
C00000  NPRTOPT     00004
C00002  NRPHONE
C00002  NUNDEF      C00002
C00000  OUTSTUFF
X00001  Q3Q10C40    00027   00036
X00002  Q8QDICT.    00000   00005
P00035  TS0000C1.   00015
P00046  TS0000C2.   00040
C00000  TWORD
P00020  WS0000C1.   00034
P00043  WS0000C2.   00045
   00117 SYMBOLS
```

```
      SUBROUTINE INPRTCL                                                 1000
CSUBR     INPRTCL   START     ********************************************* 40000
CUSE      SETIDD    START     ********************************************* 2000
      COMMON/SETIDD/ID(50),INDEX,JNDEX,IAUTO                             1000
CENU      SETIDD    ********************************************          2000
CUSE      ICKTST    START     ********************************************* 3000
      COMMON/ICKTST/ICKTST                                               1000
CENU      ICKTST    ********************************************          3000
      IAUTO=0                                                            4000
      ICKTST = 0                                                         5000
   10 READ 1,IEMP                                                        6000
      PRINT 14,IEMP                                                      7000
C     CHECK INPUT CARD TO SEE IF ALL SETS ARE REQUESTED                  8000
      IF(IEMP.EQ.3HALL) 6,9                                              9000
C     CHECK INPUT CARD TO SEE IF SET CARDS ARE TO BE READ IN             10000
    9 IF(IEMP .EQ. 4HAUTO)12,13                                          11000
   12 IAUTO=1                                                            12000
      GO TO 10                                                           13000
C     CHECK INPUT CARD TO SEE IF CHECKING IS REQUESTED                   14000
   13 IF (IEMP.EQ.4HCHEC)11,5                                            15000
   11 ICKTST = 1                                                         16000
      GO TO 10                                                           17000
    6 INDEX=9999                                                         18000
      JNDEX=0                                                            19000
      RETURN                                                             20000
5     ID(1)=NUMGET(IEMP,4)                                               21000
C     CHECK INPUT CARD TO SEE IF ALL DONE                                22000
      IF (ID(1).EQ.9999)2,3                                              23000
    2 INDEX=0                                                            24000
      JNDEX=0                                                            25000
      RETURN                                                             26000
    3 DO 8  I=2,50                                                       27000
C     LOOP TO READ IN SET NUMBERS                                        28000
      READ 1,IEMP                                                        29000
      ID(I)=NUMGET(IEMP,4)                                               30000
      IF(ID(I).EQ.9999)7,8                                               31000
C     CHECK TO SEE IF ALL CARDS READ IN                                  32000
    8 CONTINUE                                                           33000
    7 INDEX=I-1                                                          34000
      JNDEX=INDEX                                                        35000
      RETURN                                                             36000
    1 FORMAT(A4)                                                         37000
14    FORMAT(1X,A4)                                                      38000
      END                                                                39000
```

IDENT INPRTCL

PROGRAM LENGTH		00130
ENTRY POINTS	INPRTCL	00015
BLOCK NAMES		
	SETIOD	00065
	ICRTST	00001
EXTERNAL SYMBOLS		
	THEND.	
	QBQDICT.	
	NUMGET	
	TSM.	
	STM.	
	QNSINGL.	

```
P00123  BEGIN.      00123
P00122  CNVRTI.     00030   00041   00100
P00003  CRFMT.      00121   00121
P00001  DICT.       00017   00026   00033   00036   00043   00063   00076   00103   00105
P00124  ENDING.     00020   00061   00071   00120
P00000  EXIT.       00124
P00003  FORMAT.     00044   00047   00053
P00034  GG000C0.    00024
P00044  GG00001.    00034
P00104  GG00002.    00074
P00126  I           00073   00107   00113   00115
C00064  IAUTO       00021   00022   00051   00052
C00000  ICKTST      00023   00023   00055   00056
C00000  ID          00065   00065   00110   00110
P00127  IEMP        00031   00040   00044   00047   00053   00064   00101   00106
C00062  INDEX       00057   00060   00067   00070   00116   00117
P00123  INITIAL.    00020
P00015  INPRTCL     00015
P00024  .10         00052   00056
P00055  .11
P00051  .12
P00053  .13         00050
P00067  .2
P00072  .3          00066
P00062  .5          00054
P00057  .6          00046
P00115  .7          00112
P00113  .8          00111
P00047  .9          00045
P00003  ..100C00    00045
P00006  ..1         00027   00077
P00004  ..100001    00050
P00005  ..100002    00054
P00011  ..14        00037
C00063  JNDEX       00061   00071   00117
X00003  NUMGET      00062   00104
X00002  QBQDICT.    00000   00016
X00006  QNSINGL.    00121
X00005  STM.        00035
X00001  TMEND.      00032   00042   00102
X00004  TSM.        00025   00075
P00074  WS000C1.    00114
   00052 SYMBOLS
```

```
      FUNCTION IPRINT(I)                                                    1000
CSUBR      IPRINT    START     ****************************************    39000
CUSE       SETIDD    START     ****************************************    2000
      COMMON/SETIDD/ID(50),INDEX,JNDEX,IAUTO                                1000
CEND       SETIDD    ********************************************************2000
C      IPRINT=1,PRINT.IPRINT=0, NO PRINT.IAUTO=1,AUTOPRINT.                 3000
C      INDEX=9999,PRINT ALL.INDEX=0,NO PTINT.                               4000
      IF(INDEX.EQ.9999)1,2                                                  5000
    1 IPRINT=1                                                              6000
      RETURN                                                                7000
C     CHECK AUTO PRINT SWITCH                                               8000
    2 IF(IAUTO .EQ. 1)3,4                                                   9000
C     CHECK TO SE IF INDEX HAS BEEN SET                                     10000
    4 IF(INDEX .EQ. 0)5,6                                                   11000
    5 IPRINT=0                                                              12000
      RETURN                                                                13000
    6 IPRINT=ILOOK(INDEX,I)                                                 14000
      RETURN                                                                15000
    3 IPRINT=ILOOK(JNDEX,I)                                                 16000
      RETURN                                                                17000
      END                                                                   18000
```

IDENT IPRINT

```
PROGRAM LENGTH          00070
ENTRY POINTS    IPRINT  00003
BLOCK NAMES
                SETIOU  00065
EXTERNAL SYMBOLS
                QBUDICT.
                ILOOK
```

```
P00035  BEGIN.      00051   00060   00064
P00001  DICT.       00005   00023   00030   00040   00041
P00052  ENDING.     00006   00012   00021   00026   00033   00035   00036   00036   00037   00037
P00000  EXIT.       00056
P00024  FP00001.    00047
P00031  FP00002.    00050
P00067  GETPL.      00042
P00057  GETPU.      00045   00063
P00003  I           00024   00031
C00064  IAUTO       00013   00013
C00000  ID
X00002  ILOCK       00022   00027
C00062  INDEX       00007   00007   00016   00016   00024
P00035  INITIAL.    00006
P00003  IPRINT      00003
P00011  .1
P00013  .2          00010
P00027  .3          00015
P00016  .4          00014
P00020  .5
P00022  .6          00017
C00063  JNDEX       00031
P00051  PF00002.    00046
X00001  QBQDICT.    00000   00004
P00034  VALUE.      00012   00021   00025   00032   00055
   00031 SYMBOLS
```

```
      SUBROUTINE MAKEBAS                                                1000
CSUBR      MAKEBAS   START     ***************************************  41000
CUSE       MYIDENT   START     ***************************************  2000
      COMMON/MYIDENT/MYIDENT                                            1000
CEND       MYIDENT   ***************************************************  2000
CUSE       TWORD     START     ***************************************  3000
      COMMON/TWORD/TWORD,ITWORD                                         1000
      EQUIVALENCE (TWORD,ITWORD)                                        2000
CEND       TWORD     ***************************************************  3000
CUSE       ITP       START     ***************************************  4000
      COMMON/ITP/ITP                                                    1000
CEND       ITP       ***************************************************  4000
CUSE       ERRORM    START     ***************************************  5000
      COMMON/ERRORM/JERR,IERSW                                          1000
CEND       ERRORM    ***************************************************  5000
CUSE       ICKTST    START     ***************************************  6000
      COMMON/ICKTST/ICKTST                                              1000
CEND       ICKTST    ***************************************************  6000
CUSE       OPTIONS   START     ***************************************  7000
      COMMON / OPTIONS/ NCON(8),INTAPE,NOUT1,NOUT2,NPR,NUM,NOPSET       1000
     1  ,ISETSIZ                                                        2000
CEND       OPTIONS   ***************************************************  7000
CUSE       HIST      START     ***************************************  8000
      COMMON/HIST/NOPSUSD(10), NUSED                                    1000
CEND       HIST      ***************************************************  8000
CUSE       LOGFLAG   START     ***************************************  9000
      COMMON/LOGFLAG/LAST,ICNI,TAPEIN,IADD,DEL,REPUT,ADDIT,IERROR       1000
      TYPE LOGICAL LAST,ICNI,TAPEIN,IADD,DEL,REPUT,ADUIT,IERROR         2000
CEND       LOGFLAG   ***************************************************  9000
CUSE       NOPRINT   START     ***************************************  10000
      COMMON/NOPRINT/NOPRINT                                            1000
CEND       NOPRINT   ***************************************************  10000
CUSE       MYTAPES   START     ***************************************  11000
      COMMON/MYTAPES/INUNIT,JTIN,LOUT,KTAPEOUT,KINCARDS                 1000
CEND       MYTAPES   ***************************************************  11000
      DIMENSION NERRS(10)                                               12000
      INTAPE=6                                                          13000
C     CHECK TO SEE IF INPUT IS FROM SETID RUN                           14000
      IF (NUSED .LE. 0) GO TO 1                                         15000
      IF( NOPSUSD(NUSED) .EQ. 8HSETID             ) INTAPE = 1         16000
     1 CALL INITFAST                                                    17000
      NOUT = 7                                                          18000
      JTIN = INTAPE                                                     19000
      CALL ALCCDIR                                                      20000
      NOPRINT = 1                                                       21000
      MYIDENT = 8HQUIKBASE                                              22000
      CALL INITAP                                                       23000
      MYIDENT = 8HUATADB                                                24000
      ITP = INTAPE                                                      25000
      CALL SETREAD                                                      26000
      MYIDENT = 8HSCRATCH                                               27000
      KINCARDS = ITP = 10                                               28000
      CALL SETWRIT                                                      29000
      ITP = 10                                                          30000
      DO 2 I = 1, 10                                                    31000
      ITWORD = 6HLAST                                                   32000
```

```
      2   CALL WRWORD                                                    33000
          ITP = 10                                                       34000
          CALL TERMTAP                                                   35000
          JERR = 9                                                       36000
          ITP = 9                                                        37000
          MYIDENT = 8HSCRATCH                                            38000
          CALL SETWRIT                                                   39000
          MYIDENT = 8HSCRATCH                                            40000
          LOUT = 2                                                       41000
          ITP = 2                                                        42000
          CALL SETWRIT                                                   43000
          CALL NEWDATA                                                   44000
          ICNT = 1                                                       45000
          LAST = 1                                                       46000
          CALL NEWDIR                                                    47000
          MYIDENT = 8HQUIKDBG                                            48000
          CALL WRITEDIR(NOUT)                                            49000
          ICNT = 1                                                       50000
          LAST = 1                                                       51000
          CALL NEWBASE(NOUT)                                             52000
          CALL ENDDATA(NOUT)                                             53000
          ITP = 9                                                        54000
C         CHECK TO SEE IF ERRORS ARE TO BE SAVED                         55000
          IF( NCON(3) .EQ. 8HNOCHECK      ) GO TO 35                     56000
          ITWORD = 8HALLONE                                              57000
          DO 31 I = 1, 20                                                58000
          CALL WRWORD                                                    59000
       31 CONTINUE                                                       60000
       35 CONTINUE                                                       61000
          CALL TERMTAP                                                   62000
C         CHECK TO SEE IF PRINTS OF BASE WERE REQUESTED                  63000
          IF( NCON(4) .EQ.8HPRINTBASE.OR.NCON(5).EQ.8HPRNTBASE)          64000
         1CALL PRNTBASE(NOUT)                                            65000
          IF( NCON(4).EQ.8HPRNTDATA.OR.NCON(5).EQ.8HPRNTDATA)            66000
         1CALL PRNTDATA(NOUT)                                            67000
C         CHECK TO SEE IF ERRORS ARE TO BE PRINTED                       68000
        3 IF( NCON(3) .EQ. 8HNOCHECK      ) GO TO 10                     69000
          CONTINUE                                                       70000
          ITP = JERR                                                     71000
          MYIDENT = 8HSCRATCH                                            72000
          CALL SETREAD                                                   73000
       30 NUMJERR = 10000                                                74000
C         LOOP TO PRINT ERROR MESSAGES                                   75000
          DO 20 I = 1,NUMJERR                                            76000
          CALL RDARRAY(NERRS,10)                                         77000
          IF( NERRS(1) .EQ.8HALLONE       ) GO TO 21                     78000
          PRINT 300, NERRS                                               79000
      300 FORMAT( 1X, 3H***, 2X, 10A8)                                   80000
       20 CONTINUE                                                       81000
          GO TO 30                                                       82000
       21 NE = I / 2                                                     83000
          PRINT 301, NE                                                  84000
      301 FORMAT( 2X, I6, * ERRORS ON QUIKDBG RUN  * )                   85000
          ITP = 9                                                        86000
          CALL TERMTAP                                                   87000
       10 CONTINUE                                                       88000
```

```
      RETURN                                                    89000
      END                                                       90000
```

IDENT MAKEBAS

PROGRAM LENGTH		00351
ENTRY POINTS	MAKEBAS	00055
BLOCK NAMES		
	MYIDENT	00001
	TWORD	00001
	ITP	00001
	ERRORM	00002
	ICKTST	00001
	OPTIONS	00017
	MIST	00013
	LOGFLAG	00010
	NOPRINT	00001
	MYTAPES	00005
EXTERNAL SYMBOLS		
	Q3Q1004C	
	THEND.	
	Q8QDICT.	
	INITFAST	
	ALOCDIR	
	INITAP	
	SETREAD	
	SETWRIT	
	WRWORD	
	TERMTAP	
	NEWDATA	
	NEWDIR	
	WRITEDIR	
	NEWBASE	
	ENDDATA	
	PRNTBASE	
	PRNTDATA	
	RDARRAY	
	STM.	
	SLC.	
	QNSINGL.	

```
C00006  ADDIT
X00005  ALOCDIR   00101
P00341  BEGIN.    00341
P00340  CNVRTI.   00327
P00015  CRFMT.    00314   00332
C00004  DEL
P00001  DICT.     00057   00074   00102   00110   00116   00125   00135   00143   00152   00161   00163
                  00173   00177   00210   00213   00230   00234   00244   00255   00270   00275   00304
                  00310   00313   00325   00331   00335
X00017  ENDDATA   00212
P00342  ENDING.   00060   00336
P00000  EXIT.     00342
P00015  FORMAT.   00066   00105   00111   00117   00130   00147   00153   00174   00217   00223   00235
                  00246   00257   00265   00277
P00314  GG00000.  00302
P00332  GG0000I.  00323
P00345  I         00131   00136   00226   00231   00273   00314   00320
C00003  IADD
C00000  ICKTST
C00001  ICNT      00166   00203
C00007  IERROR
C00001  IERSW
P00240  IF0000I.
P00251  IF0000Z.
X00006  INITAP    00107
X00004  INITFAST  00073
P00341  INITIAL.  00060
C00010  INTAPE    00061   00062   00071   00072   00076   00077   00113   00113
C00000  INUNIT
C00016  ISETSIZ
C00000  ITP       00114   00116   00121   00122   00126   00127   00140   00141   00146   00146   00157
                  00157   00215   00216   00264   00264   00332   00333
C00000  ITWORD    00133   00133   00224   00224
P00073  .1        00065
P00336  .10       00262
P00065  .10000.   00064
P00066  .10000Z   00064
P00071  .10000Z
P00073  .10000Z   00070
P00222  .10000Z
P00223  .10000Z   00221
P00243  .10000Z   00237
P00246  .10000Z   00242
P00254  .10000Z   00250
P00257  .10001Z   00253
P00262  .10001Z
P00263  .10001Z   00261
P00301  .10001Z
P00302  .10001Z   00300
P00134  .2
P00314  .20
P00320  .21       00301
P00257  .3
P00271  .30       00317
```

```
P00231  .31
P00233  .35         00222
P00015  ..100C00    00070
P00016  ..100001    00105
P00017  ..100002    00111
P00020  ..100003    00117
P00021  ..100004    00132
P00022  ..100005    00147
P00023  ..100006    00153
P00024  ..100007    00174
P00025  ..100008    00220
P00026  ..100009    00223
P00027  ..100010    00236
P00030  ..100011    00241
P00031  ..100012    00247
P00032  ..100013    00252
P00033  ..100014    00260
P00034  ..100015    00265
P00035  ..100016    00300
P00036  ..300       00305
P00045  ..301       00326
C00000  JERR        00144   00145   00263   00263
C00001  JTIN        00077   00100
C00004  KINCARDS    00122   00123
C00003  KTAPECUT
C00000  LAST        00171   00206
C00002  LOUT        00155   00156
P00055  MAKEBAS     00055
C00000  MYIDENT     00106   00106   00112   00112   00120   00120   00150   00150   00154   00154   00175
                    00175   00266   00266
C00000  NCON        00217   00217   00235   00235   00240   00240   00246   00246   00251   00251   00257
                    00257
P00346  NE          00322   00327
P00003  NERRS       00276   00277   00311
X00016  NEWBASE     00207
X00013  NEWDATA     00162
X00014  NEWDIR      00172
C00000  NOPRINT     00103   00104
C00015  NOPSET
C00000  NOPSUSO     00067
P00347  NOUT        00076   00200   00211   00214   00245   00256
C00011  NOUT1
C00012  NOUT2
C00013  NPR
C00014  NUM
P00350  NUMJERR     00272   00315
C00012  NUSED       00062   00063   00066   00066
X00020  PRNTBASE    00243
X00021  PRNTDATA    00254
X00001  Q3Q10040    00165   00170   00202   00205
X00003  Q8QDICT.    00000   00056
X00025  QNSINGL.    00337
X00022  RDARRAY     00274
C00005  REPUT
```

```
X00007  SETREAD    00115   00267
X00010  SETWRIT    00124   00151   00160
X00024  SLC.       00307
X00023  STH.       00303   00324
C00002  TAPEIN
X00012  TERMTAP    00142   00233   00334
X00002  THEND.     00312   00330
P00315  TS00003.   00273
C00000  TWORD
X00015  WRITEDIR   00176
X00011  WRWORD     00134   00227
P00132  WS00001.   00137
P00227  WS00002.   00232
P00274  WS00003.   00316   00316
   00164 SYMBOLS
```

```
      SUBROUTINE MAKEIT(NT1)                                                1000
CSUBR      MAKEIT    START     ***************************************      43000
C     CREATE A DATA BASE ON TAPE NT1 FROM CARD INPUT.                       2000
CUSE       SIDECC    START     ***************************************      3000
      COMMON / SIDECC/ IXSD                                                 1000
CEND       SIDECC    ***************************************************    3000
CUSE       JDESTEST  START     ***************************************      4000
      COMMON/JDESTEST/JDESTEST                                              1000
CEND       JDESTEST  ***************************************************    4000
CUSE       MYIDENT   START     ***************************************      5000
      COMMON/MYIDENT/MYIDENT                                                1000
CEND       MYIDENT   ***************************************************    5000
      COMMON/DIRECTRY/IDEF,LASTLIST,NOIMDIR,NDIMLIST,ATTNAME(500),          6000
     1        IFORMAT(500),LCODE(500),DEFAULT(500),IDEFAULT(500),           7000
     2         N1(500),FN1(500),N2(500),FN2(500),LISTCHEK(500),             8000
     3         GLOB(500),LISTVALS(2000)                                     9000
               EQUIVALENCE(N1,FN1),(N2,FN2),(DEFAULT,IDEFAULT)              10000
               TYPE LOGICAL LISTCHEK,GLOB                                   11000
               TYPE INTEGER ATTNAME                                         12000
               EQUIVALENCE(LOG1,LISTCHEK),(LOG2,GLOB)                       13000
C     AUGMENT DIRECTORY FROM CARDS                                          14000
      CALL NEWDIR                                                           15000
C     WRITE OUT DIRECTORY                                                   16000
      MYIDENT = 8HQUICKDB                                                   17000
      CALL WRITEDIR(NT1)                                                    18000
      JJJ=5HDESIG                                                           19000
      JDESTEST=ITLE(JJJ,ATTNAME,IDEF)                                       20000
      JJJ = 4HSIDE                                                          21000
      IXSD = ITLE(JJJ, ATTNAME, IDEF)                                       22000
C     ADD DATA FROM CARDS                                                   23000
      CALL NEWBASE(NT1)                                                     24000
C     TERMINATE                                                             25000
      CALL ENDDATA(NT1)                                                     26000
      END                                                                   27000
```

IDENT MAKEIT

PROGRAM LENGTH		00102
ENTRY POINTS	MAKEIT	00006
BLOCK NAMES		
	STDECC	00001
	JDESTEST	00001
	MYIDENT	00001
	DIRECTRY	11054
EXTERNAL SYMBOLS		
	QQQDICT.	
	NEWDIR	
	WRITEDIR	
	ITLE	
	NEWBASE	
	ENDDATA	

```
C00004  ATTNAME    00025   00034
P00046  BEGIN.     00063   00071   00075
C02740  DEFAULT
P00001  DICT.      00010   00013   00017   00024   00033   00040   00043   00051   00052
X00006  ENDDATA    00042
P00064  ENDING.    00011   00045   00046   00047   00047   00050   00050
P00000  EXIT.      00067
C03724  FN1
C04710  FN2
P00003  FORMAT.    00014   00021   00030
P00020  FP00001.   00060
P00041  FP00002.   00061
P00044  FP00003.   00062
P00100  GETPL.     00053
P00070  GETPU.     00056   00074
C05714  GLOB
C01754  ICODE
C00000  IDEF       00026   00035
C02740  IDEFAULT
C00770  IFORMAT
P00046  INITIAL.   00011
X00004  ITLE       00023   00032
C00000  IXSO       00036   00036
P00003  ..100000   00014
P00004  ..100001   00021
P00005  ..100002   00030
C00000  JOESTEST   00027   00027
P00101  JJJ        00022   00025   00031   00034
C00001  LASTLIST
C05674  LISTCHER
C05734  LISTVALS
C05674  LOG1
C05714  LOG2
P00006  MAKEIT     00006
C00000  MYIDENT    00015   00015
C03724  N1
C04710  N2
C00002  NDIMDIR
C00003  NDIMLIST
X00005  NEWBASE    00037
X00002  NEWDIR     00012
P00003  NT1        00020   00041   00044
P00063  PF00002.   00057
X00001  Q8QDICT.   00000   00007
X00003  WRITEDIR   00016
  00055 SYMBOLS
```

```
      SUBROUTINE MOVEIT(IHOWTO)                                          1000
CSUBR      MOVEIT    START     ***************************************** 45000
C***  SUBROUTINE MOVEIT MOVES RECORDS FROM THE INPUT BUFFER AREAS        2000
CUSE       ERRORM    START     ***************************************** 3000
      COMMON/ERRORM/JERR,IERSW                                           1000
CEND       ERRORM    ********************************************************* 3000
C***  TO THE OUTPUT BUFFER AREA, ADDS THE NEW SET NUMBER AND             4000
C***  LINE NUMBER AND ADDS THE DATE OF THE UPDATE WHEN APPLICABLE        5000
      COMMON/MYOUT/OUTSTUFF(10)                                          6000
CUSE       MYINPUT   START     ***************************************** 7000
      COMMON/MYINPUT/INSTUFF(10)                                         1000
CEND       MYINPUT   ********************************************************* 7000
CUSE       MYGOODS   START     ***************************************** 8000
      COMMON/MYGOODS/NLINE,ISET,JSET,NEWDATE                             1000
CEND       MYGOODS   ********************************************************* 8000
      TYPE INTEGER OUTSTUFF                                              9000
C***  NLINE IS THE INDEX OF THE LINE NUMBER WITHIN THE CURRENT SET       10000
      NLINE=NLINE+1                                                      11000
      GO TO (20,30),IHOWTO                                               12000
C***  ISET IS THE INDEX OF THE NEW SET                                   13000
 20   JSET=ISET                                                          14000
C     LOOP TO MOVE UPDATE CARD                                           15000
      DO 21 I=1,8                                                        16000
C***  THE ARRAY INSTUFF IS SET ASIDE FOR NEW DATA COMING                 17000
C***  FROM CARD OR TAPE, THE ARRAY OUTSTUFF CONTAINS THE DATA            18000
C***  FOR TRANSFER TO NEWBASE AND NEWDIR TO BUILD THE QUICK              19000
C***  DATABASE, FOR TRANSFER TO THE PRINT ROUTINE, OUT, AND FOR          20000
C***  OUTPUT TO THE UPDATED DATATAPE, LOUT                               21000
 21   OUTSTUFF(I)=INSTUFF(I)                                             22000
C***  ENTER DATE OF UPDATE                                               23000
      OUTSTUFF(10)=NEWDATE                                               24000
C***  ENTER THE CURRENT SET NUMBER, JSET, AND LINE NUMBER, NLINE         25000
   30 IF(NLINE .LT. 9999) GO TO 10                                       26000
      NLINE = 9999                                                       27000
      ENCODE(8,400,OUTSTUFF(9)) JSET, NLINE                              28000
      ITP = JERR                                                         29000
C     LOOP TO WRITE OUT ERROR MESSAGE                                    30000
      DO 11 I = 1, 5                                                     31000
      ITWORD = 8HSET TOO                                                 32000
      CALL WRWORD                                                        33000
      ITWORD = 8H LARGE                                                  34000
   11 CALL WRWORD                                                        35000
      CALL WRARRAY(OUTSTUFF, 10)                                         36000
      RETURN                                                             37000
   10 ENCODE(8, 400, OUTSTUFF(9)) JSET, NLINE                            38000
  400 FORMAT(2I4)                                                        39000
      RETURN                                                             40000
      END                                                                41000
```

IDENT MOVEIT

PROGRAM LENGTH		00144
ENTRY POINTS	MOVEIT	00010
BLOCK NAMES		
	ENROKM	00002
	MYOUT	00012
	MYINPUT	00012
	MYGOODS	00004
EXTERNAL SYMBOLS		
	THEND.	
	QBQDICT.	
	WRWORD	
	WRARRAY	
	ENC.	
	QNSINGL.	

```
P00105  BEGIN.      00121   00127   00133
P00104  CNVRTI.     00045   00046   00076   00077
P00003  CRFMT.      00102
P00001  DICT.       00012   00043   00050   00057   00062   00066   00073   00101   00110   00111
X00005  ENC.        00042   00072
P00122  ENDING.     00013   00070   00102   00105   00106   00106   00107   00107
P00000  EXIT.       00125
P00003  FORMAT.     00053   00060
P00016  FP0000I.    00117   00120
P00136  GETPL.      00112
P00126  GETPU.      00115   00132
P00051  GG00000.    00041
P00102  GG00001.    00071
P00140  I           00024   00025   00053   00063
C00001  IERSW
P00141  IGOTO.      00017
P00003  IHOWTO      00016
P00105  INITIAL.    00013
C00000  INSTUFF     00026   00026
C00001  ISET        00022   00022
P00142  ITP         00052
P00143  ITWORD      00055   00060
P00071  .IO         00036
P00036  .I0000I
P00037  .I0000Z     00034   00035
P00061  .II
P00022  .20         00020
P00026  .21
P00033  .30         00021
P00003  ..100000    00054
P00004  ..100001    00060
P00005  ..400       00044   00074
C00000  JERR        00051   00051
C00002  JSET        00023   00045   00075   00075
P00110  MOVEIT      0001C
C00003  NEWDATE     00031   00031
C00000  NLINE       00014   00014   00015   00033   00033   00037   0004C   00046   00077
C00000  OUTSTUFF    00027   00027   00032   00032   00044   00067   00074
P00121  PF0000Z.    00116
X00002  Q8QDICT.    00000   00011
X00006  QNSINGL.    00103
X00001  THEND.      00047   00100
X00004  WRARRAY     00065
X00003  WRWORD      00056   00061
P00026  WS0000I.    00030
P00054  WS0000Z.    00064
   00056 SYMBOLS
```

```
      SUBROUTINE NEWBASE(NT1)                                          1000
CSUBR      NEWBASE   20SEP71   ********************************************  46000
CUSE       SIDECC    START     ********************************************  2000
      COMMON / SIDECC/ IXSD                                            1000
CEND       SIDECC    ********************************************************  2000
      EQUIVALENCE( LISTCHEK,LISTCHK)                                   3000
C     READ CARDS AND OUTPUT TO DATA FILE ON TAPE NT1. ASSUMES          4000
C     TAPEHANDLER SET TO WRITE.                                        5000
CUSE       MYGOODS   START     ********************************************  6000
      COMMON/MYGOODS/NLINE,ISET,JSET,NEWDATE                           1000
CEND       MYGOODS   ********************************************************  6000
CUSE       KKSET     START     ********************************************  7000
      COMMON/KKSET/KKSET                                               1000
CEND       KKSET     ********************************************************  7000
CUSE       JDESTEST  START     ********************************************  8000
      COMMON/JDESTEST/JDESTEST                                         1000
CEND       JDESTEST  ********************************************************  8000
CUSE       PRTOPT    START     ********************************************  9000
      COMMON/PRTOPT/NPRTOPT                                            1000
CEND       PRTOPT    ********************************************************  9000
      DATA (NPRTOPT=0)                                                 10000
      COMMON/DIRECTRY/IDEF,LASTLIST,NDIMDIR,NDIMLIST,ATTNAME(500),     11000
     1        IFORMAT(500),ICODE(500),DEFAULT(500),IDEFAULT(500),      12000
     2         N1(500),FN1(500),N2(500),FN2(500),LISTCHEK(500),        13000
     3         GLOB(500),LISTVALS(2000)                                14000
               EQUIVALENCE(N1,FN1),(N2,FN2),(DEFAULT,IDEFAULT)         15000
               TYPE LOGICAL LISTCHEK,GLOB                              16000
               TYPE INTEGER ATTNAME                                    17000
               EQUIVALENCE(LOG1,LISTCHEK),(LOG2,GLOB)                  18000
               DATA(NDIMDIR=500),(NDIMLIST=2000)                       19000
C     IDEF     = INDEX OF LAST DEFINED ATTRIBUTE IN TABLES             20000
C     LASTLIST= INDEX OF LAST ENTRY IN LISTVALS                        21000
C     LISTCHEK= TRUE FOR LIST CHECKING,FALSE FOR RANGE CHECKING        22000
C     GLOB     = TRUE WHEN GLOBAL DEFINITION IN FORCE.                 23000
C     ATTNAME  = BCD NAME OF ATTRIBUTE                                 24000
C     IFORMAT  = INPUT/OUTPUT CONVERSION FOR VALUES(FORTRAN CONV.)     25000
C     ICODE    = CODE SPECIFYING TYPE OF VALUES                        26000
C     DEFAULT  = UNDEFINED VALUE FOR ATTRIBUTE                         27000
C     N1       = LOWEST LEGAL VALUE(RANGE CHECK) OR INDEX IN LISTVALS  28000
C                OF BEGIN OF LIST OF ALLOWED(LIST CHECK)               29000
C     N2       = HIGHEST LEGAL VALUE(RANGE CHECK) OR INDEX IN LISTVALS 30000
C                OF END OF ALLOWED LIST(LIST CHECK)                    31000
C     LISTVALS= CONTAINS ALLOWABLE VALUES FOR LIST CHECKING            32000
CUSE       IENDSET   START     ********************************************  33000
      COMMON/IENDSET/IENDSET                                           1000
CEND       IENDSET   ********************************************************  33000
CUSE       ITP       START     ********************************************  34000
      COMMON/ITP/ITP                                                   1000
CEND       ITP       ********************************************************  34000
CUSE       TWORD     START     ********************************************  35000
      COMMON/TWORD/TWORD,ITWORD                                        1000
      EQUIVALENCE (TWORD,ITWORD)                                       2000
CEND       TWORD     ********************************************************  35000
CUSE       NOTEST    START     ********************************************  36000
      COMMON/NOTEST/NOTEST                                             1000
CEND       NOTEST    ********************************************************  36000
```

```
      CUSE      ERRORM    START     ********************************************  37000
                COMMON/ERROMM/JERR,IERSW                                          1000
      CEND      ERRORM    ********************************************************  37000
      CUSE      ICONTROL  START     ********************************************  38000
                COMMON/ICONTROL/ICOM                                              1000
      CEND      ICONTROL  ********************************************************  38000
                COMMON/MYOUT/OUTSTUFF(10)                                         39000
                DIMENSION NEACH(8)                                                40000
                DIMENSION NX(10)                                                  41000
                EQUIVALENCE (OUTSTUFF,NX)                                         42000
                TYPE INTEGER OUTSTUFF                                             43000
      C         JERR    = ERROR OUTPUT MEDIUM                                   44000
      C         IERSW   = 0 IF NO ERRORS, 1 IF ANY.                             45000
                DIMENSION NFORM(3)                                                46000
                DATA(NFORM=1H(,1H ,1H))                                           47000
                DIMENSION JATT(200),JVAL(200)                                     48000
                EQUIVALENCE (NVAL,XNVAL)                                          49000
                DATA (NCON=777777777777B)                                         50000
                DATA (NCON1=600000000000008)                                      51000
                COMMON/XYZ/XMIN,XMAX                                              51100
      C         CLEAR GLOBAL DEFINITION INDICATORS                              52000
                DO 10 I=1,IDEF                                                    53000
           10   GLOB(I)=0                                                       54000
      C***      CALL NEWCARDS FOR NEW CARD IMAGE                                55000
           20   CALL NEWCARDS                                                   56000
      C         CHECK TO SEE IF SET JUST ENDED                                  57000
            22  IF(IENDSET)70,221                                               58000
            221 GO TO (50,25,40,70,23),ICOM                                     59000
              23 IERSW=2                                                        60000
                 ITP = 9                                                        61000
      C          LOOP TO WRITE ERROR MESSAGE                                   62000
                 DO 24 I = 1,5                                                  63000
                 ITWORD = 8H ERROR                                              64000
                 CALL WRWORD                                                    65000
                 ITWORD = 8HNEWBASE                                             66000
              24 CALL WRWORD                                                    67000
                 CALL WRARRAY(NX,10)                                            68000
                 GO TO 20                                                       69000
      C          HERE DEFINE                                                   70000
              25 I=2                                                            71000
      C          CHECK FOR DONE                                                72000
              26 IF(NX(1) .EQ. 1H )20,27                                        73000
      C          CONVERT AND CHECK ATTRIBUTE AND VALUE                         74000
              27 ASSIGN 28 TO NCHEK                                             75000
                 GO TO 130                                                      76000
      C          CHECK TO SEE IF ERROR IS DATA                                 77000
              28 IF(KERR)30,29                                                  78000
      C          OUTPUT GLOBAL SIGNAL                                          79000
           29    ITP=NTI                                                       80000
                 ITWORD=-1                                                      81000
                 CALL WRWORD                                                    82000
      C          OUTPUT ATTRIBUTE INDEX                                        83000
                 ITWORD=J                                                       84000
                 CALL WRWORD                                                    85000
      C          OUTPUT ATTRIBUTE VALUE                                        86000
                 ITWORD=NVAL                                                    87000
```

```
      CALL WRBCRD                                                    88000
      GLOB(J)=1                                                      89000
      ASSIGN 30 TO MMKCHK                                            89100
      GO TO 1000                                                     89200
C     ADVANCE CARD FIELD                                             90000
   30 I=I+2                                                          91000
C     CHECK TO SEE IF CARD EXHAUSTED                                 92000
      IF(I .GT. 7)20,26                                              93000
C     END DEFINE PROCESSING                                          94000
C     HERE UNDEFINE                                                  95000
   40 I=2                                                            96000
C     CHECK FOR DONE                                                 97000
   41 IF(NX(I) .EQ. 1H )20,42                                        98000
C     LOOK UP ATTRIBUTE                                              99000
   42 J=ITLE(NX(I),ATTNAME,IDEF)                                     100000
      IF(J)43,43,44                                                  101000
C     CHECK TO SEE IF ATTRIBUTE KNOWN                                102000
C     SIGNAL UNDEFINED ATTRIBUTE IF CANT FIND                        103000
   43 ASSIGN 45 TO NAT                                               104000
      GO TO 110                                                      105000
C     HERE FOUND ATTRIBUTE ,EMIT UNDEFINE SIGNAL                     106000
44    ITP=NT;                                                        107000
      ITWORD=-2                                                      108000
      CALL WRBCRD                                                    109000
C     OUTPUT ATTRIBUTE INDEX                                         110000
      ITWORD=J                                                       111000
      CALL WRBCRD                                                    112000
C     OUTPUT DEFAULT VALUE                                           113000
      ITWORD=IDEFAULT(J)                                             114000
      CALL WRBCRD                                                    115000
      GLOB(J)=0                                                      116000
C     ADVANCE CARD FIELD                                             117000
      ASSIGN 45 TO MMKCHK                                            117100
      GO T O 1000                                                    117200
   45 I=I+1                                                          118000
C     CHECK TO SEE IF CARD EXHAUSTED                                 119000
      IF(I .GT. 8)20,41                                              120000
C     END UNDEFINE PROCESSING                                        121000
C     HERE PROCESS ITEM                                              122000
   50 I=2                                                            123000
      NZ=0                                                           124000
      ASSIGN 52 TO NCHEK                                             125000
C     CHECK AND CONVERT ATTRIBUTE VALUE PAIR                         126000
   51 IF (NX(I) .EQ. 1H ) 5555,130                                   127000
 5555 GO TO 55                                                       128000
C     CHECK TO SEE IF DATA ERROR                                     129000
   52 IF(KERR)54,53                                                  130000
   53 NZ=NZ+1                                                        131000
      JATT(NZ)=J                                                     132000
      JVAL(NZ)=NVAL                                                  133000
C     ADVANCE CARD FIELD                                             134000
      ASSIGN 54 TO MMKCHK                                            134100
      GO TO 1000                                                     134200
   54 I=I+2                                                          135000
C     CHECK TO SEE IF CARD EXHAUSTED                                 136000
      IF(I .GT. 7)55,51                                              137000
```

```
C***  CALL NEWCARDS FOR NEXT CARD IMAGE                                  138000
55    CALL NEWCARDS                                                      139000
   56 GO TO(58,58,58,58,57),ICOM                                         140000
C     HERE CONTINUE PROCESSING SAME ITEM(NO NEW COMMAND).                141000
   57 I=1                                                                142000
      GO TO 51                                                           143000
C     HERE ENCOUNTERED NEW COMMAND,OUTPUT CUR ITEM,THEN DO NEW.          144000
58    ITP=NTI                                                            145000
      ITWORD=NZ                                                          146000
      CALL WRWORD                                                        147000
C     LOOP TO WRITE ATTRIBUTE PAIRS                                      148000
      DO 59 L=1,NZ                                                       149000
      ITWORD=JATT(L)                                                     150000
C     CHECK TO SEE IF THIS ITEM IS A DESIG                               151000
      IF(ITWORD.EQ.JUESTEST) 5846,5847                                   152000
 5846 CALL COUNTDS(JVAL(J))                                              153000
 5847 CONTINUE                                                           154000
      CALL WRWORD                                                        155000
      ITWORD=JVAL(L)                                                     156000
   59 CALL WRWORD                                                        157000
      GO TO 22                                                           158000
C     HERE FOR END INPUT. UNDEFINE ALL GLOBAL ATTRIBS,AND EXIT           159000
70    ITP=NTI                                                            160000
      DO 72 I=1,IDEF                                                     161000
      IF(GLOB(I))71,72                                                   162000
   71 ITWORD=-2                                                          163000
      CALL WRWORD                                                        164000
      ITWORD=I                                                           165000
      CALL WRWORD                                                        166000
      ITWORD=IDEFAULT(I)                                                 167000
      CALL WRWORD                                                        168000
   72 CONTINUE                                                           169000
C     CHECK FOR END SET                                                  170000
      IF(IENDSET) 7200,7201                                              171000
 7200 IENDSET=0                                                          172000
      GO TO 221                                                          173000
 7201 CONTINUE                                                           174000
      RETURN                                                             175000
C     LOCAL SUBROUTINE TO CHECK ATTRIBUTE AND                            176000
C     CONVERT VALUE TO NVAL. KERR 1 IF NO CHECK. EXIT NCHEK              177000
  130 J=ITLE(NX(I),ATTNAME,IDEF)                                         178000
C     CHECK TO SEE IF ITEM IS SIDE                                       179000
      IF(J .NE. IXSD) GO TO 134                                          180000
      KKSET = 1                                                          181000
C     CHECK TO SEE IF SIDE IS RED                                        182000
      IF(NX(I+1) .EQ. 3HRED) KKSET = 2                                   183000
  134 CONTINUE                                                           184000
      KERR=0                                                             185000
C     CHECK TO SEE IF ATTRIBUTE IN DIRECTORY                             186000
      IF(J)131,131,133                                                   187000
  131 ASSIGN 132 TO NAT                                                  188000
C     SIGNAL UNDEFINED ATTRIBUTE ERROR                                   189000
      GO TO 110                                                          190000
  530 CONTINUE                                                           191000
  132 KERR=1                                                             192000
  540 CONTINUE                                                           193000
```

```
  136 GO TO NCHEK                                                    194000
C     DECODE AND CHECK VALUE                                         195000
  133 NFORM(2)=IFORMAT(J)                                            196000
      ASSIGN 132 TO ILLVAL                                           197000
C     CHECK TO SEE IF LAT-LONG TO BE CORRECTED                       198000
      IF (ICODE(J)-7)760,560,760                                     199000
  560 DECODE(8,561,NX(I+1)) NEACH                                    200000
  561 FORMAT(8R1)                                                    201000
C     LOOP TO CONVERT LAT-LONG                                       202000
      DO 569INE=1,8                                                  203000
      IF( NEACH(INE) .EQ. 1H-) 780, 547                              204000
  547 CONTINUE                                                       205000
      IF(NEACH(INE) .EQ. 1R.) 780,571                                206000
  571 IF(NEACH(INE) .EQ. 1RO .OR. NEACH(INE) .EQ. 1R                 207000
     1 .OR. NEACH(INE) .GE. 1R1.AND. NEACH(INE) .LE. 1R9) 569,562    208000
  562 IF(NEACH(INE) .EQ. 1RN .OR. NEACH(INE) .EQ. 1RS                209000
     1.OR. NEACH(INE) .EQ. 1RE .OR. NEACH(INE) .EQ. 1RW) 563,940     210000
  563 IQUAD =NEACH(INE)                                              211000
      IF(INE .EQ. 7) 564,567                                         212000
  564 DECODE(6,565,NX(I+1)) XLD,XLM,XLS                              213000
  565 FORMAT(3F2.0)                                                  214000
      GO TO 566                                                      215000
  567 IF(INE .EQ. 8) 640,940                                         216000
  569 CONTINUE                                                       217000
      GO TO 720                                                      218000
640   DECODE (7,650,NX(I+1))XLD,XLM,XLS                              219000
650   FORMAT (F3.0,2F2.0)                                            220000
  566 CONTINUE                                                       221000
      IF(XLS .LT. 0. .OR. XLS .GT. 60.) 940,660                      222000
  660 IF(XLM .LT. 0. .OR. XLM .GT. 60.) 940,670                      223000
670   XNVAL=XLD+XLM/60.+XLS/3600.                                    224000
      IF (NX(I)-3HLAT)680,700,680                                    225000
680   IF (NX(I)-4HLONG)940,690,940                                   226000
690   IF (XNVAL-180.)720,720,940                                     227000
700   IF (IQUAD-1HN)710,810,710                                      228000
710   IF (IQUAD-1HS)940,740,940                                      229000
720   IF (IQUAD-1HE)730,750,730                                      230000
730   IF (IQUAD-1HW)940,810,940                                      231000
740   XNVAL=-XNVAL                                                   232000
      GOTO 810                                                       233000
750   XNVAL=360.-XNVAL                                               234000
      GOTO 810                                                       235000
760   CONTINUE                                                       236000
      IF (NX(I+1)-5HBLANK)790,770,780                                237000
770   NVAL=1H                                                        238000
      GOTO 790                                                       239000
780   DECODE (8,NFORM,NX(I+1))NVAL                                   240000
790   ASSIGN 530TO ILLVAL                                            241000
      IC=ICODE(J)                                                    242000
      GOTO (810,810,800,800,810,540,810),IC                          243000
800   NVAL=NUMGET(NX(I+1),8)                                         244000
810   CONTINUE                                                       245000
C     SEE IF RANGE OR LIST CHECK                                     246000
C     NOTEST-ZERO CHECK = NON ZERO = NO CHECK                        247000
      IF(NOTEST.GT. 0) GO TO 136                                     248000
C     HERE RANGE CHECK                                               249000
```

```
      820 IC=ICODE(J)                                                   250000
          GO TO (830,890,840,890,890,540,830),IC                        251000
      C   CHECK RANGE IF FLOATING PRINT VALUE                           252000
      830 IF(XNVAL .LT. FN1(J) .OR. XNVAL .GT. FN2(J)) 940,540          253000
      C   CHECK RANGE IF INTEGER VALUE                                 254000
      840 IF(NVAL .LT. N1(J) .OR. NVAL .GT. N2(J)) 940,540              255000
      C                                                                 256000
      C   HERE LIST CHECK                                               257000
      890 CONTINUE                                                      258000
      137 NN1=N1(J)                                                     259000
          NN2=N2(J)                                                     260000
          DO 138 K=NN1,NN2                                              261000
      C   LOOP TO CHECK FOR MULTEITH VALUE                              262000
          IF(NVAL .EQ. LASTVALS(K))136,138                              263000
      138 CONTINUE                                                      264000
          GO TO 122                                                     265000
      C   END LOCAL SUBROUTINE TO CHECK ATTRIB,VAL.                     266000
      C   UNDEFINED ATTRIBUTE ERROR LOCAL SUBROUTINE. EXIT NAT          267000
      110 IERSW=2                                                       268000
      112 FORMAT(11H CARD READ ,7X,10(A8,2X),2X)                        269000
          ITP = JERR                                                    270000
      C   LOOP TO WRITE ERROR MESSAGE                                  271000
          DO 111 K = 1, 5                                               272000
          ITWORD = 8H UNKNOWN                                           273000
          CALL WRWORD                                                   274000
          ITWORD = 8H ATTRIBT                                           275000
      111 CALL WRWORD                                                   276000
          CALL WHARRAY(NX,IC)                                           277000
          GO TO NAT                                                     278000
      C   ILLEGAL VALUE ERROR SUBROUTINE .EXIT ILLVAL                   279000
      940 CONTINUE                                                      280000
      120 IERSW=2                                                       281000
          ITP = JERR                                                    282000
          DO 121 I = 1,5                                                283000
      C   LOOP TO WRITE ERROR MESSAGE                                  284000
          ITWORD = 8HRANGE                                              285000
          CALL WRWORD                                                   286000
          ITWORD = 8HERROR                                              287000
      121 CALL WRWORD                                                   288000
          CALL WRARRAY(NX,IC)                                           289000
          GO TO ILLVAL                                                  290000
      C   LOCAL SUBROUTINE TO CHECK MINKILL MAXKILL                     290010
     1000 CONTINUE                                                      290020
          NOFLG = 1                                                     290030
          IF( NX(I) .EQ. 7HMINKILL ) GO TO 1001                         290040
          IF( NX(I) .NE. 7HMAXKILL   ) GO TO MMKCHK                     290050
          NOFLG = 2                                                     290060
     1001 J = ITLE(NX(I), ATTNAME,IDEF)                                 290070
          IF( J .LE. 0) GO TO MMKCHK                                    290080
          NFORM(2) = IFORMAT(J)                                         290090
          DECODE( 8, NFORM, NX(I+1)) XTEMP                              290100
          GO TO ( 1002, 1003) NOFLG                                     290110
     1002 XMIN = XTEMP                                                  290120
          GO TO 1004                                                    290130
     1003 XMAX = XTEMP                                                  290140
     1004 IF( XMAX .GE. XMIN ) GO TO MMKCHK                             290150
```

```
      IERSW = 2                                                    290160
      ITP = JERR                                                   290170
      ITWORD = 8H ******                                           290180
      CALL WRWORD                                                  290190
      DO 1021 I = 1, 3                                             290200
      ITWORD = 8HMAXKILL=                                          290210
      CALL WRWORD                                                  290220
      ITWORD = 8H MINKILL                                          290230
      CALL WRWORD                                                  290240
      ITWORD = 8H ERROR                                            290250
      CALL WRWORD                                                  290260
 1021 CONTINUE                                                     290270
      CALL WRARRAY(NA, 10)                                         290280
      GO TO MMKCHK                                                 290290
      END                                                          291000
```

IDENT NEWBASE

PROGRAM LENGTH		02101
ENTRY POINTS	NEWBASE	00712
BLOCK NAMES		
	SIDECC	00001
	MYGOODS	00004
	KKSET	00001
	JDESTEST	00001
	PRTOPT	00001
	DIRECTRY	11654
	IENDSET	00001
	ITP	00001
	TWORD	00001
	NOTEST	00001
	ERRORM	00002
	ICONTROL	00001
	MYOUT	00012
	XYZ	00002
EXTERNAL SYMBOLS		
	Q3010040	
	Q3000040	
	THEND.	
	QQQDICT.	
	NEWCARDS	
	WRWORD	
	WRARRAY	
	ITLE	
	COUNTOS	
	NUMGET	
	DEC.	
	SLI.	
	UNSINGL.	

```
P01277  AN0000C.  01273
P01360  AN0000C1.  01354
P01404  AN0000C2.  01400
P01506  AN0000C3.  01502
P01722  AN0000C4.  01716
C00004  ATTNAME  01041  01233  01702
P02003  BEGIN.  02025  02033  02037
P02002  CNVRTI.  01361  01363  01364  01405  01407  01410  01507  01723
X00011  COUNTDS  01154
P02053  COUNT.  00722  00723
P00641  CRFMT.  01306  01370  01414  01610
X00013  DEC.  01275  01356  01402  01504  01720
C02740  DEFAULT
P00001  DICT.  00714  00731  00751  00755  00761  01003  01007  01013  01040  01054  01060
                01085  01126  01143  01155  01160  01165  01205  01211  01216  01232  01276
                01302  01305  01357  01367  01403  01413  01505  01512  01530  01617  01623
                01627  01643  01647  01653  01701  01721  01726  01753  01761  01765  01771
                01775  02006  02007
P02026  ENDING.  00715  01226  02003  02004  02004  02005  02005
P00000  EXIT.  02031
C03724  FN1  01550  01551
C04710  FN2  01554  01555
P00641  FORMAT.  00744  00752  00766  01031  01104  01242  01435  01441  01472  01477  01612
                01620  01636  01644  01661  01665  01750  01754  01762  01766
P00776  FP0000C1.  02015  02016
P01047  FP0000C2.  02017  02020
P01136  FP0000C3.  02021  02022
P01172  FP0000C4.  02023  02024
P02042  GETPL.  02010
P02032  GETPU.  02013  02036
P01306  GG000C0.  01274
P01370  GG000C1.  01355
P01414  GG000C2.  01401
P01513  GG000C3.  01503
P01727  GG000C4.  01717
C05714  GLOB  00726  01017  01070  01200
P02054  I  00717  00722  00745  00756  00765  00766  01022  01023  01024  01030  01031
                01035  01073  01074  01075  01101  01104  01121  01122  01123  01135  01175
                01176  01206  01212  01217  01227  01242  01272  01353  01377  01435  01441
                01472  01501  01525  01637  01650  01661  01665  01676  01715  01755  01772
P02055  IC  01516  01541
C01754  ICODE  01267  01267  01515  01515  01540  01540
C00000  ICOM  00734  00734  01127  01127
C00000  IDEF  00717  00720  01042  01220  01220  01234  01703
C02740  IDEFAULT  01062  01062  01213  01213
C00000  IENDSET  00732  00732  01222  01222  01224  01225
C00001  IERSW  00741  00742  01606  01607  01633  01634  01745  01746
P01321  IF0000C1.
P01324  IF0000C2.
P01327  IF0000C3.  01326
P01336  IF0000C4.
P01341  IF00005
P01344  IF00006
P01417  IF0000C7.  01415
```

```
P01425  IF00010.  01423
P01553  IF00011.  01551
P01563  IF00012.  01561
C00770  IFORMAT   01264  01264  01713  01713
P02056  IGOTO.    00735  01130  01517  01542  01730
P02057  ILLVAL    01266  01314  01655
P02060  INE       01307  01310  01313  01316  01321  01324  01327  01333  01336  01341  01344
                  01347  01351  01371  01374
P02003  INITIAL.  00715
P02061  IQUAD     01350  01451  01454  01457  01462
C00001  ISET
X00010  ITLE      01037  01231  01700
C00000  ITP       00743  00743  00777  00777  01050  01050  01137  01137  01173  01173  01610
                  01611  01635  01635  01747  01747
C00000  ITWORD    00747  00747  00753  00753  01000  01001  01005  01005  01011  01011  01051
                  01052  01056  01056  01063  01063  01141  01141  01147  01150  01162  01163
                  01202  01203  01207  01207  01214  01214  01615  01615  01621  01621  01641
                  01641  01645  01645  01751  01751  01757  01757  01763  01763  01767  01767
C00000  IXSO      01235  01236
P01657  .1000     01021  01072  01120
P00724  .10
P01237  .100001
P01240  .100002   01236
P01246  .100003
P01250  .100004   01245
P01536  .100005
P01537  .100006   01534  01535
P01664  .100007
P01665  .100008   01663
P01671  .100009
P01674  .100010   01670
P01707  .100011   01705
P01712  .100012   01706
P01742  .100013   01740
P01745  .100014   01741
P01676  .1001     01664
P01732  .1002     01731
P01735  .1003     01731
P01737  .1004     01734
P01772  .1021
P01606  .110      01046  01255
P01622  .111
P01633  .120      01605
P01646  .121
P01227  .130      00773  01107
P01254  .131      01252  01252
P01256  .132      01254  01266
P01263  .133      01253
P01250  .134      01237
P01260  .136      01536  01601
P01567  .137
P01602  .138      01600
P00730  .20       00763  00771  01026  01034  01077
P00732  .22       01171
```

P00734	.221	01225					
P00741	.23						
P00754	.24						
P00764	.25	00737					
P00766	.26	01025	01025				
P00772	.27	00771					
P00774	.28	00772					
P00776	.29						
P01022	.30	00775	01020				
P01027	.40	00740					
P01031	.41	01076	01076				
P01035	.42	01034					
P01045	.43	01043	01044				
P01047	.44	01044					
P01073	.45	01045	01071				
P01100	.50	00736					
P01104	.51	01124	01124	01135			
P01111	.52	01102					
P01256	.530	01513					
P01113	.53						
P01260	.540	01523	01546	01555	01556	01565	01566
P01121	.54	01112	01117				
P01313	.547	01312					
P01125	.55	01110					
P01110	.5555						
P01272	.560	01270					
P01127	.56						
P01333	.562	01326	01331				
P01347	.563	01335	01340	01343			
P01353	.564						
P01414	.566	01370					
P01371	.567	01352					
P01374	.569	01320	01323	01331	01332		
P01134	.57						
P01316	.571	01315					
P01136	.58	01131	01132	01133	01133		
P01152	.5846						
P01157	.5847	01151					
P01164	.59						
P01377	.640	01373					
P01422	.660	01420	01421				
P01430	.670	01426	01427				
P01441	.680	01440	01440				
P01446	.690	01444					
P01172	.70	00733	00740				
P01451	.700	01437					
P01202	.71	01201					
P01454	.710	01453					
P01217	.72	01201					
P01224	.7200	01223					
P01457	.720	01447	01450				
P01226	.7201	01223					
P01462	.730	01461					
P01465	.740	01455					

```
P01467  .750      01460
P01472  .760      01471   01471
P01477  .770      01475
P01501  .780      01312   01315   01376   01475   01476
P01513  .790      01500
P01525  .800      01521   01522
P01533  .810      01452   01463   01466   01471   01520   01520   01523   01524
P01537  .820
P01547  .830      01543
P01557  .840      01544
P01567  .890      01543   01545   01546
P01633  .940      01346   01372   01416   01421   01424   01427   01444   01445   01450   01456   01456
                  01464   01464   01552   01556   01562   01566
P02043  .ERASER.  01432   01433
P00641  ..100000  00746
P00642  ..100001  00752
P00643  ..100002  00770
P00644  ..100003  01033
P00645  ..100004  01106
P00646  ..100005  01244
P00661  ..100006  01437
P00662  ..100007  01443
P00663  ..100008  01474
P00664  ..100009  01477
P00700  ..10001a  01614
P00701  ..10001l  01620
P00702  ..10001c  01640
P00703  ..10001d  01644
P00704  ..10001e  01663
P00705  ..10001f  01667
P00706  ..10001g  01750
P00707  ..10001h  01756
P00710  ..10001i  01762
P00711  ..10001j  01766
P00665  ..112
P00647  ..561     01277
P00652  ..565     01360
P00655  ..650     01404
P01041  .Z000C1.  01036
P01156  .Z000C2.  01153
P01233  .Z000C3.  01230
P01531  .Z000C4.  01526
P01702  .Z000C5.  01677
P02062  J         01004   01015   01043   01055   01061   01115   01152   01235   01251   01263   01514
                  01537   01550   01554   01560   01564   01567   01704   01704   01712
P00016  JATT      01116   01147
C00000  JOESTEST  01150   01151
C00000  JERR      01610   01634   01746
C00002  JSET
P00326  JVAL      01117   01153   01156   01162
P02063  K         01574   01577   01602   01613   01624
P02064  KERR      00774   01111   01251   01257
C00000  KKSET     01240   01241   01246   01247
P02065  L         01145   01146   01161   01166
```

```
C00001 LASTLIST
C05674 LISTCHEK
C05674 LISTCHK
C05734 LISTVALS  01577  01600
C05674 LOG1
C05714 LOG2
P02066 MMKCMK    01020  01072  01120  01671  01707  01742  01777
C03724 N1        01560  01561  01570  01570
C04710 N2        01564  01565  01572  01572
P02067 NAT       01046  01255  01631
P02070 NCHEK     00773  01103  01260
P00637 NCON
P00640 NCON1
C00002 NDIMDIR   00637
C00003 NDIMLIST  C00003
P00003 NEACH     01303  01311  01314  01317  01322  01325  01330  01334  01337  01342  01345
                 01350
P00712 NEWBASE   00712
X00005 NEWCARDS  00730  01125
C00003 NEWDATE
P00013 NFORM     00637  01265  01506  01714  01722
C00000 NLINE
P02071 NN1       01571  01574
P02072 NN2       01573  01603
P02073 NOFLG     01660  01675  01727
C00000 NOTEST    01533  01533
C00000 NPRTOPT   00637
P00641 NT1       00776  01047  01136  01172
X00012 NUMGET    01527
P00636 NVAL      01010  01116  01500  01510  01532  01557  01563  01576
C00000 NX        00762  00767  00767  01032  01032  01036  01041  01105  01105  01230  01233
                 01243  01243  01273  01277  01354  01360  01400  01404  01435  01436  01442
                 01442  01473  01473  01502  01506  01526  01531  01630  01654  01661  01662
                 01666  01666  01677  01702  01715  01722  01776
P02074 NZ        01102  01113  01114  01115  01140  01167
C00000 OUTSTUFF
P02025 PF00002.  02014
X00002 Q3000040  01177
X00001 Q3Q10040  00725  01016  01067
X00004 Q8QDICT.  00000  00713
X00015 QNSINGL.  02001
X00014 SLI.      01301
X00003 THEND.    01304  01366  01412  01511  01725
P00730 TS000C1.  00721
P01167 TS00003.  01145
P01220 TS00004.  01175
P01603 TS000C6.  01575
C00000 TWORD
X00007 WRARRAY   00760  01626  01652  01774
X00006 WRWORD    00750  00754  01002  01006  01012  01053  01057  01064  01142  01157  01164
                 01204  01210  01215  01616  01622  01642  01646  01752  01760  01764  01770
P00724 WS00001.  00727
P00746 WS00002.  00757
P01146 WS00003.  01170  01170
```

P01176	WS000C4.	01221	01221							
P01310	WS000C5.	01375								
P01576	WS000C6.	01604	01604							
P01614	WS000C7.	01625								
P01640	WS00010.	01651								
P01756	WS00011.	01773								
P02075	XLD	01362	01406	01431						
P02076	XLM	01364	01410	01422	01425	01430				
P02077	XLS	01365	01411	01414	01417	01432				
C00001	XMAX	01736	01736	01737	01737					
C00000	XMIN	01733	01733	01740						
P00036	XNVAL	01434	01446	01465	01466	01470	01470	01547	01553	
P02100	XTEMP	01724	01732	01735						

00407 SYMBOLS

```
      SUBROUTINE NEWDATA                                                    1000
CSUBR      NEWDATA   OBJAN71  ************************************************ 47000
CUSE       ICKTST    START    ************************************************ 2000
      COMMON/ICKTST/ICKTST                                                  1000
CEND       ICKTST    ************************************************************ 2000
CUSE       ICONTROL  START    ************************************************ 3000
      COMMON/ICONTROL/ICOM                                                  1000
CEND       ICONTROL  ************************************************************ 3000
CUSE       ITP       START    ************************************************ 4000
      COMMON/ITP/ITP                                                        1000
CEND       ITP       ************************************************************ 4000
CUSE       MYGOODS   START    ************************************************ 5000
      COMMON/MYGOODS/NLINE,ISET,JSET,NEWDATE                                1000
CEND       MYGOODS   ************************************************************ 5000
CUSE       MYINPUT   START    ************************************************ 6000
      COMMON/MYINPUT/INSTUFF(10)                                            1000
CEND       MYINPUT   ************************************************************ 6000
      COMMON/MYOUT/OUTSTUFF(10)                                             7000
      COMMON/MYPRINT/ISTAR,NDEFINE,NUNDEF                                   8000
CUSE       MYTAPES   START    ************************************************ 9000
      COMMON/MYTAPES/INUNIT,JIN,LOUT,KTAPEOUT,KINCARDS                      1000
CEND       MYTAPES   ************************************************************ 9000
CUSE       NOTEST    START    ************************************************ 10000
      COMMON/NOTEST/NOTEST                                                  1000
CEND       NOTEST    ************************************************************ 10000
CUSE       IENDSET   START    ************************************************ 11000
      COMMON/IENDSET/IENDSET                                                1000
CEND       IENDSET   ************************************************************ 11000
CUSE       NEWSET    START    ************************************************ 12000
      COMMON/NEWSET/NEWSET                                                  1000
CEND       NEWSET    ************************************************************ 12000
      EQUIVALENCE (INSTUFF,INCARD)                                          13000
      DIMENSION  INCARD(10)                                                 14000
      DATA(NOTEST=0), (ICKTST = 0)                                          15000
      TYPE LOGICAL NDEFINE,NUNDEF                                           16000
      TYPE INTEGER OUTSTUFF                                                 17000
CUSE       LOGFLAG   START    ************************************************ 18000
      COMMON/LOGFLAG/LAST,ICNT,TAPEIN,IADD,DEL,REPUT,ADDIT,IERROR           1000
      TYPE LOGICAL LAST,ICNT,TAPEIN,IADD,DEL,REPUT,ADDIT,IERROR             2000
CEND       LOGFLAG   ************************************************************ 18000
C***  ON FIRST CALL - INITIALIZE                                            19000
C***  FIND NUMBER OF CARD IMAGES ALLOWED IN BUFFERS                         20000
C***  INITIALIZE CONTROL VARIABLES                                          21000
C***  VARIABLES FOR DEFINE AND UNDEFINE IN PRINT SUBROUTINE                 22000
C***  ISTAR IS SET EQUAL TO IM* FOR NEW CARD IMAGE ENTERING DATABASE        23000
      NMAX=10                                                               24000
      NDEFINE=NUNDEF=1                                                      25000
      ISTAR=1H                                                              26000
      NEWSET=0                                                              27000
      JCLOSET=0                                                             28000
      IDONE=TAPEBUFF=0                                                      29000
      IGNORE = 0                                                            30000
      IENDSET=0                                                             31000
      LAST=ICNT=TAPEIN=IADD=0                                               32000
      DEL=REPUT=ADDIT=IERROR=0                                              33000
      ICLOSET=JSET=ISET=JLINE=NUMDEL=0                                      34000
```

```
C***  BLANK OUT DATA AREAS IN CORE STORAGE                          35000
      DO 13 I=1,10                                                  36000
13    INSTUFF(I)=OUTSTUFF(I)=INCARD(I)=8H                           37000
      ITP = 10                                                      38000
      CALL SETREAD                                                  39000
      RETURN                                                        40000
      ENTRY NEWCARDS                                                41000
      NOTEST=ICKTST                                                 42000
C***  SHOULD NEXT CONTROL CARD BE READ IN                           43000
310   IF(ICNT) 50,33                                                44000
33    ICNT=1                                                        45000
      ITP = 10                                                      46000
      CALL RDARRAY(INCARD,8)                                        47000
C     HAS LAST UPDATE CARD BEEN READ                                48000
C***  READ NEXT CONTROL CARD                                        49000
      IF(INCARD(1).EQ.4HLAST) 34,35                                 50000
34    LAST=1                                                        51000
      ITP = 10                                                      52000
      CALL TERMTAP                                                  54000
      GO TO 46                                                      55000
C***  DOES THE CONTROL CARD SPECIFY RECORD DELETIONS                56000
   35 IF (INCARD(1) - 6HDELETE)  37, 36, 37                         57000
36    DEL=1                                                         58000
C***  WHAT IS THE MAX INDEX FOR RECORD DELETION                     59000
      MAXDELE=NUMGET(INCARD(4),8)                                   60000
      GO TO 45                                                      61000
C***  DOES THIS CONTROL CARD SPECIFY A RECORD REPLACEMENT           62000
37    IF(INCARD(1).EQ.7HREPLACE) 38,39                              63000
38    REPUT=1                                                       64000
      GO TO 45                                                      65000
C***  DOES THIS CONTROL CARD SPECIFY ADDING NEW RECORDS             66000
39    IF(INCARD(1).EQ.6HADDMEM) 40,50                               67000
 40   IF(INCARD(5).EQ.4HTAPE) 41,4209                               68000
C***  CHECK TO SEE IF DATA IS TO BE ADDED FROM INPUT TAPE           69000
41    TAPEIN=1                                                      70000
      GO TO 4211                                                    71000
 4209 IF(INCARD(5).EQ.8HTAPEBUFF) 4210,42                           72000
 4210 TAPEBUFF=1                                                    73000
C***  ON WHICH LOGICAL TAPE UNIT IS THE NEW DATA                    74000
 4211 INUNIT=NUMGET(INCARD(6),8)                                    75000
      IF(INUNIT.LE.JTIN) 4102,4101                                  76000
4101  IF(INUNIT.GE.LOUT) 4102,42                                    77000
4102  PRINT 4103,INUNIT                                             78000
      PRINT 4104,(INCARD(I),I=1,8)                                  79000
      GO TO 77                                                      80000
42    IADD=1                                                        81000
C***  SHOULD A NEW SET BE STARTED                                   82000
      IF(INCARD(7).EQ.6HNEWSET) 4250,45                             83000
4250  NEWSET=NUMGET(INCARD(6),8)                                    84000
C***  DETERMINE THE INCOMING SET NUMBER                             85000
45    ISET=NUMGET(INCARD(2),8)                                      86000
C***  DETERMINE THE INCOMING LINE NUMBER                            87000
      LINENO=NUMGET(INCARD(3),8)                                    88000
      IF(DEL) 46,452                                                89000
C***  DETERMINE THE DATE FOR THIS UPDATE                            90000
452   NEWDATE=INCARD(4)                                             91000
```

```
  451   IF(ADDIT)46,51                                                  92000
   46   ADDIT=0                                                         93000
        GO TO 51                                                        94000
   50   IF(ADDIT) 72,51                                                 95000
    51  ITP=JTIN                                                        96000
C                                                                       97000
C       READ NEXT CARD FROM DATADB FILE UNLESS COMMAND IS ADDAFTER.     98000
C       IN THAT CASE, READ THE CARD ONLY IF THE CARD TO BE ADDED AFTER HAS  99000
C       NOT YET BEEN PROCESSED BY A REPLACE COMMAND.                    100000
C                                                                       101000
        IF (IADD)  59, 59, 57                                           102000
C       JLINE IS A LOCAL VARIABLE WHICH CHANGES ONLY WHEN DATADB IS READ  103000
     57   MYDBPOS = JSET * 10000 + JLINE                                 104000
        MYCDPOS = ISET * 10000 + LINENO                                 105000
        IF( MYCDPOS - MYDBPOS) 5277, 71, 59                             106000
C           READ NEXT CARD FROM DATADB FILE                             107000
     59 CALL RDARRAY(OUTSTUFF, NMAX)                                    108000
        DO 590 I = 1, 6                                                 109000
        IF( OUTSTUFF(I) .EQ. SHTSTAT      ) OUTSTUFF(I) = SHTGTSTAT     110000
    590 CONTINUE                                                        111000
C***    DETERMINE SET AND LINENO FOR THE DATA BASE RECORD               112000
        DECODE(8,500,OUTSTUFF(4)) JSET,JLINE                            113000
    500 FORMAT(2I4)                                                     114000
C***    IS THIS THE START OF A NEW SET                                  115000
        IF(JSET.EQ.JOLDSET) 512,511                                     116000
    511 JOLDSET=JSET                                                    117000
        NLINE=0                                                         118000
        IENDSET=1                                                       119000
        IGNORE = 0                                                      120000
C***    HAVE ALL CONTROL CARDS BEEN READ IN                             121000
    512 IF(LAST) 80,510                                                 122000
C***    CHECK PROPER SET                                                123000
    510 IF(ISET-JSET) 5277,52,80                                        124000
C***    CHECK PROPER LINE NUMBER                                        125000
     52 IF(LINENO-JLINE) 5277,53,80                                     126000
   5277 PRINT 5288,JSET,JLINE,ISET,LINENO                               127000
        WRITE(44,5288)JSET,JLINE,ISET,LINENO                            128000
        CALL ABORT                                                      129000
C***    LOCAL SUBROUTINE TO DELETE RECORDS                              130000
     53 IF(DEL) 54,50                                                   131000
C***    NUMDEL IS THE NUMBER OF RECORDS TO BE DELETED MINUS 1           132000
     54 NUMDEL=MAXDELE-LINENO                                           133000
        IF(NUMDEL.LE.0) 5555,55                                         134000
     55 DO 56 IDELETE=1,NUMDEL                                          135000
     56 CALL RDARRAY(OUTSTUFF,NMAX)                                     136000
   5555 DEL=0                                                           137000
        GO TO 33                                                        138000
C***    LOCAL SUBROUTINE TO REPLACE CARD IMAGES                         139000
     60 IF(REPUT) 61,70                                                 140000
     61 ITP = 10                                                        141000
        CALL RDARRAY(INCARD, 6)                                         142000
        IF (INCARD(1) .EQ. SHLAST ) 34, 610                             143000
C***    READ IN REPLACEMENT CARD IMAGE FROM CARD READER                 144000
    610 CONTINUE                                                        145000
C***    MOVE RECORD TO OUTPUT BUFFER                                    146000
        CALL MOVEIT(1)                                                  147000
```

```
      IGNORE = LINENO                                                  148000
      ICNT=REPUT=0                                                     149000
C***  SET INDICATOR FOR NEW RECORD IN DATA BASE                        150000
      ISTAR=1H*                                                        151000
      GO TO 801                                                        152000
C***  LOCAL SUBROUTINE TO ADD NEW RECORDS                              153000
70    IF(IADD) 71,72                                                   154000
71    IADD=0                                                           155000
      ADDIT=1                                                          156000
      ICNT=0                                                           157000
C***  IS NEW DATA ON TAPE                                              158000
      IF(TAPEIN) 710,7118                                              159000
 7118 IF (TAPEBUFF)  710, 79                                           160000
710   ICNT=1                                                           161000
C                  CHECK TO SEE IF CARD ALREADY PROCESSED              162000
   79 IF (LINENO - IGNORE)  80, 78, 80                                 163000
C                  ALREADY PROCESSED                                   164000
   78 IGNORE = 0                                                       165000
      RETURN                                                           166000
 72   IF(TAPEIN) 73,7322                                               167000
 7322 IF(TAPEBUFF) 7100,74                                            168000
C***  READ IN NEW RECORDS FROM LTN INUNIT                              169000
73    READ(INUNIT,700),(INSTUFF(I),I=1,8)                              170000
C***  CHECK FOR EOF ON LTN INUNIT                                      171000
      IF(EOF,INUNIT)77,76                                              172000
 7100 CALL BUFFIT(IDONE)                                               173000
      IF(IDONE) 77,76                                                  174000
74    ICNT=0                                                           175000
76    IF(NEWSET.GT.0) 7710,7660                                        176000
7710  ISET=NEWSET                                                      177000
      NLINE=0                                                          178000
      IENDSET=1                                                        179000
      NEWSET=0                                                         180000
C***  MOVE RECORD TO OUTPUT BUFFER AREA                                181000
 7660 CALL MOVEIT(1)                                                   182000
C***  SET INDICATOR FOR NEW RECORD                                     183000
      ISTAR=1H*                                                        184000
      GO TO 801                                                        185000
77    ADDIT=ICNT=TAPEIN=0                                              186000
      IF(TAPEBUFF) 7795,7794                                           187000
C***  REWIND LTN INUNIT WHEN ALL ADDITIONS ARE COMPLETE                188000
 7794 REWIND INUNIT                                                    189000
 7795 IDONE=TAPEBUFF=0                                                 190000
      GO TO 33                                                         191000
C     MOVE RECORD TO OUTPUT BUFFER AREA                                192000
 80   CALL MOVEIT(2)                                                   193000
C***  LOCAL SUBROUTINE TO INTERPRET COMMANDS                           194000
C***  ICOM=5=UNKNOWN, 1=ITEM,2=DEFINE, 3=UNDEFINE,                    195000
C***  4=ENDINPUT                                                       196000
 801  CONTINUE                                                         197000
      ICOM=5                                                           198000
      IF(OUTSTUFF(1).EQ.4HITEM) 101,102                                199000
101   ICOM=1                                                           200000
      GO TO 108                                                        201000
102   IF(OUTSTUFF(1).EQ.6HDEFINE) 103,104                              202000
103   ICOM=2                                                           203000
```

```
      GO TO 108                                                          204000
104   IF(OUTSTUFF(1).EQ.8HUNDEFINE) 105,108                              205000
105   ICOM=3                                                             206000
C***  CHECK FOR PRINT OPTIONS                                            207000
108   IF(JSET.EQ.ICLOSET)82,81                                           208000
81    ICLOSET=JSET                                                       209000
      IJX = ILOOK(JNDEX, JSET)                                           210000
      IF( IJX .LE. 0)  GO TO 82                                          211000
8199  CALL PAGESKP                                                       212000
82    IF(ISTAR.EQ.1H*) 8310,821                                          213000
8310  NOTEST=0                                                           214000
      GO TO 83                                                           215000
821   IF(IPRINT(JSET))83,84                                              216000
C***  CALL PRINT SUBROUTINE                                              217000
83    CALL OUT                                                           218000
      ISTAR=1H                                                           219000
C***  CHECK FOR END OF DATA IN DATA BASE                                 220000
84    IF(OUTSTUFF(1).EQ.8HENDINPUT) 87,85                                221000
 85   ITP=LOUT                                                           222000
      CALL WRARRAY(OUTSTUFF,NMAX)                                        223000
      RETURN                                                             224000
C***  NMIN IS THE INDEX TO FIRST WORD OF RECORD IN OUTPUT BUFFER          225000
87    ICOM=4                                                             226000
C***  TERMINATE TAPE HANDLER OPERATIONS ON INPUT AND OUTPUT TAPES        227000
      ITP=JTIN                                                           228000
      CALL TERMTAPE                                                      229000
      ITP=LOUT                                                           230000
      CALL WRARRAY(OUTSTUFF,NMAX)                                        231000
      CALL TERMTAPE                                                      232000
99    CONTINUE                                                           233000
      RETURN                                                             234000
300   FORMAT(@(A8,2X))                                                   235000
4103  FORMAT(24H LOGICAL UNIT ASSIGNMENT ,I8,                            236000
     168HIS IN ERROR, THE FOLLOWING OPTION CONTROL CARD WILL NOT BE EXER 237000
     1CISED  )                                                          238000
4104  FORMAT(1X,8(A8,2X))                                                239000
 5288  FORMAT(5X,31HDATABASE AHEAD OF CONTROL CARDS  ,/5X,               240000
     *11HDATABASE = ,2I5,8H CARD =  ,2I5)                               241000
700   FORMAT(@(A8,2X),4CX)                                               242000
      END                                                                243000
```

IDENT NEWDATA

PROGRAM LENGTH		01107
ENTRY POINTS	NEWCARDS	00215
	NEWDATA	00120
BLOCK NAMES		
	ICKTST	00001
	ICONTROL	00001
	ITP	00001
	MYGOODS	00004
	MYINPUT	00012
	MYOUT	00012
	MYPRINT	00003
	MYTAPES	00005
	NOTEST	00001
	IENDSET	00001
	NEWSET	00001
	LOGFLAG	00010
EXTERNAL SYMBOLS		
	Q3010040	
	Q3000040	
	Q1010100	
	Q3010440	
	THEND.	
	Q8QDICT.	
	SETHEAD	
	RDARRAY	
	TERMTAP	
	NUMGET	
	ABORT	
	MOVEIT	
	BUFFIT	
	ILOCK	
	PAGESKP	
	IPRINT	
	OUT	
	WRARRAY	
	TERMTAPE	
	Q8QIFEOF	
	REW.	
	TSM.	
	DEC.	
	STM.	
	QNSINGL.	

X00013	ABORT	00536										
C00006	ADDIT	00167	00403	00407	00412	00624	00733					
P01056	BEGIN.	01057										
X00015	BUFFIT	00674										
P01055	CNVRTI.	00332	00345	00451	00453	00507	00511	00513	00515	00525	00527	00531
		00533	00661									
P00003	CRFMT.	00457	01054	01054	01054	01054	01054					
X00027	DEC.	00446										
C00004	DEL	00173	00257	00376	00541	00562						
P00001	DICT.	00122	00213	00217	00234	00247	00261	00314	00327	00334	00337	00351
		00362	00366	00372	00432	00447	00456	00504	00517	00522	00535	00537
		00553	00572	00600	00655	00667	00672	00675	00716	00740	00747	01000
		01007	01016	01022	01033	01043	01047	01052				
P01060	ENDING.	00123	00214	00220	00644	01035	01053	01056				
P00000	EXIT.	01061										
P00003	FORMAT.	00134	00201	00236	00251	00265	00274	00277	00306	00356	00434	00574
		00612	00720	00753	00760	00765	01010	01023	01025			
P00335	GG0000C0.	00325										
P00352	GG0000C1.	00335										
P00457	GG0000C2.	00445										
P00520	GG0000C3.	00502										
P00536	GG0000C4.	00520										
P00670	GG0000C5.	00653										
P01067	I	00201	00202	00342	00343	00346	00435	00435	00660	00662	00664	
C00003	IADD	00150	00152	00355	00417	00615	00621					
C00000	ICKTST	C00001	00221	00221								
C00001	ICNT	00156	00224	00230	00611	00627	00637	00703	00731			
C00000	ICOM	00751	00752	00756	00757	00763	00764	0077C	00771	01036	01037	
P01070	IDELETE	00551	00555									
P01071	IDONE	00143	00676	00677	00744							
C00000	IENDSET	00145	00146	00466	00466	00712	00713					
C00007	IERROR	00163	00165									
P01072	IGNORE	00144	00470	00603	00641	00644						
P01073	IJX	01002	01002									
X00016	ILOOK	00777										
C00000	INCARD	00204	00204	00235	00236	00436	00251	00251	00262	00265	00285	00274
		00274	00277	00277	00306	00306	00315	00344	00344	00356	00356	00363
		00367	00373	00400	00400	00573	00574	00574				
P01056	INITIAL.	00123	00220									
C00000	INSTUFF	00206	00206	00663	00663							
C00000	INUNIT	00316	00316	00317	00322	00322	00331	00331	00652	00652	00670	00670
		00736	00736									
P01074	ICLOSET	00200	00773	00776								
X00020	IPRINT	01015										
C00001	ISET	00176	00176	00370	00370	00424	00424	00474	00474	00512	00512	00530
		00530	00710	00710								
C00000	ISTAR	00134	00135	00612	00613	00721	00721	01010	01010	01024	01024	
C00000	ITP	00210	00211	00231	00232	00244	00245	00415	00415	00567	00570	01031
		01031	01040	01041	01045	01045						
P00442	.1000C1											
P00444	.1000C2	00441										
P01005	.1000C3	01003										
P01006	.1000C4	01004										
P00756	.1G1											

```
P00760  .102        00755
P00763  .103
P00765  .104        00762
P00770  .105
P00772  .108        00757   u0764   00767
P00203  .13
P00223  .310
P00226  .33         00563   u0745
P00241  .34         00576
P00251  .35         00240
P00255  .36         00253
P00265  .37         00253   u0254
P00270  .38
P00274  .39         00267
P00277  .40         00276
P00302  .41
P00322  .4101       00320
P00325  .4102       00320   u0321   00323
P00353  .42         00310   u0324
P00306  .4209       00301
P00311  .4210
P00313  .4211       00305
P00361  .4250
P00365  .45         00264   u0273   00360
P00402  .451
P00400  .452
P00405  .46         00250   u0377   00404
P00411  .50         00225   u0276
P00414  .51         00404   u0410
P00474  .510
P00462  .511        00461
P00471  .512        00461
P00477  .52         00475
P00502  .5277       00430   u0476   00501
P00540  .53         00500
P00543  .54         00542
P00550  .55         00546
P00560  .5555       00546   u0547
P00552  .56
P00421  .57
P00431  .59         00420   u0420
P00444  .590
P00564  .60         00542
P00567  .61         00566
P00577  .610        00576
P00614  .70         00566
P00617  .71         00427   u0616
P00635  .710        00632   u0634
P00674  .7100       00651
P00633  .7118
P00645  .72         00413   u0616
P00652  .73         00647
P00650  .7322
P00701  .74         00651
```

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P00704  .76         00673   00700
P00715  .7660       00705   00706
P00723  .77         00352   00673   00700
P00707  .7710
P00736  .7794
P00741  .7795       00735
P00643  .78         00641
P00640  .79         00634
P00746  .80         00473   00476   00501   00642   00642
P00751  .801        00613   00722
P00775  .81         00774
P01006  .8199
P01010  .82         00774   01005
P01015  .821        01012
P01021  .83         01014   01020
P01013  .8310
P01025  .84         01020
P01030  .85         01027
P01036  .87         01027
P01053  .99
P00003  ..100000    00134
P00004  ..100001    00203
P00005  ..100002    00237
P00006  ..100003    00252
P00007  ..100004    00266
P00010  ..100005    00275
P00011  ..100006    00300
P00012  ..100007    00307
P00013  ..100008    00357
P00014  ..100009    00440
P00015  ..100010    00442
P00021  ..100011    00575
P00022  ..100012    00612
P00023  ..100013    00720
P00024  ..100014    00754
P00025  ..100015    00761
P00026  ..100016    00766
P00027  ..100017    01011
P00030  ..100018    01023
P00031  ..100019    01026
P00032  ..300
P00040  ..4103      00330
P00061  ..4104      00340
P00016  ..500       00450
P00070  ..5288      00505   00523
P00111  ..700       00656
P01075  JLINE       00175   00423   00454   00500   00510   00526
P01076  JNDEX       01001
P01077  JOLDSET     00140   00460   00463
C00002  JSET        00177   00421   00421   00452   00452   00457   00457   00462   00462   00475   00506
                    00506   00524   00524   00772   00772   00775   00775   01001   01017
C00001  JTIN        00317   00414   00414   01037   01040
C00004  KINCARDS
C00003  KTAPECUT
```

```
C00000  LAST        00180  00243  00472
P01100  LINENC      00374  00426  00477  00514  00532  00544  00602  00640
C00002  LOUT        00323  01030  01030  01044  01044
P01101  MAXDELE     00203  00543
X00014  MOVEIT      00377  00715  00746
P01102  MYCDPOS     00426
P01103  MYOBPOS     00423  00427
C00001  NDEFINE     00133
P00215  NEWCARDS    00215
P00120  NEWDATA     00120
C00003  NEWDATE     00401  00401
C00000  NEWSET      00136  00135  00364  00364  00704  00704  00707  00707  00714  00714
C00000  NLINE       00464  00465  00711
P01104  NMAX        00125  00433  00554  01034  01050
C00000  NOTEST      00003  00222  00222  01013  01014
P01105  NUMDEL      00175  00544  00545  00556
X00012  NUMGET      00260  00313  00361  00365  00371
C00002  NUNDEF      00127  00131
X00021  OUT         01021  01021
C00000  OUTSTUFF    00205  00205  00433  00437  00437  00443  00443  00450  00554  00753  00753
                    00760  00760  00765  00765  01025  01025  01034  01050
X00017  PAGESKP     01006
X00003  G1Q1Q1GO    00142  00743
X00002  G3QCOC4O    00130  00151  00164  00223  00375  00402  00411  00416  00471  00540  00564
                    00506  00614  00630  00645  00726
X00001  G3Q1OC4O    00126  00132  00147  00153  00162  00166  00227  00242  00256  00271  00303
                    00354  00406  00561  00604  00610  00620  00623  00626  00636  00702  00724
                    00730
X00004  G3Q10440    00155  00157  00170  00172  00732
X00009  GBQDICT.    00000  00121  00216
X00024  GBUIFECK    00671
X00031  GNSINGL.    01054
X00010  HDARRAY     00233  00431  00552  00571
C00005  HEPUT       00171  00272  00565  00605  00607
X00025  HEW.        00737
X00007  SETHEAD     00212
X00030  STH.        00326  00336  00503  00521
P01106  TAPEBLFF    00141  00312  00633  00650  00734  00742
C00002  TAPEIN      00154  00304  00631  00646  00725  00727
X00011  TERMTAP     00246
X00023  TERMTAPE    01042  01051
X00005  THEND.      00333  00350  00455  00516  00534  00666
P00556  TS000C4.    00551
X00026  TSH.        00654
X00022  WRARRAY     01032  01046
P00203  WS000C1.    00207
P00343  WS000C2.    00347
P00437  WS000C3.    00444
P00552  WS000C4.    00557  00557
P00661  WS000C5.    00665
   00305 SYMBOLS
```

```
      SUBROUTINE NEWDIR                                                  1000
CSUBR      NEWDIR    20SEP71  ***************************************** 48000
CUSE       MPRTOPT   START    ***************************************** 2000
      COMMON/MPRTOPT/MPRTOPT                                             1000
CEND       MPRTOPT   ***************************************************** 2000
      DATA (MPRTOPT=0)                                                   3000
C     READS CARDS TO MODIFY EXISTING DIRECTORY OR CREATE NEW.            4000
C*************************************************************************** 5000
CUSE       ERRORM    START    ***************************************** 6000
      COMMON/ERRORM/JERR,IERS                                            1000
CEND       ERRORM    ***************************************************** 6000
C*************************************************************************** 7000
      DIMENSION NFORM(3),NLIST(10)                                       8000
      DATA(NFORM=1H(,1H ,1H))                                            9000
CUSE       MYOUT     START    ***************************************** 10000
      COMMON/MYOUT/OUTSTUFF(10)                                          1000
      TYPE INTEGER OUTSTUFF                                              2000
CEND       MYOUT     ***************************************************** 10000
CUSE       ITP       START    ***************************************** 11000
      COMMON/ITP/ITP                                                     1000
CEND       ITP       ***************************************************** 11000
CUSE       TWORD     START    ***************************************** 12000
      COMMON/TWORD/TWORD,ITWORD                                          1000
      EQUIVALENCE (TWORD,ITWORD)                                         2000
CEND       TWORD     ***************************************************** 12000
CUSE       DIRECTRY  START    ***************************************** 13000
      COMMON/DIRECTRY/IDEF,LASTLIST,NDIMDIR,NDIMLIST,ATTNAME(500),       1000
     1       IFORMAT(500),ICODE(500),DEFAULT(500),IDEFAULT(500),         2000
     2        N1(500),FN1(500),N2(500),FN2(500),LISTCHEK(500),           3000
     3        GLOB(500),LISTVALS(2000)                                   4000
              EQUIVALENCE(N1,FN1),(N2,FN2),(DEFAULT,IDEFAULT)            5000
              TYPE LOGICAL LISTCHEK,GLOB                                 6000
      TYPE INTEGER ATTNAMX                                               7000
              TYPE INTEGER ATTNAME                                       8000
              EQUIVALENCE(LOG1,LISTCHEK),(LOG2,GLOB)                     9000
CEND       DIRECTRY  ***************************************************** 13000
      COMMON/XYZ/XMIN,XMAX                                               13100
CUSE       SIDECC    START    ***************************************** 13200
      COMMON / SIDECC/ IXSD                                              1000
CEND       SIDECC    ***************************************************** 13200
CUSE       JDESTEST  START    ***************************************** 13300
      COMMON/JDESTEST/JDESTEST                                           1000
CEND       JDESTEST  ***************************************************** 13300
      TYPE INTEGER FORMATX                                               14000
      EQUIVALENCE(DEFAULX,NDEFAULX)                                      15000
5     CALL NEWCARDS                                                      16000
      ICOM=OUTSTUFF(1)                                                   17000
      ATTNAMX=OUTSTUFF(2)                                                18000
      FORMATX=OUTSTUFF(3)                                                19000
      ICODEX=NUMGET(OUTSTUFF(4),8)                                       20000
      IDEFAULX=OUTSTUFF(5)                                               21000
      NX1=OUTSTUFF(6)                                                    22000
      NX2=OUTSTUFF(7)                                                    23000
      IXCARD=OUTSTUFF(9)                                                 24000
      IF(ICODEX .EQ. 3 .OR. ICODEX .EQ. 4) 86,87                         25000
   86 ITRAN=1                                                            26000
```

```
      GO TO 80                                                          27000
   87 ITRAN=2                                                           28000
   80 CONTINUE                                                          29000
C     INTERPRET COMMAND                                                 30000
      GO TO 20                                                          32000
    3 CONTINUE                                                          33000
      ITP = JERR                                                        34000
C     LOOP TO WRITE ERROR MESSAGE                                       35000
      DO 337 I = 1,5                                                    36000
      ITWORD = 8HATTERROR                                               37000
      CALL WRWORD                                                       38000
      ITWORD = ATTNAMX                                                  39000
  337 CALL WRWORD                                                       40000
      CALL WRARRAY(OUTSTUFF,10)                                         41000
      IERSW=2                                                           42000
      GO TO 5                                                           43000
   20 IF(ICOM .EQ. 3HADD)21,50                                          44000
C     HERE ADD NEW ATTRIBUTE TO DIRECTORY                               45000
   21 J=ITLE(ATTNAMX,ATTNAME,IDEF)                                      46000
      IF(J)22,24,22                                                     47000
   22 GO TO 3                                                           48000
   24 NFORM(2)=FORMATX                                                  49000
      IF(IDEFAULX .EQ. 5HBLANK)46,47                                    50000
   46 NDEFAULX=1H                                                       51000
      GO TO 48                                                          52000
C     TRANSLATE DEFAULT                                                 53000
   47 GO TO (70,71),ITRAN                                               54000
   70 NDEFAULX=NUMGET(IDEFAULX,8)                                       55000
      GO TO 48                                                          56000
   71 DECODE(8,NFORM,IDEFAULX)DEFAULX                                   57000
C     TRANSLATE CHECKING                                                58000
   48 IF(NX1 .EQ. 4HLIST) 26,128                                        59000
  128 IF(NX1 .EQ. 7HNOCHECK) 126,25                                     60000
  126 NXX1=1H                                                           61000
  127 NXX2=1H                                                           62000
      GO TO 74                                                          63000
   25 GO TO (72,73),ITRAN                                               64000
   72 NXX1=NUMGET(NX1,8)                                                65000
      NXX2=NUMGET(NX2,8)                                                66000
      GO TO 74                                                          67000
   73 DECODE(8,NFORM,NX1)NXX1                                           68000
      DECODE(8,NFORM,NX2)NXX2                                           69000
   74 ILISTC=0                                                          70000
      GO TO 36                                                          71000
C     HERE ADD LIST                                                     72000
   26 NXX1=LASTLIST+1                                                   73000
      ILISTC=1                                                          74000
27    CALL NEWCARDS                                                     75000
      DO 17 JK=1,10                                                     76000
17    NLIST(JK)=OUTSTUFF(JK)                                            77000
      DO 32 I=1,8                                                       78000
      IF(NLIST(I) .EQ. 1H  )35,29                                       79000
   29 LASTLIST=LASTLIST+1                                               80000
      IF(NLIST(I) .EQ. 5HBLANK)30,31                                    81000
   30 LISTVALS(LASTLIST)=1H                                             82000
      GO TO 32                                                          83000
```

```
     31 GO TO (75,76),ITRAN                                          84000
     75 LISTVALS(LASTLIST)=NUMGET(NLIST(I),8)                        85000
        GO TO 32                                                     86000
     76 DECODE(8,NFORM,NLIST(I))LISTVALS(LASTLIST)                   87000
     32 CONTINUE                                                     88000
        GO TO 27                                                     89000
C       HERE LIST TRANSLATED                                         90000
     35 NXX2=LASTLIST                                                91000
     36 CONTINUE                                                     92000
C       UPDATE DIRECTORY                                             93000
C       SEE IF CAN OVERWRITE PREVIOUS DELETED                        94000
     40 DO 61 I=1,IDEF                                               95000
        IF(ATTNAME(I) .EQ. 7HDELETED) 60,61                          96000
     60 IF(IDEFAULT(I) .EQ. ATTNAMX) 62,61                           97000
     61 CONTINUE                                                     98000
        IDEF=IDEF+1                                                  99000
        I=IDEF                                                      100000
     62 ATTNAME(I)=ATTNAMX                                          101000
        IFORMAT(I)=FORMATX                                          102000
        ICODE(I)=ICODEX                                             103000
        DEFAULT(I)=DEFAULX                                          104000
        N1(I)=NXX1                                                  105000
        N2(I)=NXX2                                                  106000
        LISTCHEK(I)=ILISTC                                          107000
        GO TO 5                                                     108000
C       CONTINUE TRANSLATING COMMANDS                               109000
     50 CONTINUE                                                    110000
        IF(ICOM .EQ. 8HENDIRECT)51,52                               111000
     52 ITP = JERR                                                  112000
        DO 53 I = 1,5                                               113000
        ITWORD = ICOM                                               114000
        CALL WRWORD                                                 115000
        ITWORD = IXCARD                                             116000
        CALL WRWORD                                                 117000
     53 CONTINUE                                                    118000
        CALL WRARRAY (OUTSTUFF,10)                                  119000
        GO TO 5                                                     120000
     51 CONTINUE                                                    121000
        JJJ = 5HDESIG                                               121010
        JDESTEST = ITLE( JJJ,ATTNAME,IDEF)                          121020
        JJJ = 4HSIDE                                                121030
        IXSD = ITLE( JJJ, ATTNAME,IDEF)                             121040
        JJJ= 7HMINKILL                                              121050
        J = ITLE(JJJ,ATTNAM,IDEF)                                   121060
        XMIN = DEFAULT(J)                                           121070
        JJJ = 7HMAXKILL                                             121080
        J = ITLE( JJJ, ATTNAM, IDEF)                                121090
        XMAX = DEFAULT(J)                                           121100
        RETURN                                                      121110
        END                                                         122000
```

IDENT NEWDIR

PROGRAM LENGTH		00476
ENTRY POINTS	NEWDIR	00042
BLOCK NAMES		
	MPRTOPT	00001
	ERROMM	00002
	MYOUT	00012
	ITP	00001
	TWORD	00001
	DIRECTRY	11654
	XYZ	00002
	SIDECC	00001
	JDESTEST	00001
EXTERNAL SYMBOLS		
	THEND.	
	Q3U10040	
	Q8QD1CT.	
	NEWCARDS	
	NUMGET	
	WHWORD	
	WRARRAY	
	ITLE	
	DEC.	
	QNSINGL.	

P00302	AN00003.	00276										
P00456	ATTNAM	00425	00436									
C00004	ATTNAME	00131	00320	00320	00336	00337	00407	00416				
P00445	ATTNAMX	00053	00112	00131	00325	00335						
P00450	BEGIN.	00451										
P00447	CNVRT1.	00160	00215	00225	00303							
X00011	DEC.	00155	00212	00222	00300							
C02740	DEFAULT	00344	00345	00430	00430	00441	00441					
P00020	DEFAULX	00161	00344									
P00001	DICT.	00044	00047	00057	00111	00115	00121	00130	00150	00156	00163	00202
		00206	00213	00220	00223	00230	00240	00271	00301	00307	00370	00374
		00400	00406	00415	00424	00435						
P00452	ENDING.	00045	00443	00450								
P00000	EXIT.	00453										
C03724	FN1											
C04710	FN2											
P00021	FORMAT.	00104	00125	00140	00142	00164	00167	00172	00174	00247	00315	00356
		00403	00412	00421	00432							
P00444	FORMATX	00055	00136	00340								
P00164	GG00000.	00154										
P00221	GG00001.	00211										
P00231	GG00002.	00221										
P00310	GG00003.	00277										
C05714	GLOB											
P00457	I	00105	00116	00247	00250	00255	00266	00275	00310	00316	00317	00323
		00327	00334	00336	00364	00375						
C01754	ICODE	00342	00343									
P00460	ICODEX	00061	00071	00073	00342							
P00461	ICOM	00051	00125	00356	00365							
C00000	IDEF	00132	00330	00330	00332	00333	00410	00417	00426	00437		
C02740	IDEFAULT	00324	00324									
P00462	IDEFAULX	00063	00140	00151	00157							
C00001	IERSW	00123	00124									
P00073	IF00001.											
C00770	IFORMAT	00340	00341									
P00463	IGOTO.	00145	00177	00264								
P00464	ILISTC	00232	00236	00352								
P00450	INITIAL.	00045										
X00010	ITLE	00127	00405	00414	00423	00434						
C00000	ITP	00103	00103	00362	00362							
P00465	ITRAN	00076	00100	00144	00176	00263						
C00000	ITWORD	00107	00107	00113	00113	00366	00366	00372	00372			
P00466	IXCARD	00071	00371									
C00000	IXSD	00420	00420									
P00172	.126	00171										
P00174	.127											
P00167	.12P	00165										
P00244	.17											
P00125	.20	00101										
P00127	.21											
P00135	.22	00134										
P00136	.24	00134										
P00176	.25	00170										
P00233	.26	00166										

```
P00237  .27          00312
P00253  .29          00252
P00102  .3           00135
P00260  .30
P00263  .31          00257
P00310  .32          00262   00274
P00114  .337
P00313  .35          00252
P00315  .36          00232
P00315  .40
P00142  .46          00141
P00144  .47          00141
P00164  .48          00143   00153
P00356  .50          00126
P00046  .5           00124   00355   00402
P00403  .51          00360
P00361  .52          00357
P00375  .53
P00323  .60
P00327  .61          00322   00326
P00335  .62          00326
P00147  .70          00146
P00154  .71          00146
P00201  .72          00200
P00211  .73          00200
P00231  .74          00175   00210
P00266  .75          00265
P00275  .76          00265
P00101  .80          00076
P00075  .86          00072
P00077  .87          00074
P00021  ..100000     00106
P00022  ..100001     00126
P00023  ..100002     00140
P00024  ..100003     00142
P00025  ..100004     00165
P00026  ..100005     00170
P00027  ..100006     00172
P00030  ..100007     00174
P00031  ..100008     00251
P00032  ..100009     00256
P00033  ..100010     00260
P00034  ..100011     00321
P00035  ..100012     00357
P00036  ..100013     00403
P00037  ..100014     00412
P00040  ..100015     00421
P00041  ..100016     00432
P00272  .Z00001.     00267
P00467  J            00133   00427   00427   00440   00440
C00000  JDESTEST     00411   00411
C00000  JERR         00102   00102   00361   00361
P00470  JJJ          00404   00407   00413   00416   00422   00425   00433   00436
P00471  JK           00242   00242
```

```
C00001  LASTLIST  00233  00233  00253  00253  00254  00261  00261  00273  00273  00304  00304
                  00313  00313
C05674  LISTCHEK  00354
C05734  LISTVALS  00282  00274  00305
C05674  LOG1
C05714  LOG2
C00000  MPRTOPT   00021
C03724  N1        00346  00347
C04710  N2        00350  00351
P00020  NDEFAULX  00143  00152
C00002  NDIMDIR
C00003  NDIMLIST
X00004  NEWCARDS 00046  00237
P00042  NEWDIR    00042
P00003  NFORM     00021  00137  00157  00214  00224  00302
P00006  NLIST     00245  00251  00256  00267  00272  00276  00302
X00005  NUMGET    00056  00147  00201  00205  00270
P00472  NX1       00065  00164  00167  00203  00214
P00473  NX2       00067  00207  00224
P00474  NXX1      00173  00204  00216  00235  00346
P00475  NXX2      00175  00210  00226  00314  00350
C00000  OUTSTUFF  00050  00050  00052  00052  00054  00054  00060  00061  00062  00063  00064
                  00065  00066  00067  00070  00122  00244  00244  00401
X00002  Q3Q10040  00353
X00003  Q8QDICT.  00000  00043
X00012  QNSINGL.  00446
X00001  THEND.   00162  00217  00227  00306
P00330  TS00004.  00316
C00000  TWORD
X00007  WRARRAY   00120  00377
X00006  WRWORD   00110  00114  00367  00373
P00106  WS00001.  00117
P00244  WS00002.  00246
P00250  WS00003.  00311
P00317  WS00004.  00331  00331
P00365  WS00005.  00376
C00001  XMAX      00442  00442
C00000  XMIN      00431  00431
   00214 SYMBOLS
```

```
      SUBROUTINE OUT                                                    1000
CSUBR      OUT        START     ***************************************** 49000
C***  SUBROUTINE IS DESIGNED TO PRINT OUT CARD IMAGES UPON REQUEST      2000
      COMMON/MYPRINT/ISTAR,NDEFINE,NUNDEF                               3000
CUSE       MYOUT      START     ***************************************** 4000
      COMMON/MYOUT/OUTSTUFF(10)                                         1000
      TYPE INTEGER OUTSTUFF                                             2000
CEND       MYOUT      ********************************************************* 4000
      TYPE LOGICAL NDEFINE,NUNDEF                                       5000
CUSE       ICONTROL   START     ***************************************** 6000
      COMMON/ICONTROL/ICOM                                              1000
CEND       ICONTROL   ********************************************************* 6000
      DATA(IAST=2H  )                                                   7000
C***  THE PROPER VALUE OF ICOM IS DETERMINED IN SUBROUTINE NEWDATA      8000
      GO TO (54,51,552,55,55),ICOM                                      9000
C***  HERE FOR DEFINE CARD, SKIP A LINE IF THE PREVIOUS CARD WAS        10000
C***  NOT A DEFINE CARD                                                 11000
51    IF(NDEFINE)52,55                                                  12000
52    PRINT 1001                                                        13000
      NDEFINE=0                                                         14000
      NUNDEF=1                                                          15000
      IAST=2H*                                                          16000
      GO TO 55                                                          17000
C***  HERE FOR ITEM CARD, SKIP A LINE                                   18000
54    PRINT 1001                                                        19000
      NDEFINE=NUNDEF=1                                                  20000
      IAST=2H                                                           21000
      GO TO 55                                                          22000
C***  HERE FOR UNDEFINE, SKIP A LINE IF PREVIOUS CARD IMAGE WAS         23000
C***  NOT AN UNDEFINE CARD                                              24000
552   IF(NUNDEF)553,55                                                  25000
553   PRINT 1001                                                        26000
      NDEFINE=1                                                         27000
      IAST=2H**                                                         28000
      NUNDEF=0                                                          29000
C***  PRINT OUTPUT - IAST IS SET TO 1H* FOR DEFINE, 2H** FOR UNDEFINE,  30000
C***  AND IS BLANK FOR ALL OTHER CASES - IF ISTAR IS EQUAL TO 1H*,      31000
C***  THE CARD IMAGE IS AN UPDATE TO THE DATA LIBRARY                   32000
55    PRINT 1000,(IAST,(OUTSTUFF(I),I=1,10),ISTAR)                      33000
1001  FORMAT(1HU)                                                       34000
1000  FORMAT(3X,A2,2X,9(A8,3X),A8,A1)                                   35000
      RETURN                                                            36000
      END                                                               37000
```

IDENT OUT

PROGRAM LENGTH		00147
ENTRY POINTS	OUT	00026
BLOCK NAMES		
	MYPRINT	00003
	MYOUT	00012
	ICONTROL	00001
EXTERNAL SYMBOLS		
	Q3Q00040	
	THEND.	
	Q3Q10040	
	Q8QDICT.	
	STH.	
	QNSINGL.	

```
P00143  BEGIN.      00143
P00142  CNVAT1.     00125   00131   00135
P00004  CRFMT.      00140   00140
P00001  DICT.       00030   00045   00050   00063   00066   00105   00110   00122   00137
P00144  ENDING.     00031   00140
P00000  EXIT.       00144
P00004  FORMAT.     00057   00076   00114
P00051  GG00000.    00043
P00067  GG00001.    00061
P00111  GG00002.    00103
P00140  GG00003.    00120
P00145  I           00126   00127   00132
P00003  IAST        00060   00077   00115   00124
C00000  ICOM        00032   00032
P00146  IGOTO.      00033
P00143  INITIAL.    00031
C00000  ISTAR       00134   00134
P00040  .51         00035
P00043  .52         00042
P00061  .54         00034
P00120  .55         00036   00037   00042   00060   00077   00102
P00100  .552        00036
P00103  .553        00102
P00004  ..100000    00057
P00013  ..1000      00123
P00005  ..100001    00075
P00006  ..100002    00114
P00007  ..1001      00046   00064   00106
C00001  NDEFINE     00041   00053   00075   00113
C00002  NUNDEF      00056   00071   00073   00101   00117
P00026  OUT         00026
C00000  OUTSTUFF    00130   00130
X00001  Q3Q000400   00040   00072   00100
X00003  Q3Q10C400   00052   00055   00070   00074   00112   00116
X00004  QBQDICT.    00000   00027
X00006  QNSINGL.    00141
X00005  STH.        00044   00062   00104   00121
X00002  THEND.      00047   00065   00107   00136
P00127  WS000C1.    00133
   00047 SYMBOLS
```

```
      SUBROUTINE PRONLY                                                 1000
CSUBR      PRONLY    START     ********************************************  50000
CUSE       MYIDENT   START     ********************************************  2000
      COMMON/MYIDENT/MYIDENT                                            1000
CEND       MYIDENT   ********************************************************  2000
CUSE       OPTIONS   START     ********************************************  3000
      COMMON / OPTIONS/ NCON(8),INTAPE,NOUT1,NOUT2,NPR,NUM,NOPSET       1000
     1  ,ISETSIZ                                                        2000
CEND       OPTIONS   ********************************************************  3000
CUSE       NOPRINT   START     ********************************************  4000
      COMMON/NOPRINT/NOPRINT                                            1000
CEND       NOPRINT   ********************************************************  4000
CUSE       HIST      START     ********************************************  5000
      COMMON/HIST/NOPSUSD(10),NUSED                                     1000
CEND       HIST      ********************************************************  5000
      MYIDENT = BHQUICKBASE                                             6000
      NOPRINT = 1                                                       7000
      CALL INITAP                                                       8000
C     CHECK TO SEE IF DATA PRINT IS REQUESTED IN FIRST FIELD            9000
      MYIDENT = BHQUICKDB                                               10000
    1 IF(NCON(3).NE.BHPRNTDATA) GO TO 2                                 11000
      NUSED = NUSED + 1                                                 12000
      NOPSUSD(NUSED) = NCON(3)                                          13000
      CALL PRNTDATA(INTAPE)                                             14000
      GO TO 3                                                           15000
C     CHECK TO SEE IF BASE PRINT IS REQUESTED IN FIRST FIELD            16000
    2 IF(NCON(3) .NE. BHPRNTBASE) GO TO 3                               17000
      NUSED = NUSED + 1                                                 18000
      NOPSUSD(NUSED) = NCON(3)                                          19000
      CALL PRNTBSE(INTAPE)                                              20000
C     CHECK TO SEE IF DATA PRINT IS REQUESTED IN SECOND FIELD           21000
    3 IF(NCON(4) .NE. BHPRNTDATA) GO TO 4                               22000
      NUSED = NUSED + 1                                                 23000
      NOPSUSD(NUSED) = NCON(4)                                          24000
      CALL PRNTDATA(INTAPE)                                             25000
C     CHECK TO SEE IF BASE PRINT IS REQUESTED IN SECOND FIELD           26000
    4 IF(NCON(4) .NE. BHPRNTBASE) GO TO 5                               27000
      NUSED = NUSED + 1                                                 28000
      NOPSUSD(NUSED) = NCON(4)                                          29000
      CALL PRNTBSE(INTAPE)                                              30000
    5 CONTINUE                                                          31000
      RETURN                                                            32000
      END                                                               33000
```

IDENT PRONLY

```
PROGRAM LENGTH              00111
ENTRY POINTS    PRONLY      00011
BLOCK NAMES
                MYIDENT     00001
                OPTIONS     00017
                NOPRINT     00001
                HIST        00013
EXTERNAL SYMBOLS
                Q8QDICT.
                INITAP
                PRNTDATA
                PRNTBSE
```

```
P00107  BEGIN.      00107
P00001  DICT.       00013   00022   00037   00054   00070   00104
P00110  ENDING.     00014   00106
P00000  EXIT.       00110
P00003  FORMAT.     00015   00023   00025   00042   00056   00072
X00002  INITAP      00021
P00107  INITIAL.    00014
C00010  INTAPE      00040   00055   00071   00105
C00016  ISETSIZ
P00025  .1
P00030  .100001
P00031  .100002     00027
P00045  .100003
P00046  .100004     00044
P00061  .100005
P00062  .100006     00060
P00075  .100007
P00076  .100008     00074
P00042  .2          00030
P00056  .3          00041   00045
P00072  .4          00061
P00106  .5          00075
P00003  ..100000    00015
P00004  ..100001    00023
P00005  ..100002    00026
P00006  ..100003    00043
P00007  ..100004    00057
P00010  ..100005    00073
C00000  MYIDENT     00016   00016   00024   00024
C00000  NCON        00025   00025   00033   00033   00042   00042   00050   00050   00056   00056   00064
                    00064   00072   00072   00100   00100
C00000  NOPRINT     00017   00020
C00015  NOPSET
C00000  NOPSUSD     00035   00052   00066   00102
C00011  NOUT1
C00012  NOUT2
C00013  NPR
C00014  NUM
C00012  NUSED       00031   00031   00032   00034   00034   00046   00046   00047   00051   00051   00062
                    00062   00063   00065   00065   00076   00076   00077   00101   00101
X00004  PRNTBSE     00053   00103
X00003  PRNTDATA    00036   00067
P00011  PRONLY      00011
X00001  QBQDICT.    00000   00012
   00052 SYMBOLS
```

```
      SUBROUTINE PRTCONT                                                    1000
CSUBR      PRTCOUNT  20SEP71   ************************************************ 51000
CUSE       IDESIGS   START     ************************************************  2000
      COMMON/IDESIGS/IDESIGS(250), DESIGNO(250,3)                           1000
      TYPE INTEGER DESIGNO                                                  2000
CENU       IDESIGS   ************************************************************ 2000
CUSE       NODESIGS  START     ************************************************  3000
      COMMON/NODESIGS/NODESIGS(2),KKMIN(2)                                  1000
CENU       NODESIGS  ************************************************************ 3000
CUSE       IWSIDE    START     ************************************************  4000
      COMMON/IWSIDE/IWSIDE(2)                                               1000
CEND       IWSIDE    ************************************************************ 4000
      DATA(IWSIDE=4HBLUE,3HRED)                                             5000
      DO 7555 J=1,2                                                         6000
      CALL PAGESKP                                                          7000
      PRINT 8620, IWSIDE(J)                                                 8000
 8620 FORMAT(10X,27HTARGET COUNT BY REGION FOR ,A5,7HTARGETS  /)            9000
      PRINT 8623                                                           10000
      ITOTRG1=ITOTRG2=ITOTRG3=0                                            11000
      IDOWNS=KKMIN(J)                                                      12000
      IUPS=IDOWNS+NODESIGS(J)-1                                            13000
      DO 8621 I=IDOWNS,IUPS                                                14000
      ITOTRG1=ITOTRG1+DESIGNO(I,1)                                         15000
      ITOTRG2=ITOTRG2+DESIGNO(I,2)                                         16000
      ITOTRG3=ITOTRG3+DESIGNO(I,3)                                         17000
      JTOTAL=DESIGNO(I,1)+DESIGNO(I,2)+DESIGNO(I,3)                        18000
 8621 PRINT 8622,IDESIGS(I),DESIGNO(I,1),DESIGNO(I,2),DESIGNO(I,3),        19000
     *JTOTAL                                                               20000
      PRINT 8625                                                           21000
      JTOTAL=ITOTRG1+ITOTRG2+ITOTRG3                                       22000
      PRINT 8626,ITOTRG1,ITOTRG2,ITOTRG3,JTOTAL                            23000
 8626 FORMAT(17X,4(I5,5X)//)                                               24000
 8625 FORMAT(1HO,17X,35H-----     -----     -----     -----                25000
 8622 FORMAT(10X,A2,5X,4(I5,5X))                                           26000
 8623 FORMAT(10X,42HDESIG  IREG1     IREG2     IREG3     TOTAL  /)         27000
 7555 CONTINUE                                                             28000
      RETURN                                                               29000
      END                                                                  30000
```

IDENT PRTCONT

PROGRAM LENGTH		00225
ENTRY POINTS	PRTCONT	00066
BLOCK NAMES		
	IDESIGS	01750
	NOUESIGS	00004
	INSIDE	00002
EXTERNAL SYMBOLS		
	THEND.	
	QBQDICT.	
	PAGESKP	
	STM.	
	QNSINGL.	

```
P00213  BEGIN.      00213
P00212  CNVRTI.     00104  00150  00151  00152  00153  00155  00200  00201  00202  00203
P00003  CRFMT.      00107  00206  00206  00206  00206
C00372  DESIGNS     00127  00130  00132  00132  00134  00135  00136  00137  00137  00140  00151
                    00152  00153
P00001  DICT.       00076  00075  00100  00106  00111  00114  00144  00157  00165  00170  00176
                    00205
P00214  ENDING.     00071  00210
P00000  EXIT.       00214
P00003  FORMAT.
P00107  GG00000.    00076
P00115  GG00001.    00107
P00160  GG00002.    00142
P00171  GG00003.    00163
P00206  GG00004.    00174
P00215  I           00124  00127  00146  00160
C00000  IDESIGS     00147  00147
P00216  IDOWNS      00121  00124
P00213  INITIAL.    00071
P00217  ITOTRG1     00117  00126  00131  00171  00200
P00220  ITOTRG2     00116  00131  00133  00172  00201
P00221  ITOTRG3     00116  00134  00136  00172  00202
P00222  IUPS        00123  00161
C00000  IWSIDE      00003  00103  00103
P00206  .7555
P00142  .8621
P00003  ..8620      00101
P00042  ..8622      00145
P00053  ..8623      00112
P00027  ..8625      00166
P00017  ..8626      00177
P00223  J           00073  00102  00206
P00224  JTOTAL      00141  00154  00173  00203
C00002  KKMIN       00117  00120
C00000  NODESIGS    00121  00122
X00003  PAGESKP     00074
P00066  PRTCONT     00066
X00002  QBQDICT.    00000  00067
X00005  QNSINGL.    00211
X00004  STH.        00077  00110  00143  00164  00175
X00001  THEND.      00105  00113  00156  00167  00204
P00161  TS00002.    00125
P00174  WS00001.    00207
P00126  WS00002.    00162  00162
   00052 SYMBOLS
```

```
      SUBROUTINE SETID                                                      1000
CSUBR      SETID     16APR71   ********************************************  52000
CUSE       OPTIONS   START     ********************************************   2000
      COMMON / OPTIONS/ NCON(8),INTAPE,NOUT1,NOUT2,NPR,NUM,NOPSET           1000
     1  ,ISETSIZ                                                            2000
CEND       OPTIONS   ********************************************************  2000
C     COMMON BLOCK REQUIRED BY FILEHANDLER                                   3000
CUSE       ITP       START     ********************************************   4000
      COMMON/ITP/ITP                                                        1000
CEND       ITP       ********************************************************  4000
CUSE       MYIDENT   START     ********************************************   5000
      COMMON/MYIDENT/MYIDENT                                                1000
CEND       MYIDENT   ********************************************************  5000
CUSE       TWORD     START     ********************************************   6000
      COMMON/TWORD/TWORD,ITWORD                                             1000
      EQUIVALENCE (TWORD,ITWORD)                                            2000
CEND       TWORD     ********************************************************  6000
CUSE       NOPRINT   START     ********************************************   7000
      COMMON/NOPRINT/NOPRINT                                                1000
CEND       NOPRINT   ********************************************************  7000
C                                                                           8000
C                                                                           9000
C     END COMMON BLOCKS REQUIRED BY FILEHANDLER                             10000
C                                                                           11000
C     COMMON BLOCKS OPTIONAL TO FILE HANDLER                                12000
      COMMON / FILABEL / INIDENT, INRUNNO, INDATE, INFORM, INSECR,          13000
     1 INTIME, INLNGTH, INCOMM(5)                                           14000
C                                                                           15000
      COMMON / IFTPRNT / IFTPRNT (10)                                       16000
      COMMON / MYLABEL / MYFORM, MYSECR, MYLNGTH,MYCOMM(5)                  17000
      COMMON / TODAY / NOWRUNO, NOWDATE , NOWTIME                           18000
C                                                                           19000
C      END COMMON BLOCKS OPTIONAL TO FILE HANDLER                           20000
C                                                                           21000
                                                                            22000
C                                                                           23000
      COMMON /  1 / NSAVE(500,2), NS(500)                                   24000
      DIMENSION INCARD(16), IMCARD(10)                                      25000
      DIMENSION ISETS(50)                                                   26000
C        IMP         LOCAL FLAG TO SHOW IF LINE PRINTED - 1 IF NOT        27000
C        IMCARD      USED TO COMPARE TAPES IF 2 ARE MADE                  28000
C        INCARD      CARD INPUT ARRAY-                                    29000
C        ISETS                                                            30000
C        ISETSIZ     ON DEFAULT OPTION MAXIMUN SET SIZE                   31000
C        IT          USED TO SAVE ITWORD IF 2 TAPES ARE MADE.             32000
C        NAT         NUMBER OF DEFINED ATTRIBUTES IN DIRECTORY            33000
C        NDIR        1 IF IN DIRECTORY-2 TO FLAG END DIRECTORY            34000
C        NEND        SET TO 2 IF LAST ON FINI CARD READ                   35000
C        NER         NUMBER OF COMPARE ERRORS IF 2 TAPES ARE MADE         36000
C        NL                                                               37000
C        NREC        NUMBER OF RECORDS COMPARED IF 2 TAPES ANE MADE       38000
C        NSET CURRENT SET NUMBER. DATA SET TO 1                           39000
C        NTIMES      LOCAL COUNTER TO LOOK AT UNDEFINES                   40000
       DATA(ISETSIZ = 5000)                                                41000
      DATA(          NSET =  1)                                           42000
      DATA(          NDIR    =   1)                                       43000
```

```
      DATA(          NAT =   1)                                          44000
      DATA(          NEND    = 1   )                                     45000
C                                                                         46000
C                                                                         47000
  100 FORMAT(8(A8,A2))                                                    48000
  101 FORMAT(I8)                                                          49000
  102 FORMAT(8(A8,A2),I8,2X,A8)                                           50000
  103 FORMAT(1H0)                                                         51000
  104 FORMAT(1H1)                                                         52000
  105 FORMAT(6X,A2,2X,8(A8,A2,2X),I8,4X,A8)                               53000
  106 FORMAT(1X,*ERROR IN RECORD NUMBER*,I6,*TOTAL ERRORS TO HERE*,I6,/,  54000
     1* TAPE1=*,8(A8,A2),I8,2X,A8,/,* TAPE2=*,8(A8,A2),I8,2A,A8)          55000
  107 FORMAT(1H1,5X,*-----GOOD TAPES-----*)                               56000
  108 FORMAT( 2I4)                                                        57000
  109 FORMAT( 1X, * ATTRIBUTE MISSPELLED  *, 2X, 8(A8,2X))                58000
  110 FORMAT( 1X, * END FILE OR LAST CARD FOUND BEFORE ENDIRCT  *    )    59000
  111 FORMAT( 110, /, 10(A8,2X))                                          60000
  112 FORMAT( 1X, *NO ERRORS IN * , I5,* RECORDS*  )                      61000
  113 FORMAT( 2X, *TAPES DO NOT MATCH  *    )                             62000
  114 FORMAT( 10X, 10(A8,4X)//,10X,10(A8,4X      ))                      63000
  115 FORMAT( 2X, * NREC =    * , I10)                                    64000
  116 FORMAT(1X,*TAPES DO NOT AGREE*,I5,*DIFFERENCES IN*,I5,*RECORDS*)    65000
  120 FORMAT( 10X, 8(A8,4X),2I5,4X,A8)                                    66000
  121 FORMAT( 8(A8,2X))                                                   67000
  130 FORMAT( 6X, 1H*,3X,8(A8,4X),2I5,4X,A8)                              68000
  131 FORMAT( 6X, 2H**,2X,8(A8,4X),2I5,4X,A8)                             69000
  132 FORMAT(10X,8(A8,4X),2I5,4X,A8)                                      70000
  160 FORMAT( 2X, * OPTION NOT IMPLETMENTED,  DEFAULT OPTION OVERRIDES*)  71000
C                                                                         72000
C                                                                         73000
C                                                                         74000
C                                                                         75000
      PRINT 104                                                           76000
      NOPRINT = 1                                                         77000
      MYIDENT = 8HQUIKBASE                                                78000
      CALL INITAP                                                         79000
      ITP = NOUT1                                                         80000
      MYIDENT = 8HDATALIB1                                                81000
      CALL SETWRIT                                                        82000
C     CHECK TO SEE IF BACK UP COPY OF TAPE REQUESTED                      83000
      IF( NOUT2 .LE. 0 .OR. NOUT2 .EQ. NOUT1  )GO TO 456                  84000
      ITP = NOUT2                                                         85000
      MYIDENT = 8HDATALIB2                                                86000
      CALL SETWRIT                                                        87000
  456 CONTINUE                                                            88000
      NSET = 1                                                            89000
      NDIR = 1                                                            90000
      NAT = 1                                                             91000
      NEND = 1                                                            92000
   10 READ(INTAPE,100)INCARD                                              93000
C     CHECK TO SEE IF END OF FILE ON TAPE                                 94000
      IF(EOF,INTAPE)90,20                                                 95000
C     CHECK TO SEE IF LAST CARD READ IN                                   96000
   20 IF( INCARD(1) .EQ. 4HLAST  ) GO TO 90                               97000
      IF(INCARD(1) .EQ. 8HENDINPUT) GO TO 90                              98000
C     CHECK TO SEE IF USER IS REQUESTING NEW SET HERE                     99000
```

```
      IF(INCARD(1) .EQ. 8HBEGINSET )GO TO 724                          100000
      IF( INCARD(1) .EQ. 8HNEWSET          ) GO TO 724                 101000
      GO TO 24                                                         102000
  724 NSET = NUMGET(INCARD(3) ,10)                                     103000
C     IF USER DID NOT SUPPLY SET NUMBER, MAKE SET = 1                  104000
      IF( NSET   .LE.  0)   NSET  = 1                                  105000
      GO TO 10                                                         106000
C     CHECK FOR AN-ADD-CARD                                            107000
   24 IF( INCARD(1) .NE. 3HADD   ) GO TO 22                            108000
   23 INCARD(7)=NUMGET(INCARD(7),10)                                   109
      ENCODE(8,101,INCARD(7))INCARD(7)                                 11
      INCARD(8)=1H                                                     11
      NS(NAT) = INCARD(3)                                              11
      NAT = NAT + 1                                                    113000
C    TO HERE STILL IN DIRECTORY                                        114000
C     CHECK FOR END OF DIRECTORY                                       115000
   22 IF( INCARD(1) .EQ. 8HENDIRECT    ) NDIR = 2                      116000
C     LOOP TO WRITE RECORD TO TAPE                                     117000
      DO 32 I = 1, 15, 2                                               118000
      ITP = NOUT1                                                      119000
      ITWORD = INCARD(I)                                               120000
      CALL WRWORD                                                      121000
      IF( NOUT2 .LE. 0) GO TO 32                                       122000
      ITP = NOUT2                                                      123000
      CALL WRWORD                                                      124000
   32 CONTINUE                                                         125000
      ENCODE( 8, 108, ITWORD) NSET,NUM                                 126000
      ITP = NOUT1                                                      127000
      CALL WRWORD                                                      128000
      IT = ITWORD                                                      129000
      ITWORD = NCON(6)                                                 130000
      CALL WRWORD                                                      131000
C     CHECK TO SEE IF BACK UP TAPE IS TO BE WRITTEN                    132000
      IF( NOUT2 .LE. 0)  GO TO 33                                      133000
      ITP = NOUT2                                                      134000
      ITWORD = IT                                                      135000
      CALL WRWORD                                                      136000
      ITWORD = NCON(6)                                                 137000
      CALL WRWORD                                                      138000
   33 GO TO (78, 79) NPR                                               139000
   78 PRINT 120,(INCARD(I), I= 1, 15, 2), NSET,NUM,NCON(6)             140000
   79 CONTINUE                                                         141000
      NUM = NUM + 1                                                    142000
      GO TO (10, 11) NDIR                                              143000
C                                                                      144000
C    TO HERE IF LAST OF DICT READ                                      145000
C                                                                      146000
   11 NUM = 1                                                          147000
      IF(NOPSET .NE. 1) ISETSIZ = 9999                                 148000
      GO TO( 41, 42, 43, 44, 45) NOPSET                                149000
   42 GO TO 44                                                         150000
   43 GO TO 44                                                         153000
   44 NSETC1=8HCLASS                                                   156000
         NSETC2=8HSIDE                                                 157000
         GO TO 41                                                      158000
   45 CONTINUE                                                         159000
```

```
      NSET = NSET + 1                                                    160000
      GO TO 240                                                          161000
C     DEFAULT OPTION                                                     162000
   41 NAT = NAT - 1                                                      163000
      NSET = 2                                                           164000
  240 CONTINUE                                                           165000
      DO 241 I = 1, 1000                                                 166000
  241 NSAVE(I) = 1H                                                      167000
C     LOOP TO CLEAR NSAVE ARRAY TO BLANKS                                168000
      IF(NPR.NE.1) GO TO 200                                             169000
      PRINT 104                                                          170000
C      PRIMARY READ STATEMENT                                            171000
  200 READ(INTAPE, 121)(INCARD(I), I = 1, 8)                             172000
 2001 CONTINUE                                                           173000
      IMP=1                                                              174000
C     CHECK TO SEE IF END OF FILE                                        175000
      IF( EOF,INTAPE) 91, 80                                             176000
C     CHECK TO SE IF END OF DATA                                         177000
   80 IF( INCARD(1) .EQ. 4HLAST   ) NEND = 2                             178000
      IF(INCARD(1) .EQ. 8HENDINPUT) NEND = 2                             179000
      IF( INCARD(1) .EQ. 4HFINI  ) NEND = 2                              180000
      IF(NOPSET.EQ.5) GO TO 85                                           180100
C     CHECK TO SEE IF DEFINE CARD                                        181000
      IF( INCARD(1) .NE. 8HDEFINE     ) GO TO 248                        182000
      GO TO (81,82,82,82,85) NOPSET                                      183000
C     CHECK TO SEE IF USER REQUESTING NEW SET HERE                       184000
   85 IF(INCARD(1).EQ.8H8EGINSET.OR.INCARD(1).EQ.6HNEWSET ) GO TO 850    185000
      GO TO (186,262) NPR                                                186000
  850 NSET = NSET + 1                                                    187000
      NIX = NUMGET (INCARD(2) ,8)                                        188000
C     CHECK TO SEE IF SET NUMBER SUPPLIED                                189000
      IF(NIX .LE. 0) NIX = NSET                                          190000
      NSET = NIX                                                         191000
      NUM = 1                                                            192000
C     CHECK PRINT OPTION                                                 193000
      IF(NPR.NE.1) GO TO 200                                             194000
      PRINT 104                                                          195000
      PRINT 132, (INCARD(I), I = 1, 8) , NSET, NUM                       196000
      GO TO 200                                                          197000
C     TO HERE FOR OPTIONS OF SIDE, CLASS, OR BOTH                        198000
C     LOOP TO CHECK FOR #SIDE # OR # CLASS#                              199000
   82 DO 83 I=2,6,2                                                      200000
      IF(INCARD(I).EW.NSETC1) GO TO 84                                   201000
      IF(INCARD(I).EW.NSETC2) GO TO 84                                   202000
   83 CONTINUE                                                           203000
      GO TO (186,262) NPR                                                204000
   84 NSET=NSET+1                                                        205000
      NUM=1                                                              206000
      GO TO (185,262) NPR                                                207000
  185 PRINT 104                                                          208000
  186 PRINT 130, (INCARD(I),I=1,8),NSET,NUM,NCON(6)                      209000
      GO TO 262                                                          210000
   81 CONTINUE                                                           211000
      GO TO(88, 89) NPR                                                  212000
C        SAVE ALL DEFINES IN NSAVE                                       213000
   88 PRINT 130, (INCARD(I), I = 1, 8), NSET,NUM, NCON(6)                214000
```

```
      IMP=2                                                          215000
   89 CONTINUE                                                       216000
C     LOOP TO SAVE DEFINED ATTRIBUTES DEFAULT OPTION                 217000
      DO 242 I = 1, NAT                                              218000
      IF( INCARD(2) .NE. NS(I)) GO TO 242                            219000
      NSAVE(I,1) = INCARD(2)                                         220000
      NSAVE(I,2) = INCARD(3)                                         221000
      GO TO 243                                                      222000
  242 CONTINUE                                                       223000
      PRINT 109, (INCARD(I), I = 1, 8)                               224000
  243 IF( INCARD(4) .EQ. 1H  ) GO TO 247                             225000
      DO 244 I = 1, NAT                                              226000
      IF( INCARD(4) .NE. NS(I)) GO TO 244                            227000
      NSAVE(I,1) = INCARD(4)                                         228000
      NSAVE(I,2) = INCARD(5)                                         229000
      GO TO 245                                                      230000
  244 CONTINUE                                                       231000
      PRINT 109,(INCARD(I), I = 1, 8)                                232000
  245 IF( INCARD(6) .EQ. 1H   ) GO TO 247                            233000
      DO 246 I = 1, NAT                                              234000
      IF( INCARD(6) .NE. NS(I)) GO TO 246                            235000
      NSAVE(I,1) = INCARD(6)                                         236000
      NSAVE(I,2) = INCARD(7)                                         237000
      GO TO 247                                                      238000
  246 CONTINUE                                                       239000
      PRINT 109,(INCARD(I), I = 1, 8)                                240000
      GO TO 247                                                      241000
C        REMOVE DEFINES WHEN UNDEFINED ENCOUNTERED                   242000
C     CHECK FOR UNDEFINE CARD                                        243000
  248 IF( INCARD(1) .NE. 8HUNDEFINE   ) GO TO 247                    244000
      IF(NOPSET .NE. 1) GO TO 247                                    245000
C     CHECK FOR NON-DEFAULT OPTION                                   246000
      GO TO(68, 69) NPR                                              247000
   68 PRINT 131,(INCARD(I), I = 1, 8),NSET,NUM,NCON(6)               248000
      IMP=2                                                          249000
C     LOOP TO REMOVE ATTRIBUTES WHEN UNDEFINED                       250000
   69 CONTINUE                                                       251000
      NTIMES = 2                                                     252000
 2250 DO 250 I = 1, NAT                                              253000
      IF(INCARD(NTIMES).NE.NS(I)) GO TO 250                          254000
      NSAVE(I,1) = 1H                                                255000
      NSAVE(I,2) = 1H                                                256000
      GO TO 251                                                      257000
  250 CONTINUE                                                       258000
      PRINT 109,(INCARD(I), I = 1, 8)                                259000
C     PRINT  MSG                                                     260000
  251 NTIMES = NTIMES + 1                                            261000
C     CHECK TO SEE IF THREE WITH CARD                                262000
      IF( NTIMES.GT.8) GO TO 247                                     263000
      IF(INCARD(NTIMES).NE.1H )GO TO 2250                            264000
C        WRITE OUT CURRENT CARD                                      265000
  247 CONTINUE                                                       266000
      GO TO (261,262)NPR                                             267000
  261 GO TO (263,262) IMP                                            268000
  263  PRINT 132,(INCARD(I), I = 1, 8), NSET, NUM, NCON(6)           269000
  262 CONTINUE                                                       270000
```

```
      ENCODE( 8, 108, INCARD(9)) NSET, NUM                                  271000
      INCARD( 10) = NCON(6)                                                 272000
      ITP = NOUT1                                                           273000
      CAL L WRARRAY(INCARD, 10)                                             274000
C     CHECK TO SEE IF BACK UP IS TO BE MADE                                 275000
      IF( NOUT2 .LE. 0)  GO TO 777                                          276000
      ITP = NOUT2                                                           277000
      CALL WRARRAY(INCARD, 10)                                              278000
  777 CONTINUE                                                              279000
      NUM = NUM + 1                                                         280000
      GO TO(71, 72) NEND                                                    281000
   71 CONTINUE                                                              282000
      NEWF = 1                                                              283000
      IF( NUM .LE.  ISETSIZ)   GO TO 200                                    284000
C     CHECK FOR PROPER SET TERMINATION                                      285000
      IF( INCARD(1) .EQ. 8HDEFINE          ) GO TO 201                      286000
      IF( INCARD(1) .EQ. 8HUNDEFINE        ) GO TO 201                      287000
      READ(INTAPE,121)(INCARD(I), I = 1, 8)                                 288000
      NEWF = 2                                                              289000
      IF( INCARD(1) .EQ. 8HDEFINE        .OR. INCARD(1) .EQ. 8HUNDEFINE     290000
     1 .OR. INCARD(1) .EQ. 8HITEM                    ) GO TO 201              291000
  204 DO 202 I = 1, 8                                                       292000
  202 INCARD(I) = INCARD(I)                                                 293000
      GO TO 2001                                                            294000
  201 CONTINUE                                                              295000
      GO TO (271,272) NPR                                                   296000
  271 PRINT 104                                                             297000
  272 CONTINUE                                                              298000
      NUM = 1                                                               299000
      NSET = NSET + 1                                                       300000
      J = 1                                                                 301000
      DO 567 K = 1, 10                                                      302000
  567 INCARD(K) = 1H                                                        303000
      INCARD(1) = 8HDEFINE                                                  304000
      INCARD(10) = NCON(6)                                                  305000
C     LOOP TO PUT OUT LEFT OVER DEFINES ON A NEW SET                        306000
      DO 350 I = 1, NAT                                                     307000
      IF( NSAVE(I, 1) .EQ. 1H  ) GO TO 350                                  308000
      J = J + 1                                                             309000
      INCARD(J) = NSAVE(I, 1)                                               310000
      J = J + 1                                                             311000
      INCARD(J) = NSAVE(I, 2)                                               312000
      IF( J .LT. 7)   GO TO 350                                             313000
      ENCODE( 8, 108, INCARD(9)) NSET, NUM                                  314000
      J = 1                                                                 315000
      GO TO (338, 339) NPR                                                  316000
  338 PRINT 130,(INCARD(L), L=1,8),NSET,NUM,NCON(6)                         317000
  339 CONTINUE                                                              318000
      ITP = NOUT 1                                                          319000
      CALL WRARRAY(INCARD, 10)                                              320000
      IF( NOUT2 .LE. 0) GO TO 352                                           321000
      ITP = NOUT2                                                           322000
      CALL WRARRAY(INCARD, 10)                                              323000
  352 NUM = NUM + 1                                                         324000
      DO 351 K = 2, 7                                                       325000
  351 INCARD(K) = 1H                                                        326000
```

```
  350 CONTINUE                                                          327000
C   SEE IF PARTIAL DEFINE RECORD REMAINS                                328000
      IF( J .EQ. 1) GO TO 203                                           329000
      ENCODE( 8, 108, INCARD(9)) NSET, NUM                              330000
      GO TO(209, 210),NPR                                               331000
  209 PRINT 130,(INCARD(L), L = 1,8),NSET,NUM,NCON(6)                   332000
  210 CONTINUE                                                          333000
      NUM = NUM + 1                                                     334000
      ITP = NOUT1                                                       335000
      CALL WRARRAY(INCARD, 10)                                          336000
      IF( NOUT2 .LE. 0)  GO TO 203                                      337000
      ITP = NOUT2                                                       338000
      CALL WRARRAY(INCARD, 10)                                          339000
  203 GO TO (200, 204) , NEOF                                           340000
   90 PRINT 110                                                         341000
      PRINT 111, NAT, (NS(I), I = 1, NAT)                               342000
      RETURN                                                            343000
   91 NEND = 2                                                          344000
      INCARD(1) = 4HLAST                                                345000
      DO 73 I = 2, 10                                                   346000
   73 INCARD(I) = 1H                                                    347000
      GO TO 247                                                         348000
   72 ITP = NOUT1                                                       349000
      CALL TERMTAP                                                      350000
C        IF TWO TAPES WERE GENERATED COMPARE HERE                       351000
      IF( NOUT2 .LE. 0) GO TO 92                                        352000
      ITP = NOUT2                                                       353000
      CALL TERMTAP                                                      354000
      ITP = NOUT1                                                       355000
      CALL SETREAD                                                      356000
      ITP = NOUT2                                                       357000
      CALL SETREAD                                                      358000
      NREC = 0                                                          359000
      NER = 0                                                           360000
 1920 CONTINUE                                                          361000
C     LOOP TO COMPARE TWO TAPES                                         362000
      DO 93 L = 1, 20000                                                363000
      ITP = NOUT1                                                       364000
      CALL RDARRAY(INCARD, 10)                                          365000
      ITP = NOUT2                                                       366000
      CALL RDARRAY(IMCARD,10)                                           367000
      NREC = NREC + 1                                                   368000
      IF( INCARD(1) .EQ. 4HLAST  .OR. IMCARD(1) .EQ. 4HLAST  ) GO TO 96 369000
      DO 94 K = 1, 10                                                   370000
      IF( INCARD(K) .EQ. IMCARD(K))   GO TO 94                          371000
   95 CONTINUE                                                          372000
      NER = NER + 1                                                     373000
      PRINT 113                                                         374000
      PRINT 115, NREC                                                   375000
      PRINT 114,(INCARD(MX), MX= 1, 10),(IMCARD(NX), NX = 1, 10)        376000
      GO TO 93                                                          377000
   94 CONTINUE                                                          378000
   93 CONTINUE                                                          379000
      GO TO 1920                                                        380000
C     CHECK FOR ERRORS OF COMPARED TAPES                                381000
   96 IF( NER .LE. 0) PRINT 112, NREC                                   382000
```

```
      IF( NER .GT. 0) PRINT 116, NER, NREC                          383000
   92 RETURN                                                        384000
      END                                                           385000
```

IDENT SETID

PROGRAM LENGTH		02377
ENTRY POINTS	SETID	00534
BLOCK NAMES		
	OPTIONS	00017
	ITP	00001
	MYIDENT	00001
	TWORD	00001
	NOPRINT	00001
	FILABEL	00014
	IFTPRNT	00012
	MYLABEL	00010
	TODAY	00003
	1	00034

EXTERNAL SYMBOLS

THEND.
Q$$DICT.
INITAP
SETWRIT
NUMGET
WRWORD
WRARRAY
TERMTAP
SETREAD
RDARRAY
Q$$IFEOF
TSM.
STM.
ENC.
SLI.
ONSINGL.

P02350	BEGIN.	02351										
P02347	CNVRTI.	00663	00730	00732	01000	01003	01005	01006	01073	01205	01210	01212
		01262	01265	01267	01270	01307	01312	01314	01315	01346	01402	01436
		01465	01470	01472	01473	01527	01563	01566	01570	01571	01601	01603
		01655	01761	01763	02002	02005	02007	02010	02054	02056	02074	02077
		02101	02102	02143	02150	02264	02276	02303	02326	02341	02342	
P00123	CRFMT.	00534	00534	00534	00534	00534	00534	00534	00534	00534	00534	00534
		00534	00534	00534	00534	00534	00534	00534	00534	00534	00534	00534
		00534										
P00001	DICT.	00536	00542	00545	00553	00561	00575	00606	00612	00615	00620	00640
		00654	00661	00665	00710	00720	00726	00734	00740	00746	00760	00764
		00773	01010	01060	01063	01067	01100	01105	01153	01172	01175	01200
		01214	01247	01252	01255	01272	01302	01317	01342	01352	01376	01406
		01432	01442	01460	01475	01523	01533	01556	01573	01576	01605	01613
		01624	01651	01662	01710	01713	01756	01765	01775	02012	02016	02027
		02051	02060	02067	02104	02112	02123	02132	02135	02140	02155	02172
		02202	02206	02212	02223	02230	02253	02256	02261	02266	02271	02307
		02323	02330	02336	02344							
X00016	ENC.	00660	00725	01575	01755	02050						
P02352	ENDING.	00537	02156	02345	02350							
P00000	EXIT.	02353										
P00123	FORMAT.	00550	00556	00572	00622	00625	00630	00633	00650	00666	00674	01033
		01035	01045	01107	01113	01117	01126	01137	01353	01407	01444	01502
		01541	01640	01643	01665	01721	01726	01731	02033	02161	02162	02234
P00546	GG000C0.	00540										
P00616	GG000C1.	00604										
P00666	GG000C2.	00657										
P00735	GG000C3.	00724										
P01011	GG000C4.	00771										
P01064	GG000C5.	01056										
P01101	GG000C6.	01065										
P01176	GG000C7.	01170										
P01215	GG000010.	01176										
P01253	GG000011.	01245										
P01273	GG000012.	01253										
P01320	GG000013.	01300										
P01353	GG000014.	01340										
P01407	GG000015.	01374										
P01443	GG000016.	01430										
P01476	GG000017.	01456										
P01534	GG000020.	01521										
P01574	GG000021.	01554										
P01606	GG000022.	01574										
P01663	GG000023.	01647										
P01714	GG000024.	01706										
P01766	GG000025.	01754										
P02013	GG000026.	01773										
P02061	GG000027.	02047										
P02105	GG000030.	02065										
P02136	GG000031.	02130										
P02156	GG000032.	02136										
P02257	GG000033.	02251										
P02267	GG000034.	02257										
P02310	GG000035.	02267										

```
P02331  GG00036.  02321
P02345  GG00037.  02334
P02357  I         00701  00704  00722  00776  00777  01001  01046  01046  01072  01074  01075
                  01203  01204  01206  01217  01220  01224  01231  01260  01261  01263  01305
                  01306  01310  01323  01325  01331  01335  01344  01345  01347  01357  01361
                  01365  01371  01400  01401  01403  01413  01415  01421  01425  01434  01435
                  01437  01463  01464  01466  01503  01505  01512  01516  01525  01526  01530
                  01561  01562  01564  01654  01655  01657  01675  01675  01731  01733  01742
                  02041  02144  02146  02151  02162  02163
P00565  IF0000C1.
P01141  IF0000C2.
P01667  IF0000C3.
P01671  IF0000C4.
P02230  IF0000C5.
C00000  IFTPRNT
P02360  IGGTC.    00766  01014  01024  01132  01145  01234  01242  01275  01453  01546  01552
                  01631  01703  01771  02062  02126
P02361  IMP       01102  01321  01477  01551
P00023  IMCARD    01657  01665  01667  01671  01677  02231  02236  02245  02303
P00003  INCARD    00613  00622  00625  00630  00633  00641  00650  00655  00656  00662  00663
                  00667  00667  00674  00705  01000  01075  01107  01113  01117  01126  01137
                  01141  01154  01205  01221  01225  01262  01307  01324  01330  01333  01346
                  01353  01360  01364  01367  01402  01407  01414  01420  01423  01436  01444
                  01465  01505  01527  01542  01563  01577  01607  01614  01625  01640  01643
                  01700  01724  01726  01730  01744  01750  01757  02002  02017  02030  02037
                  02052  02074  02113  02124  02161  02165  02224  02234  02244  02276
C00007  INCOMM
C00002  INDATE
C00003  INFORM
C00000  INIDENT
X00003  INITAP    00552
P02350  INITIAL.  00537
C00006  INLNGTH
C00001  INRUNNO
C00004  INSEGR
C00010  INTAPE    00603  00603  00616  00616  01064  01064  01102  01103  01646  01646
C00005  INTIME
P00035  ISETS
C00016  ISETSIZ   00117  01021  01022  01635
P02362  IT        00742  00755
C00000  ITP       00555  00555  00571  00571  00703  00703  00716  00716  00736  00736  00754
                  00754  01611  01611  01622  01622  02014  02014  02025  02025  02107  02110
                  02121  02121  02170  02170  02200  02200  02204  02204  02210  02210  02221
                  02221  02226  02228
C00000  ITWORD    00705  00706  00727  00741  00741  00744  00744  00756  00756  00762  00762
P00003  .10       00647  01015
P00567  .100001   00563  00564
P00570  .100002   00566
P00624  .100003
P00625  .100004   00623
P00627  .100005
P00630  .100006.  00626
P00632  .100007
P00633  .100008   00631
```

```
P00635  .100009
P00636  .100010    00634
P00645  .100011    00644
P00647  .100012    00644
P00652  .100013
P00653  .100014    00651
P00676  .100015
P00700  .100016    00675
P00714  .100017    00712
P00715  .100018    00713
P00752  .100019    00750
P00753  .100020    00751
P01021  .100021
P01023  .100022    01020
P01055  .100023
P01056  .100024    01054
P01111  .100025
P01113  .100026    01110
P01115  .100027
P01117  .100028    01114
P01121  .100029
P01123  .100030    01120
P01125  .100031
P01126  .100032    01124
P01130  .100033
P01131  .100034    01127
P01143  .100035    01140
P01144  .100036    01142
P01160  .100037    01156
P01162  .100038    01157
P01167  .100039
P01170  .100040    01166
P01223  .100041
P01224  .100042    01222
P01227  .100043
P01230  .100044    01226
P01327  .100045
P01330  .100046    01326
P01355  .100047
P01356  .100048    01354
P01363  .100049
P01364  .100050    01362
P01411  .100051
P01412  .100052    01410
P01417  .100053
P01420  .100054    01416
P01446  .100055
P01447  .100056    01445
P01451  .100057
P01452  .100058    01450
P01510  .100059
P01511  .100060    01507
P01540  .100061
P01541  .100062    01537   01537
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P01544  .100063
P01545  .100064   01543
P01620  .100065   01616
P01621  .100066   01617
P01637  .100067   01636
P01640  .100068   01636
P01642  .100069
P01643  .100070   01641
P01645  .100071
P01646  .100072   01644
P01673  .100073   01666   01670
P01674  .100074   01672
P01737  .100075
P01740  .100076   01736
P01753  .100077
P01754  .100078   01752   01752
P02023  .100079   02021
P02024  .100080   02022
P02046  .100081
P02047  .100082   02045
P02117  .100083   02115
P02120  .100084   02116
P02176  .100085   02174
P02177  .100086   02175
P02240  .100087   02235
P02241  .100088   02237
P02246  .100089
P02247  .100090   02245
P02321  .100091   02317
P02331  .100092   02320
P02334  .100093
P02345  .100094   02332   02333
P01016  .11
P01245  .185      01243
P01253  .186      01146   01235
P02216  .1920     02315
P00622  .20       00621
P01064  .200      01055   01167   01215   01637   02127
P01101  .2001     01701
P01702  .201      01642   01645   01673
P01677  .202
P02125  .203      02046   02117
P01674  .204      02127
P02065  .209      02063
P02105  .210      02064
P00674  .22       00652
P01502  .2250     01544
P00653  .23
P01045  .240      01041
P00650  .24       00636
P01050  .241
P01335  .242      01327
P01353  .243      01334
P01371  .244      01363
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P01407	.245	01370							
P01425	.246	01417							
P01545	.247	01355	01411	01424	01443	01446	01451	01540	02166
P01444	.248	01130							
P01516	.250	01510							
P01534	.251	01515							
P01551	.261	01547							
P01574	.262	01147	01235	01244	01273	01550	01553		
P01554	.263	01553							
P01706	.271	01704							
P01714	.272	01705							
P00721	.32	00714							
P00765	.33	00752							
P01773	.338	01772							
P02013	.339	01772							
P02041	.350	01737	01753						
P02036	.351								
P02031	.352	02023							
P01042	.41	01025	01036						
P01031	.42	01026							
P01032	.43	01027							
P01033	.44	01027	01031	01032					
P01037	.45	01030							
P00576	.456	00567							
P01723	.567								
P01456	.68	01454							
P01500	.69	01455							
P01633	.71	01632							
P02167	.72	01632							
P00637	.724	00632	00635						
P02164	.73								
P01626	.777	01620							
P00771	.78	00767							
P01011	.79	00770							
P01107	.80	01106							
P01274	.81	01133							
P01216	.82	01134	01135	01135					
P01230	.83								
P01236	.84	01223	01227						
P01150	.850	01143							
P01137	.85	01125	01136						
P01300	.88	01276							
P01322	.89	01277							
P02130	.90	00621	00624	00627					
P02157	.91	01106							
P02345	.92	02176							
P02313	.93	02310							
P02311	.94	02246							
P02247	.95								
P02316	.96	02240							
P00466	..100C00	00550							
P00123	..100	00607							
P00467	..100C01	00556							
P00470	..100C02	00572							

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P00471  ..100003   00623
P00472  ..100004   00626
P00473  ..100005   00631
P00474  ..100006   00634
P00475  ..100007   00651
P00476  ..100008   00666
P00477  ..100009   00675
P00500  ..100010   01033
P00501  ..100011   01035
P00502  ..100012   01050
P00503  ..100013   01110
P00504  ..100014   01114
P00505  ..100015   01120
P00506  ..100016   01127
P00507  ..100017   01140
P00510  ..100018   01142
P00511  ..100019   01354
P00512  ..100020   01410
P00513  ..100021   01445
P00514  ..100022   01511
P00515  ..100023   01514
P00516  ..100024   01542
P00517  ..100025   01641
P00520  ..100026   01644
P00521  ..100027   01665
P00522  ..100028   01670
P00523  ..100029   01672
P00524  ..100030   01723
P00525  ..100031   01726
P00526  ..100032   01735
P00527  ..100033   02036
P00530  ..100034   02161
P00531  ..100035   02164
P00532  ..100036   02234
P00533  ..100037   02237
P00131  ..101      00662
P00134  ..102
P00145  ..103
P00151  ..104      00543   01061   01173   01250   01711
P00155  ..105
P00172  ..106
P00233  ..107
P00244  ..108      00727   01577   01757   02052
P00247  ..109      01343   01377   01433   01524
P00263  ..110      02133
P00275  ..111      02141
P00305  ..112      02324
P00316  ..113      02254
P00325  ..114      02272
P00342  ..115      02262
P00351  ..116      02337
P00367  ..120      00774
P00401  ..121      01070   01652
P00407  ..130      01256   01303   01776   02070
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P00424  ..131    01461
P00441  ..132    01201   01557
P00453  ..160
P02363  J        01720   01740   01741   01744   01745   01746   01750   01751   01767   02044
P02364  K        01721   01722   02034   02034   02242   02243   02244   02311
P02365  L        02000   02001   02003   02072   02073   02075   02217   02313
P02366  MX       02274   02275   02277
C00003  MYCOMM
C00000  MYFCMM
C00000  MYIDENT  00551   00551   00557   00557   00573   00573
C00002  MYLNGTH
C00001  MYSECR
P00121  NAT      00601   00670   00672   00673   01042   01043   01336   01372   01426   01517   02042
                 02142   02152
C00000  NCON     00743   00743   00761   00761   01006   01270   01315   01473   01571   01606   01606
                 01727   01727   02010   02102
P00120  NDIR     00660   00677   01013
P00122  NEND     00602   01116   01116   01122   01630   02160
P02367  NER      02215   02247   02250   02316   02331   02340
P02370  NEWF     01634   01664   02125
P02371  NIX      01155   01155   01161   01162
C00000  NOPRINT  00546   00547
C00015  NOPSET   01017   01023   01023   01123   01123   01131   01131   01447   01447
C00011  NOUT1    00554   00554   00566   00702   00702   00735   00735   01610   01610   02013   02013
                 02107   02167   02167   02203   02203   02220   02220
C00012  NOUT2    00562   00562   00565   00565   00570   00570   00711   00711   00715   00715   00747
                 00747   00753   00753   01615   01615   01621   01621   02020   02020   02024   02024
                 02114   02114   02120   02120   02173   02173   02177   02177   02207   02207   02225
                 02225
C00001  NOWDATE
C00000  NOWRUNC
C00002  NOWTIME
C00013  NPR      00765   00765   01053   01053   01144   01144   01165   01232   01233   01241   01274
                 01274   01452   01452   01545   01545   01702   01702   01767   01770   02061   02061
P02372  NREC     02214   02232   02233   02263   02325   02342
C01750  NS       00670   00671   01325   01326   01361   01362   01415   01416   01506   01506   02147
                 02147
C00000  NSAVE    01051   01051   01331   01332   01333   01334   01365   01366   01367   01370   01421
                 01422   01423   01424   01512   01513   01514   01515   01734   01734   01742   01743
                 01746   01747
P00117  NSET     00577   00642   00643   00646   00730   01003   01037   01040   01044   01150   01151
                 01160   01163   01207   01236   01237   01264   01311   01467   01565   01600   01716
                 01717   01760   02004   02052   02076
P02373  NSETC1   01034   01221
P02374  NSETC2   01035   01225
P02375  NTIMES   01501   01504   01534   01535   01536   01541
C00014  NUM      00731   00731   01004   01004   01011   01011   01012   01016   01017   01164   01164
                 01211   01211   01240   01241   01266   01266   01313   01313   01471   01471   01567
                 01567   01602   01602   01626   01626   01627   01634   01635   01714   01715   01762
                 01762   02006   02006   02031   02031   02032   02055   02055   02100   02100   02105
                 02105   02106
X00005  NUMGET   00637   00653   01152
P02376  NX       02301   02302   02304
X00002  OBODICT. 00000   00535
```

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X00013  QBQIFEOF  00617  01104
X00020  QNSINGL.  02346
X00012  RDARRAY   02222  02227
P00534  SETIO     00534
X00011  SETREAD   02205  02211
X00004  SETWRIT   00560  00574
X00017  SLI.      00611
X00015  STH.      00541  00772  01057  01171  01177  01246  01254  01301  01341  01375  01431
                  01457  01522  01555  01707  01774  02066  02131  02137  02252  02260  02270
                  02322  02335
X00010  TERMTAP   02171  02201
X00001  THEND.    00544  00614  00664  00733  01007  01062  01077  01174  01213  01251  01271
                  01316  01351  01405  01441  01474  01532  01572  01604  01661  01712  01764
                  02011  02057  02103  02134  02154  02255  02265  02306  02327  02343
P01336  TS00011.  01323
P01372  TS00013.  01357
P01426  TS00015.  01413
P01517  TS00020.  01503
P02042  TS00026.  01732
P02152  TS00032.  02145
X00014  TSH.      00605  01066  01650
C00000  TWORD
X00007  WRARRAY   01612  01623  02015  02026  02111  02122
X00006  WRWORD    00707  00717  00737  00745  00757  00763
P00702  WS00001.  00723
P00777  WS00002.  01002
P01050  WS00003.  01052
P01073  WS00004.  01076
P01204  WS00005.  01207
P01220  WS00006.  01232
P01261  WS00007.  01264
P01306  WS00010.  01311
P01324  WS00011.  01337  01337
P01345  WS00012.  01350
P01360  WS00013.  01373  01373
P01401  WS00014.  01404
P01414  WS00015.  01427  01427
P01435  WS00016.  01440
P01464  WS00017.  01467
P01504  WS00020.  01520  01520
P01526  WS00021.  01531
P01562  WS00022.  01565
P01655  WS00023.  01660
P01677  WS00024.  01701
P01723  WS00025.  01725
P01733  WS00026.  02043  02043
P02001  WS00027.  02004
P02036  WS00030.  02040
P02073  WS00031.  02076
P02146  WS00032.  02153  02153
P02164  WS00033.  02166
P02220  WS00034.  02314
P02243  WS00035.  02312
P02275  WS00036.  02300
```

```
PU2302  WS00037.   02305
00575 SYMBOLS
```

```
      PROGRAM BASEMOD                                                    1000
CSUBR      BASEMOD   10NOV70  **********************************************  1000
C                                                                        2000
C                                                                        3000
C THE MAIN FUNCTION OF PROGRAM BASEMOD IS TO EFFECT THE ALTERATION OF    4000
C THE CONTENT OR CHARACTERISTICS OF A DATA BASE IN ORDER TO ADAPT IT      5000
C TO THE SPECIFIC SCENARIO FOR WHICH THE PLAN IS BEING DEVELOPED.  THE   6000
C PROGRAM MAY BE EXERCISED EITHER AFTER PROGRAM QUIKBASE OR AFTER        7000
C PROGRAM INDEXER.  IF IT IS EXERCISED IN THE FORMER POSITION,           8000
C SUBROUTINE DBMOD WILL CONTROL THE INFORMATION PROCESSING, WHILE IF IT  9000
C IS EXERCISED IN THE LATTER, SUBROUTINE INDMOD WILL BE THE CONTROLLING  10000
C SUBROUTINE.  DETAILS CONCERNING FILE UTILIZATION AND OTHER NECESSARY   11000
C INFORMATION ARE CONTAINED IN THE TWO CONTROLLING SUBROUTINES.          12000
C                                                                        13000
C                                                                        14000
C ***********************************************************************  15000
C                                                                        16000
C                                                                        17000
      READ 100,IALT                                                      18000
  100 FORMAT(I10)                                                        19000
C                                                                        20000
C IS THE PROGRAM TO BE RUN POST-QUIKBASE OR POST-INDEXER                 21000
C                                                                        22000
      IF(IALT)200,200,300                                                23000
C                                                                        24000
C RUN POST-QUIKBASE                                                      25000
C                                                                        26000
  200 CALL DBMOD                                                         27000
      GO TO 400                                                          28000
C                                                                        29000
C RUN POST-INDEXER                                                       30000
C                                                                        31000
  300 CALL INDMOD                                                        32000
  400 CONTINUE                                                           33000
      PRINT 7777                                                         34000
      WRITE(44,7777)                                                     35000
 7777 FORMAT (43H ***** PROCESSOR BASEMOD COMPLETED *****)               36000
      END                                                                37000
```

IDENT BASEMOD

PROGRAM LENGTH 00064
ENTRY POINTS BASEMOD 00017
EXTERNAL SYMBOLS
QBQENTRY
THEND.
QBQDICT.
DBMOD
INDMOD
TSH.
STH.
QNSINGL.

```
P00017  BASEMOD     00017
P00061  CNVRT!.     00030
P00063  CRFMT.      00034   00057
X00004  DBMOD       00036
P00001  DICT.       00021   00023   00026   00033   00037   00042   00045   00050   00053   00056
P00062  ENDING.     00057
P00000  EXIT.       00062
P00003  FORMAT.
P00034  GG00000.    00024
P00051  GG00001.    00043
P00057  GG00002.    00051
P00063  IALT        00031   00034
X00005  INDMOD      00041
P00036  .200        00034   00035
P00041  .300        00035
P00043  .400        00040
P00003  ..100       00027
P00006  ..7777      00046   00054
X00003  Q8QDICT.    00000   00020
X00001  Q8QENTRY    00022
X00010  QNSINGL.    00060
X00007  STM.        00044   00052
X00002  THEND.      00032   00047   00055
X00006  TSM.        00025
   00030 SYMBOLS
```

```
      SUBROUTINE ADDVAL (IS,IC,IT,V,JC)                                  1000
CSUBR      ADDVAL    18DEC70  ***************************************** 23000
C                                                                        2000
C                                                                        3000
C THIS SUBROUTINE CUMULATES VALUE BY CLASS, TYPE AND SIDE AND PRINTS     4000
C THE TABULATED INFORMATION                                              5000
6                                                                        6000
C                                                                        7000
C                                                                        8000
C ************************************************************************ 9000
C                                                                       10000
CUSE       REDBLUE   18DEC70  ***************************************** 11000
      DIMENSION NAMZ(2,15,40),NUMZ(2,15,40),VALZ(2,15,40),LP(2,15)       1000
      DIMENSION LLSIDE(2)                                                2000
      DIMENSION NAMCL(2,15)                                              3000
CEND       REDBLUE   ************************************************** 11000
      DATA (INITIAL=0)                                                  12000
      IF (INITIAL) 20,10                                                13000
   10 INITIAL = 1                                                       14000
      DO 11 M = 1,2                                                     15000
      DO 11 N=1,15                                                      16000
      LP(M,N) = 0                                                       17000
      NAMCL(M,N)=8H                                                     17500
      DO 11 L=1,40                                                      18000
      NAMZ(M,N,L) = 1H    $   NUMZ(M,N,L) = 0    $   VALZ(M,N,L) = 0.0  19000
   11 CONTINUE                                                          20000
   20 CONTINUE                                                          20100
      IF (NAMCL(IS,IC) .EQ. 8H         )23,21                           20200
   23 CONTINUE                                                          20400
      NAMCL(IS,IC)=JC                                                   20600
   21 CONTINUE                                                          20800
      M= LP(IS,IC)                                                      21000
      DO  30  L = 1,M                                                   22000
      N = L                                                             23000
      IF ( IT .EQ. NAMZ(IS,IC,L) ) 25,30                                24000
   30 CONTINUE                                                          25000
      N = LP(IS,IC)  =  LP(IS,IC) + 1                                   26000
      NAMZ(IS,IC,N)  =  IT                                              27000
   25 VALZ(IS,IC,N)  =  VALZ(IS,IC,N)  +  V                             28000
      NUMZ(IS,IC,N)  =  NUMZ(IS,IC,N)  +  1                            29000
      RETURN                                                            30000
      ENTRY  PRNTVAL                                                    31000
      LLSIDE(1)=4HBLUE                                                  32000
      LLSIDE(2)=3HRED                                                   33000
      DO 50 M = 1,2                                                     49000
      PRINT 101,LLSIDE(M)                                               50000
  101 FORMAT(1H1,///,25X,44HCUMULATIVE VALUE BY CLASS AND TYPE FOR SIDE ,  51000
     1A8,/)                                                             52000
      PRINT 120                                                         53000
  120 FORMAT (//,20X,5HCLASS,5X,4HTYPE,11X,5HCOUNT,5X,5HVALUE  )        54000
      DO 50 N=1,15                                                      55000
      PRINT 102,NAMCL(M,N)                                              56000
  102 FORMAT (/,20X,A8)                                                 57000
      CLASSVAL = 0.0      $      NUM = 0                                58000
      DO 201 L=1,40                                                     59000
      IF (NUMZ(M,N,L)) 200,201                                          60000
```

```
      200 PRINT 103,NAMZ(M,N,L),NUMZ(M,N,L),VALZ(M,N,L)                  61000
      103 FORMAT (30X,A8,2X,I10,2X,F15.5 )                               62000
          CLASSVAL = CLASSVAL + VALZ(M,N,L)                              63000
          NUM = NUM + NUMZ(M,N,L)                                        64000
      201 CONTINUE                                                       65000
          PRINT 104, NUM, CLASSVAL                                       66000
      104 FORMAT (30X,8(1H-),2X,10(1H-),2X,15(1H-),/                     67000
         *        30X,3HALL,7X,I10,2X,F15.5)                             68000
       50 CONTINUE                                                       69000
          RETURN                                                         70000
          END                                                            71000
```

IDENT ADDVAL

PROGRAM LENGTH		07644
ENTRY POINTS	ADDVAL	07233
	PRNTVAL	07334
EXTERNAL SYMBOLS		
	THEND.	
	Q8QDICT.	
	STH.	
	QNSINGL.	

P07233	ADDVAL	07233										
P07561	BEGIN.	07620	07626	07632								
P07637	CLASSVAL	07400	07421	07423	07435							
P07450	CNVRT1.	07353	07374	07414	07415	07416	07434	07435				
P07122	CRFMT.	07356	07364	07377	07421	07440						
P00001	CICT.	07235	07337	07350	07355	07360	07363	07371	07376	07411	07420	07432
		07437	07565	07566								
P07621	ENDING.	07236	07334	07340	07446	07562	07563	07563	07564	07564		
P00000	EXIT.	07624										
P07122	FORMAT.	07245	07253	07271	07341	07343						
P07274	FP00001.	07616	07617									
P07310	FP00002.	07604	07605									
P07326	FP00003.	07606	07607									
P07330	FP00004.	07612	07613									
P07536	FP00005.	07600	07601									
P07551	FP00006.	07574	07575									
P07635	GETPL.	07567	07576	07610								
P07625	GETPU.	07572	07602	07614	07631							
P07356	GG00000.	07346										
P07364	GG00001.	07356										
P07377	GG00002.	07367										
P07421	GG00003.	07407										
P07440	GG00004.	07430										
P07122	IC	07536										
P07451	IN00001.	07251	07373	07462	07474	07476	07512					
P07452	IN00002.	07255	07404	07413	07422	07462	07473	07477	07513	07516	07531	
P07453	IN00003.	07271	07275	07277	07320	07543	07555					
P07454	IN00004.	07311	07517	07532	07545	07556						
P07455	IN00005.	07325	07327	07500	07514	07544	07557					
P07121	INITIAL	07237	07242									
P07562	INITIAL.	07236	07340									
P07122	IS	07551										
P07122	IT	07310	07324									
P07241	.10											
P07262	.11											
P07407	.200	07405										
P07271	.20	07240										
P07425	.201	07406										
P07277	.21	07273										
P07274	.23											
P07327	.25	07313										
P07314	.30	07312										
P07440	.50											
P07122	..100000	07252										
P07123	..100001	07256										
P07124	..100002	07272										
P07125	..100003	07341										
P07126	..100004	07343										
P07127	..101	07351										
P07165	..102	07372										
P07172	..103	07412										
P07202	..104	07433										
P07146	..120	07361										
P07122	JC	07274										

```
P07640  L          07253  07302  07305  07314  07402  07425  07525
P07061  LLSIDE     07342  07343  07353
P07023  LP         07251  07300  07320  07321
P07641  M          07243  07266  07300  07316  07344  07352  07443  07470
P07642  N          07246  07263  07306  07322  07365  07440  07506
P07063  NAMCL      07252  07272  07276  07374
P00003  NAMZ       07257  07312  07326  07414
P07643  NUM        07401  07423  07424  07434
P02263  NUMZ       07260  07332  07333  07405  07415  07424
P07462  P00000.U   07465
P07476  P00001.U   07503
P07516  P00002.U   07522
P07576  PF00002.   07573
P07602  PF00003.   07577
P07610  PF00004.   07603
P07614  PF00005.   07611
P07620  PF00006.   07615
P07335  PRNTVAL    07335
X00002  QBQDICT.   00000  07234  07336
X00004  QNSINGL.   07447
P07460  RELCON..   07561
X00003  STH.       07347  07357  07370  07410  07431
X00001  THEND.     07354  07362  07375  07417  07436
P07316  TS00004.   07304
P07467  UP00000.   07244  07267  07301  07345  07444  07443  07470  07471  07472  07475  07475
P07505  UP00001.   07247  07264  07307  07323  07366  07441  07501  07504  07507  07510  07515
                   07515
P07524  UP00002.   07254  07303  07315  07403  07426  07520  07525  07526  07527  07533  07533
P07535  UP00003.   07456  07537  07540  07541  07545  07546
P07550  UP00004.   07457  07552  07553  07554  07560  07540
P07122  V          07331
P04543  VALZ       07261  07330  07332  07416  07422
P07245  WS00001.   07270
P07250  WS00002.   07265
P07256  WS00003.   07262
P07305  WS00004.   07317  07317
P07346  WS00005.   07445
P07367  WS00006.   07442
P07404  WS00007.   07427
   00133 SYMBOLS
```

```
      SUBROUTINE COUNTDES(II,MYDESIG,IREG)                                  1000
CSUBR      COUNTDES  140CT70  ******************************************** 11000
C                                                                           2000
C                                                                           3000
C THIS SUBROUTINE KEEPS A TALLY BY REGION AND TYPE OF THE TARGETS KEPT      4000
C FOR EACH SIDE                                                             5000
C                                                                           6000
C                                                                           7000
C ************************************************************************  8000
C                                                                           9000
CUSE       IDESIGS   140CT70  ******************************************** 10000
      COMMON/IDESIGS/IDESIGS(500),DESIGNO(500,3)                            1000
      COMMON/NODESIGS/NODESIGS(2),KKMIN(2)                                  2000
      TYPE INTEGER DESIGNO                                                  3000
CEND       IDESIGS   ******************************************************* 10000
      DATA (NODESIGS = 0,0),(KKMIN = 1,251)                                 11000
C                                                                           12000
C SEPARATE THE TARGET DESIGNATOR CODE (MYDESIG) INTO THE ALPHARETIC          13000
C (LDES) AND THE NUMERIC (KDESIG) PORTIONS                                  14000
C                                                                           15000
      DECODE (8,100,MYDESIG)LDES,KDESIG                                     16000
  100 FORMAT (A2,I3,3X)                                                     17000
C                                                                           18000
C DETERMINE THE REGION IN WHICH THE TARGET IS LOCATED                       19000
C                                                                           20000
      IF (KDESIG.LT.500)1,2                                                 21000
    1 CONTINUE                                                              22000
      IREG = 1                                                              23000
      GO TO 5                                                               24000
    2 CONTINUE                                                              25000
      IF (KDESIG.LT.800)3,4                                                 26000
    3 CONTINUE                                                              27000
      IREG = 2                                                              28000
      GO TO 5                                                               29000
    4 CONTINUE                                                              30000
      IREG = 3                                                              31000
    5 CONTINUE                                                              32000
C                                                                           33000
C BLUE DATA ARE STORED IN SPACES 1 THROUGH 250, RED DATA ARE STORED IN       34000
C SPACES 251 THROUGH 500                                                    35000
C                                                                           36000
      KK = KKMIN(II)                                                        37000
      MAX=KK+NODESIGS(II)-1                                                 38000
C                                                                           39000
C CHECK TO SEE WHETHER OTHER TARGETS OF THIS TYPE HAVE BEEN RECORDED        40000
C FOR THIS SIDE                                                             41000
C                                                                           42000
      DO 20 J=KK,MAX                                                        43000
      IF(LDES.EQ.IDESIGS(J)) 1:,20                                          44000
C                                                                           45000
C TARGET IS FIRST OF ITS TYPE, MAKE A RECORD OF IT , TOGETHER WITH ITS      46000
C TYPE                                                                      47000
C                                                                           48000
 20   CONTINUE                                                             49000
      J=MAX+1                                                               50000
      NODESIGS(II)=NODESIGS(II)+1                                           51000
```

```
      IDESIGS(J) = LDES                                                  52000
C                                                                        53000
C INCREMENT THE NUMBER OF TARGETS OF THIS TYPE (IN THE APPROPRIATE       54000
C REGION) BY ONE                                                         55000
C                                                                        56000
   11 CONTINUE                                                           57000
      DESIGNO(J,IREG) = DESIGNO(J,IREG) + 1                              58000
      RETURN                                                             59000
      END                                                                60000
```

IDENT COUNTDES

PROGRAM LENGTH		00216
ENTRY POINTS	COUNTDES	00010
BLOCK NAMES		
	IDESIGS	03720
	NODESIGS	00004
EXTERNAL SYMBOLS		
	THEND.	
	QADDICT.	
	DEC.	
	QNSINGL.	

```
P00136  BEGIN.      00172   00200   00204
P00106  CNVRTI.     00020   00022
P00010  COUNTDES    00010
P00003  CRFMT.      00026
X00003  DEC.        00015
C00764  DESIGNO     00102   00102   00103
P00001  DICT.       00012   00016   00025   00142   00143
P00173  ENDING.     00013   00104   00137   00140   00140   00141   00141
P00000  EXIT.       00176
P00003  FORMAT.
P00017  FP00001.    00157
P00031  FP00002.    00164   00165
P00040  FP00003.    00166   00167
P00044  FP00004.    00170   00171
P00047  FP00005.    00151   00152
P00073  FP00006.    00153   00154
P00127  FP00007.    00162   00163
P00207  GETPL.      00144   00155
P00177  GETPU.      00147   00160   00203
P00026  GG00000.    00014
C00000  IDESIGS     00061   00062   00077   00100
P00003  II          00047   00073
P00107  IN00003.    00101   00113   00123   00134
P00137  INITIAL.    00013
P00003  IREG        00032   00041   00045   00127
P00031  .1
P00101  .11         00063
P00064  .20         00062
P00035  .2          00027   00030
P00040  .3
P00044  .4          00036   00037
P00047  .5          00034   00043
P00003  ..100       00017
P00211  J           00055   00061   00064   00071   00077   00120
P00212  KDESIG      00023   00026   00035
P00213  KK          00051   00054
C00002  KKMIN       C00002  00050   00050
P00214  LDES        00021   00060   00076
P00215  MAX         00054   00066   00070
P00003  MYDESIG     00017
C00000  NODESIGS    00003   00052   00052   00074   00074   00075
P00113  P00000.U    00115
P00155  PF00002.    00150
P00160  PF00003.    00156
P00172  PF00004.    00161
X00002  QBQDICT.    00000   00011
X00004  QNSINGL.    00105
P00111  RELCON..    00136
X00001  THEND.      00024
P00066  TS00001.    00057
P00117  UP00000.    00056   00065   00072   00113   00120   00121   00122   00124   00124
P00126  UP00002.    00033   00042   00046   00110   00130   00131   00132   00134   00135
P00060  #S00001.    00067   00067
   00065 SYMBOLS
```

```
      SUBROUTINE DBMOD                                                  1000
CSUBR     DBMOD     3NOV71  ******************************************  2000
CDECLAREX                                                               2000
      COMMON/PROCESS/NI,NV,NC,INITEM(100),VALUE(500),DEF(500),LGLOB(500)
      TYPE INTEGER VALUE
      TYPE LOGICAL DEF,LGLOB
      COMMON/EDITERM/ISWTERM
      COMMON/EDITAPE/INTP,NOUT,ITOUT(10),JOUT
      EQUIVALENCE(CLASS    ,VALUE(   1))
      TYPE INTEGER CLASS
      EQUIVALENCE(TYPE     ,VALUE(   2))
      TYPE INTEGER TYPE
      EQUIVALENCE(SIDE     ,VALUE(   3))
      TYPE INTEGER SIDE
      EQUIVALENCE(CNTRYOWN,VALUE(   4))
      TYPE INTEGER CNTRYOWN
      EQUIVALENCE(CNTRYLOC,VALUE(   5))
      TYPE INTEGER CNTRYLOC
      EQUIVALENCE(FUNCTION,VALUE(   6))
      TYPE INTEGER FUNCTION
      EQUIVALENCE(SITENO   ,VALUE(   7))
      TYPE INTEGER SITENO
      EQUIVALENCE(NAME     ,VALUE(   8))
      TYPE INTEGER NAME
      EQUIVALENCE(SQNNO    ,VALUE(   9))
      TYPE INTEGER SQNNO
      EQUIVALENCE(FLTNO    ,VALUE(  10))
      TYPE INTEGER FLTNO
      EQUIVALENCE(BENO     ,VALUE(  11))
      TYPE INTEGER BENO
      EQUIVALENCE(VULN     ,VALUE(  12))
      TYPE INTEGER VULN
      EQUIVALENCE(H1       ,VALUE(  13))
      TYPE INTEGER H1
      EQUIVALENCE(H2       ,VALUE(  14))
      TYPE INTEGER H2
      EQUIVALENCE(WACNO    ,VALUE(  15))
      TYPE INTEGER WACNO
      EQUIVALENCE(CATCODE ,VALUE(  16))
      TYPE INTEGER CATCODE
      EQUIVALENCE(MAJOR    ,VALUE(  17))
      TYPE INTEGER MAJOR
      EQUIVALENCE(MINOR    ,VALUE(  18))
      TYPE INTEGER MINOR
      EQUIVALENCE(DESIG    ,VALUE(  19))
      TYPE INTEGER DESIG
      EQUIVALENCE(TASK     ,VALUE(  20))
      TYPE INTEGER TASK
      EQUIVALENCE(POSTURE ,VALUE(  21))
      TYPE INTEGER POSTURE
      EQUIVALENCE(INDEXNO ,VALUE(  22))
      TYPE INTEGER INDEXNO
      EQUIVALENCE(NOPERSON,VALUE(  23))
      TYPE INTEGER NOPERSON
      EQUIVALENCE(NMPSITE ,VALUE(  24))
      TYPE INTEGER NMPSITE
```

```
      EQUIVALENCE(NOALERT ,VALUE(  25))
      TYPE INTEGER NOALERT
      EQUIVALENCE(NOINCOM ,VALUE(  26))
      TYPE INTEGER NOINCOM
      EQUIVALENCE(LINK    ,VALUE(  27))
      TYPE INTEGER LINK
      EQUIVALENCE(ZONE    ,VALUE(  28))
      TYPE INTEGER ZONE
      EQUIVALENCE(AREA    ,VALUE(  29))
      TYPE REAL    AREA
      EQUIVALENCE(LAT     ,VALUE(  30))
      TYPE REAL    LAT
      EQUIVALENCE(LONG    ,VALUE(  31))
      TYPE REAL    LONG
      EQUIVALENCE(LEGNO   ,VALUE(  32))
      TYPE INTEGER LEGNO
      EQUIVALENCE(RESERVE ,VALUE(  33))
      TYPE INTEGER RESERVE
      EQUIVALENCE(BLEGNO  ,VALUE(  34))
      TYPE INTEGER BLEGNO
      EQUIVALENCE(NEXTZONE,VALUE(  35))
      TYPE INTEGER NEXTZONE
      EQUIVALENCE(IPOINT  ,VALUE(  36))
      TYPE INTEGER IPOINT
      EQUIVALENCE(DATEIN  ,VALUE(  37))
      TYPE REAL    DATEIN
      EQUIVALENCE(DATEOUT ,VALUE(  38))
      TYPE REAL    DATEOUT
      EQUIVALENCE(POP     ,VALUE(  39))
      TYPE REAL    POP
      EQUIVALENCE(IGIN    ,VALUE(  40))
      TYPE INTEGER IGIN
      EQUIVALENCE(MVA     ,VALUE(  41))
      TYPE INTEGER MVA
      EQUIVALENCE(RADIUS  ,VALUE(  42))
      TYPE REAL    RADIUS
      EQUIVALENCE(VAL     ,VALUE(  43))
      TYPE REAL    VAL
      EQUIVALENCE(VALU    ,VALUE(  44))
      TYPE REAL    VALU
      EQUIVALENCE(MISDEF  ,VALUE(  45))
      TYPE INTEGER MISDEF
      EQUIVALENCE(IARDEF  ,VALUE(  46))
      TYPE INTEGER IARDEF
      EQUIVALENCE(TARDEFMI,VALUE(  47))
      TYPE INTEGER TARDEFMI
      EQUIVALENCE(TARDEFLO,VALUE(  48))
      TYPE INTEGER TARDEFLO
      EQUIVALENCE(ICLASS  ,VALUE(  49))
      TYPE INTEGER ICLASS
      EQUIVALENCE(ITYPE   ,VALUE(  50))
      TYPE INTEGER ITYPE
      EQUIVALENCE(IREG    ,VALUE(  51))
      TYPE INTEGER IREG
      EQUIVALENCE(IREFUEL ,VALUE(  52))
      TYPE INTEGER IREFUEL
```

```
      EQUIVALENCE(IOTHER  ,VALUE(  53))
      TYPE INTEGER IOTHER
      EQUIVALENCE(IGROUP  ,VALUE(  54))
      TYPE INTEGER IGROUP
      EQUIVALENCE(ICOMPLEX,VALUE(  55))
      TYPE INTEGER ICOMPLEX
      EQUIVALENCE(ITGT    ,VALUE(  56))
      TYPE INTEGER ITGT
      EQUIVALENCE(JTYPE   ,VALUE(  57))
      TYPE INTEGER JTYPE
      EQUIVALENCE(WHDTYPE ,VALUE(  58))
      TYPE INTEGER WHDTYPE
      EQUIVALENCE(ASMTYPE ,VALUE(  59))
      TYPE INTEGER ASMTYPE
      EQUIVALENCE(NDECOYS ,VALUE(  60))
      TYPE INTEGER NDECOYS
      EQUIVALENCE(FFRAC   ,VALUE(  61))
      TYPE REAL    FFRAC
      EQUIVALENCE(DELTA   ,VALUE(  62))
      TYPE REAL    DELTA
      EQUIVALENCE(FVALH1  ,VALUE(  63))
      TYPE REAL    FVALH1
      EQUIVALENCE(T1      ,VALUE(  64))
      TYPE REAL    T1
      EQUIVALENCE(T2      ,VALUE(  65))
      TYPE REAL    T2
      EQUIVALENCE(T3      ,VALUE(  66))
      TYPE REAL    T3
      EQUIVALENCE(FVALT1  ,VALUE(  67))
      TYPE REAL    FVALT1
      EQUIVALENCE(FVALT2  ,VALUE(  68))
      TYPE REAL    FVALT2
      EQUIVALENCE(MINKILL ,VALUE(  69))
      TYPE REAL    MINKILL
      EQUIVALENCE(MAXKILL ,VALUE(  70))
      TYPE REAL    MAXKILL
      EQUIVALENCE(MAXFRACV,VALUE(  71))
      TYPE REAL    MAXFRACV
      EQUIVALENCE(MAXFACTV,VALUE(  72))
      TYPE REAL    MAXFACTV
      EQUIVALENCE(YIELD   ,VALUE(  73))
      TYPE REAL    YIELD
      EQUIVALENCE(NOBOMB1 ,VALUE(  74))
      TYPE INTEGER NOBOMB1
      EQUIVALENCE(NOBOMB2 ,VALUE(  75))
      TYPE INTEGER NOBOMB2
      EQUIVALENCE(NASMS   ,VALUE(  76))
      TYPE INTEGER NASMS
      EQUIVALENCE(NCM     ,VALUE(  77))
      TYPE INTEGER NCM
      EQUIVALENCE(PAYLOAD ,VALUE(  78))
      TYPE INTEGER PAYLOAD
      EQUIVALENCE(IREP    ,VALUE(  79))
      TYPE INTEGER IREP
      EQUIVALENCE(PDUD    ,VALUE(  80))
      TYPE REAL    PDUD
```

```
      EQUIVALENCE(CEP      ,VALUE(  81))
      TYPE REAL     CEP
      EQUIVALENCE(RANGE    ,VALUE(  82))
      TYPE REAL     RANGE
      EQUIVALENCE(RANGEDEC,VALUE(  83))
      TYPE REAL     RANGEDEC
      EQUIVALENCE(RANGEREF,VALUE(  84))
      TYPE REAL     RANGEREF
      EQUIVALENCE(SPEED    ,VALUE(  85))
      TYPE REAL     SPEED
      EQUIVALENCE(SPDLO    ,VALUE(  86))
      TYPE REAL     SPDLO
      EQUIVALENCE(SPDASH   ,VALUE(  87))
      TYPE REAL     SPDASH
      EQUIVALENCE(REL      ,VALUE(  88))
      TYPE REAL     REL
      EQUIVALENCE(PEN      ,VALUE(  89))
      TYPE REAL     PEN
      EQUIVALENCE(ALERTDBL,VALUE(  90))
      TYPE REAL     ALERTDBL
      EQUIVALENCE(NALRTDBL,VALUE(  91))
      TYPE REAL     NALRTDBL
      EQUIVALENCE(ALERTDLY,VALUE(  92))
      TYPE REAL     ALERTDLY
      EQUIVALENCE(NALRTDLY,VALUE(  93))
      TYPE REAL     NALRTDLY
      EQUIVALENCE(CCREL    ,VALUE(  94))
      TYPE REAL     CCREL
      EQUIVALENCE(TTOS     ,VALUE(  95))
      TYPE REAL     TTOS
      EQUIVALENCE(TMDEL    ,VALUE(  96))
      TYPE REAL     TMDEL
      EQUIVALENCE(TVUL     ,VALUE(  97))
      TYPE REAL     TVUL
      EQUIVALENCE(TRETARG  ,VALUE(  98))
      TYPE REAL     TRETARG
      EQUIVALENCE(PLABT    ,VALUE(  99))
      TYPE REAL     PLABT
      EQUIVALENCE(ABRATE   ,VALUE( 100))
      TYPE REAL     ABRATE
      EQUIVALENCE(PRABT    ,VALUE( 101))
      TYPE REAL     PRABT
      EQUIVALENCE(PINC     ,VALUE( 102))
      TYPE REAL     PINC
      EQUIVALENCE(PDES     ,VALUE( 103))
      TYPE REAL     PDES
      EQUIVALENCE(PFPF     ,VALUE( 104))
      TYPE REAL     PFPF
      EQUIVALENCE(PKMIS    ,VALUE( 105))
      TYPE REAL     PKMIS
      EQUIVALENCE(ATTRLEG  ,VALUE( 106))
      TYPE REAL     ATTRLEG
      EQUIVALENCE(ATTRCORR,VALUE( 107))
      TYPE REAL     ATTRCORR
      EQUIVALENCE(KORSTYLE,VALUE( 108))
      TYPE INTEGER KORSTYLE
```

```
      EQUIVALENCE(DEFRANGE,VALUE( 109))
      TYPE REAL     DEFRANGE
      EQUIVALENCE(HILOATTR,VALUE( 110))
      TYPE REAL     HILOATTR
      EQUIVALENCE(ATTRSUPF,VALUE( 111))
      TYPE REAL     ATTRSUPF
      EQUIVALENCE(IWTYP2  ,VALUE( 112))
      TYPE INTEGER IWTYP2
      EQUIVALENCE(EFECTNES,VALUE( 113))
      TYPE REAL     EFECTNES
      EQUIVALENCE(ISITE   ,VALUE( 114))
      TYPE INTEGER ISITE
      EQUIVALENCE(IVULN   ,VALUE( 115))
      TYPE INTEGER IVULN
      EQUIVALENCE(NADBLI  ,VALUE( 116))
      TYPE REAL     NADBLI
      EQUIVALENCE(NADBLR  ,VALUE( 117))
      TYPE REAL     NADBLR
      EQUIVALENCE(ADBLI   ,VALUE( 118))
      TYPE REAL     ADBLI
      EQUIVALENCE(NAREADEC,VALUE( 119))
      TYPE INTEGER NAREADEC
      EQUIVALENCE(NWHOS   ,VALUE( 120))
      TYPE INTEGER NWHOS
      EQUIVALENCE(NTINT   ,VALUE( 121))
      TYPE INTEGER NTINT
      EQUIVALENCE(ADBLR   ,VALUE( 122))
      TYPE REAL     ADBLR
      EQUIVALENCE(TIMEN   ,VALUE( 123))
      TYPE REAL     TIMEN
      EQUIVALENCE(TIME    ,VALUE( 124))
      TYPE REAL     TIME
      EQUIVALENCE(DELAY   ,VALUE( 125))
      TYPE REAL     DELAY
      EQUIVALENCE(IALERT  ,VALUE( 126))
      TYPE INTEGER IALERT
      EQUIVALENCE(NWTYPE  ,VALUE( 127))
      TYPE INTEGER NWTYPE
      EQUIVALENCE(INDV    ,VALUE( 128))
      TYPE INTEGER INDV
      EQUIVALENCE(INTAR   ,VALUE( 129))
      TYPE INTEGER INTAR
      EQUIVALENCE(EVENT   ,VALUE( 130))
      TYPE INTEGER EVENT
      EQUIVALENCE(EVENTN  ,VALUE( 131))
      TYPE INTEGER EVENTN
      EQUIVALENCE(PLACE   ,VALUE( 132))
      TYPE INTEGER PLACE
      EQUIVALENCE(PLACEN  ,VALUE( 133))
      TYPE INTEGER PLACEN
      EQUIVALENCE(IALT    ,VALUE( 134))
      TYPE INTEGER IALT
      EQUIVALENCE(NWPNS   ,VALUE( 135))
      TYPE INTEGER NWPNS
      EQUIVALENCE(NTARG   ,VALUE( 136))
      TYPE INTEGER NTARG
```

```
      EQUIVALENCE(MCODE   ,VALUE( 137))
      TYPE INTEGER MCODE
      EQUIVALENCE(CODE    ,VALUE( 138))
      TYPE INTEGER CODE
      EQUIVALENCE(BCODE   ,VALUE( 139))
      TYPE INTEGER BCODE
      EQUIVALENCE(IOUD    ,VALUE( 140))
      TYPE INTEGER IOUD
      EQUIVALENCE(AGX     ,VALUE( 141))
      TYPE INTEGER AGX
      EQUIVALENCE(AGY     ,VALUE( 142))
      TYPE INTEGER AGY
      EQUIVALENCE(DGX     ,VALUE( 143))
      TYPE INTEGER DGX
      EQUIVALENCE(DGY     ,VALUE( 144))
      TYPE INTEGER DGY
      EQUIVALENCE(AMOB    ,VALUE( 145))
      TYPE INTEGER AMOB
      EQUIVALENCE(DMOB    ,VALUE( 146))
      TYPE INTEGER DMOB
      EQUIVALENCE(WHOTYPEN,VALUE( 147))
      TYPE INTEGER WHOTYPEN
      EQUIVALENCE(PRIMETAR,VALUE( 148))
      TYPE INTEGER PRIMETAR
      EQUIVALENCE(ICLASST ,VALUE( 149))
      TYPE INTEGER ICLASST
      EQUIVALENCE(ITYPET  ,VALUE( 150))
      TYPE INTEGER ITYPET
      EQUIVALENCE(JTYPET  ,VALUE( 151))
      TYPE INTEGER JTYPET
      EQUIVALENCE(TYPET   ,VALUE( 152))
      TYPE INTEGER TYPET
      EQUIVALENCE(CLASST  ,VALUE( 153))
      TYPE INTEGER CLASST
      EQUIVALENCE(CNTYOWNT,VALUE( 154))
      TYPE INTEGER CNTYOWNT
      EQUIVALENCE(CNTYLOCT,VALUE( 155))
      TYPE INTEGER CNTYLOCT
      EQUIVALENCE(IPENMODE,VALUE( 156))
      TYPE INTEGER IPENMODE
      EQUIVALENCE(IRECMODE,VALUE( 157))
      TYPE INTEGER IRECMODE
      EQUIVALENCE(IATTACK ,VALUE( 158))
      TYPE INTEGER IATTACK
      EQUIVALENCE(NAL     ,VALUE( 159))
      TYPE INTEGER NAL
      EQUIVALENCE(TAIM    ,VALUE( 160))
      TYPE INTEGER TAIM
      EQUIVALENCE(MWNDS   ,VALUE( 161))
      TYPE INTEGER MWNDS
      EQUIVALENCE(NPEN    ,VALUE( 162))
      TYPE INTEGER NPEN
      EQUIVALENCE(NDET    ,VALUE( 163))
      TYPE INTEGER NDET
      EQUIVALENCE(PARRIVE ,VALUE( 164))
      TYPE REAL    PARRIVE
```

```
      EQUIVALENCE(ADEFZON ,VALUE( 165))
      TYPE INTEGER ADEFZON
      EQUIVALENCE(ADEFCMP ,VALUE( 166))
      TYPE INTEGER ADEFCMP
      EQUIVALENCE(NAINT   ,VALUE( 167))
      TYPE INTEGER NAINT
      EQUIVALENCE(AZON1   ,VALUE( 168))
      TYPE INTEGER AZON1
      EQUIVALENCE(AZON2   ,VALUE( 169))
      TYPE INTEGER AZON2
      EQUIVALENCE(AZON3   ,VALUE( 170))
      TYPE INTEGER AZON3
      EQUIVALENCE(CPACTY  ,VALUE( 171))
      TYPE INTEGER CPACTY
      EQUIVALENCE(ICORR   ,VALUE( 172))
      TYPE INTEGER ICORR
      EQUIVALENCE(IMIRV   ,VALUE( 173))
      TYPE INTEGER IMIRV
      EQUIVALENCE(IOBL    ,VALUE( 174))
      TYPE INTEGER IOBL
      EQUIVALENCE(PKNAV   ,VALUE( 175))
      TYPE REAL    PKNAV
      EQUIVALENCE(ITIME   ,VALUE( 176))
      TYPE INTEGER ITIME
      EQUIVALENCE(PSASW   ,VALUE( 177))
      TYPE REAL    PSASW
      EQUIVALENCE(TPASW   ,VALUE( 178))
      TYPE REAL    TPASW
      EQUIVALENCE(TGTSTAT ,VALUE( 179))
      TYPE INTEGER TGTSTAT
      EQUIVALENCE(FLAG    ,VALUE( 180))
      TYPE INTEGER FLAG
      EQUIVALENCE(NOPERSQ1,VALUE( 181))
      TYPE INTEGER NOPERSQ1
      EQUIVALENCE(NOPERSQ2,VALUE( 182))
      TYPE INTEGER NOPERSQ2
      EQUIVALENCE(NOPERSQ3,VALUE( 183))
      TYPE INTEGER NOPERSQ3
      EQUIVALENCE(NUMOBL  ,VALUE( 184))
      TYPE INTEGER NUMOBL
      EQUIVALENCE(EFECNES1,VALUE( 185))
      TYPE REAL    EFECNES1
      EQUIVALENCE(EFECNES2,VALUE( 186))
      TYPE REAL    EFECNES2
      EQUIVALENCE(VAL1    ,VALUE( 187))
      TYPE REAL    VAL1
      EQUIVALENCE(VAL2    ,VALUE( 188))
      TYPE REAL    VAL2
      EQUIVALENCE(TYPE1   ,VALUE( 189))
      TYPE INTEGER TYPE1
      EQUIVALENCE(TYPE2   ,VALUE( 190))
      TYPE INTEGER TYPE2
C                                                                      3000
C                                                                      4000
C THIS SUBROUTINE CONTROLS THE INFORMATION PROCESSING WHEN PROGRAM     5000
C BASEMOD IS RUN AFTER PROGRAM QUIKBASE.  THE REQUIRED INPUT AND OUTPUT 6000
```

```
C TAPES ARE AS FOLLOWS.                                                  7000
C                                                                        8000
C INPUT TAPES                                                            9000
C       LTN 08 = QUIKDB TAPE                                            10000
C       LTN 09 = OUTPUT TAPE FROM PROGRAM STACKER (OPTIONAL - ONLY      11000
C                NEEDED IF ZONES OR TARDEFS ARE DESIRED)                12000
C                                                                        13000
C OUTPUT TAPES                                                           14000
C       LTN 01 = QKMODDB TAPE                                           15000
C                                                                       16000
C                                                                       17000
C ***********************************************************************18000
C                                                                       19000
CUSE      ITP       14OCT70   ***************************************** 20000
      COMMON/ITP/ITP                                                     1000
      COMMON/NOPRINT/NOPRINT                                             2000
      COMMON/MYIDENT/MYIDENT                                             3000
CEND      ITP       ***************************************************** 4000
C                                                                        21000
C USED IN SUBROUTINES DBMOD,STKRIN                                       22000
C                                                                        23000
C     COMMON/ITP/ITP                                                     24000
C                                                                        25000
C ITP               NUMBER OF UNIT FROM WHICH DATA IS TO BE READ OR ONTO 26000
C                   WHICH DATA IS TO BE WRITTEN                          27000
C                                                                        28000
C     COMMON/NOPRINT/NOPRINT                                             29000
C                                                                        30000
C NOPRINT           VARIABLE USED BY FILEHANDLER, =1 IF MESSAGES ARE TO  31000
C                   BE PRINTED WHEN A FILE IS READ, OTHERWISE, NO        32000
C                   MESSAGES ARE PRINTED                                 33000
C                                                                        34000
C     COMMON/MYIDENT/MYIDENT                                             35000
C                                                                        36000
C MYIDENT           TAPE LABEL                                           37000
C                                                                        38000
C ***********************************************************************39000
CUSE      CUTIGIW   19OCT70   ***************************************** 40000
      COMMON/CUTIGIW/JCOUNTRY(25,2),MINIGIW(25,2),NOIGIWS(1,2)           1000
      DIMENSION IWSIDE(2)                                                2000
      DIMENSION NPOSTURE(2),NTASK(2),XPOP(2)                             3000
      TYPE INTEGER PLANTEST                                              4000
      DIMENSION PLANTEST(2),ZPOP(2),NZONEIT(2),NTARIT(2)                 5000
CEND      CUTIGIW   ***************************************************** 6000
C                                                                        41000
C USED IN SUBROUTINE DBMOD                                               42000
C                                                                        43000
C                                                                        44000
C     COMMON/CUTIGIW/JCOUNTRY(MNC,NS),MINIGIW(MNC,NS),NOIGIWS(1,NS)      45000
C                                                                        46000
C MNC               MAX. NUMBER OF COUNTRIES IN LIST                     47000
C NS                NUMBER OF SIDES                                      48000
C 1                 DUMMY  CONSTANT                                      49000
C JCOUNTRY(MNC,NS) LIST OF COUNTRIES TO BE ASSIGNED VALUES OF MINIGIW    50000
C MINIGIW(MNC,NS)  LIST OF MINIMUM ALLOWABLE VALUES OF ATTRIBUTE IGIW    51000
C NOIGIWS(1,NS)     NUMBER OF COUNTRIES IN THE LIST FOR EACH SIDE        52000
```

```
C                                                                       53000
C ***********************************************************************54000
C                                                                       55000
CUSE      IDESIGS   14OCT70  ***************************************** 56000
      COMMON/IDESIGS/IDESIGS(500),DESIGNO(500,3)                         1000
      COMMON/NODESIGS/NODESIGS(2),KKMIN(2)                               2000
      TYPE INTEGER DESIGNO                                               3000
CEND      IDESIGS   ***************************************************** 56000
C                                                                       57000
C USED IN SUBROUTINES DBMOD, COUNTOES                                   58000
C                                                                       59000
C     COMMON/IDESIGS/IDESIGS(NT),DESIGNO(NT,NR)                         60000
C                                                                       61000
C NT                TOTAL NUMBER OF TYPES FOR BOTH SIDES COMBINED       62000
C NR                NUMBER OF REGIONS                                   63000
C IDESIGS(NT)       FIRST TWO LETTERS OF TARGET DESIGNATOR CODE         64000
C DESIGNO(NT,NR)    ARRAY CONTAINING SUMMARIES BY REGION AND TYPE OF    65000
C                   ITEMS KEPT                                          66000
C                                                                       67000
C     COMMON/NODESIGS/NODESIGS(NS),KKMIN(NS)                            68000
C                                                                       69000
C NS                NUMBER OF SIDES                                     70000
C NODESIGS(NS)      NUMBER OF DIFFERENT TYPES OF WEAPONS KEPT           71000
C KKMIN(NS)         INTERNAL INDEX PARAMETER, =1 FOR BLUE, =251 FOR RED 72000
C                                                                       73000
C ***********************************************************************74000
C                                                                       75000
CUSE      NRTYPES   2NOV70  ******************************************* 76000
      COMMON/NRTYPES/NRTYPES(2),MTYPES(2),NNTYPES(100),ALERTNO(100),     1000
     1 COMINNO(100)                                                      2000
CEND      NRTYPES   ***************************************************** 76000
C                                                                       77000
C USED IN SUBROUTINES DBMOD, RDTYPES                                    78000
C                                                                       79000
C     COMMON/NRTYPES/NRTYPES(NS),NNTYPES(MNW),ALERTNO(MNW),COMINNO(MNW) 80000
C                                                                       81000
C NS                NUMBER OF SIDES                                     82000
C MNW               MAX. NUMBER OF WEAPON TYPES PER REGION FOR BOTH SIDES 83000
C                   COMBINED WHICH WILL HAVE SCALING FACTORS            84000
C NRTYPES(NS)       NUMBER OF WEAPON TYPES FOR CURRENT SIDE FOR WHICH   85000
C                   NOALERT AND NOINCOM ARE TO BE SCALED                86000
C MTYPES(NS)        SAME AS NRTYPES(NS), BUT IN ALPHAMERIC FORMAT       87000
C NNTYPES(MNW)      WEAPON TYPE OF (MNW)TH WEAPON TO BE SCALED          88000
C ALERTNO(MNW)      NOALERT SCALE FACTOR FOR (MNW)TH WEAPON             89000
C COMINNO(MNW)      NOINCOM SCALE FACTOR FOR (MNW)TH WEAPON             90000
C                                                                       91000
C ***********************************************************************92000
C                                                                       93000
CUSE      MYSIDE    14OCT70  ******************************************* 94000
      COMMON/MYSIDE/MYSIDE                                               1000
CEND      MYSIDE    ***************************************************** 94000
C                                                                       95000
C USED IN SUBROUTINES DBMOD, MYZONE                                     96000
C                                                                       97000
C MYSIDE            CURRENT SIDE                                        98000
C                                                                       99000
```

```
C ********************************************************************** 100000
C                                                                        101000
CUSE      PRINTS    140CT70   ********************************************* 102000
      COMMON/PRINTS/IFREQ,IPRT,IPRINT                                      1000
CEND      PRINTS    ********************************************************* 102000
C                                                                        103000
C USED IN SUBROUTINES OBMOD, PRINTIT                                     104000
C                                                                        105000
C     COMMON/PRINTS/IFREQ,IPRT,IPRINT                                    106000
C                                                                        107000
C IFREQ             DESIRED FREQUENCY OF PRINTS                          108000
C IPRT              INDEX USED TO COUNT NUMBER OF ITEMS PROCESSED        109000
C                   BETWEEN PRINTS                                       110000
C IPRINT            =1 IF PRINTS ARE DESIRED, =0 IF NOT                  111000
C                                                                        112000
C ********************************************************************** 113000
C                                                                        114000
CUSE      LDESIGS   140CT70   ********************************************* 115000
      COMMON/LDESIGS/LDESIGS(500),LDESIGNO(500,3)                          1000
      COMMON/LDESIGS/LODESIGS(2),LLMIN(2)                                  2000
CEND      LDESIGS   ********************************************************* 115000
C                                                                        116000
C USED IN SUBROUTINES OBMOD, NUMDEL                                      117000
C                                                                        118000
C     COMMON/LDESIGS/LDESIGS(NT),LDESIGNO(NT,NR)                         119000
C                                                                        120000
C NT                TOTAL NUMBER OF TYPES FOR BOTH SIDES COMBINED        121000
C NR                NUMBER OF REGIONS                                    122000
C LDESIGS(NT)       FIRST TWO LETTERS OF TARGET DESIGNATOR CODE          123000
C LDESIGNO(NT,NR)   ARRAY CONTAINING SUMMARIES BY REGION AND TYPE OF     124000
C                   ITEMS OMITTED                                        125000
C                                                                        126000
C     COMMON/LODESIGS/LODESIGS(NS),LLMIN(NS)                             127000
C                                                                        128000
C NS                NUMBER OF SIDES                                      129000
C LODESIGS(NS)      NUMBER OF DIFFERENT TYPES OF WEAPONS DELETED         130000
C LLMIN(NS)         INTERNAL INDEX PARAMETER, =1 FOR BLUE, =251 FOR RED  131000
C                                                                        132000
C ********************************************************************** 133000
C                                                                        134000
C                                                                        135000
C BEGIN TO INITIALIZE VARIABLES                                          136000
C                                                                        137000
      IWSIDE(1)=4HBLUE                                                   138000
      IWSIDE(2)=3HRED                                                    139000
      NORECORD=0                                                         140000
      NOPRINT=1                                                          141000
      MYIDENT = 8H BASEMOD                                               142000
      IPRINT = IPRT = IFREQ = 0                                          143000
C                                                                        144000
C READ IN PRINT OPTIONS                                                  145000
C                                                                        146000
      READ 801,NPRINT,JFREQ,JGJW                                         147000
  801 FORMAT(3(A8,2X))                                                   148000
C                                                                        149000
C IF PRINTS ARE DESIRED, SET IPRINT=1                                    150000
```

```
C                                                                       151000
      IF(NPRINT.EQ.5HPRINT) 7900,7902                                   152000
 7900 IPRINT=1                                                          153000
      IFREQ=NUMGET(JFREQ,8)                                             154000
      IF(IFREQ.LE.0) 7901,7902                                          155000
 7901 IFREQ=1                                                           156000
 7902 CONTINUE                                                          157000
      DO 600 I=1,2                                                      158000
      NPOSTURE(I)=NTASK(I)=8H                                           159000
      PLANTEST(I)=NOIGIWS(1,I)=NZONEIT(I)=NTARIT(I)=0                   160000
      NRTYPES(I)=0                                                      161000
 600  ZPOP(I)=XPOP(I)=0                                                 162000
      DO 601 I=1,2                                                      163000
      DO 601 J=1,25                                                     164000
      JCOUNTRY(J,I)=8H                                                  165000
 601  MINIGIW(J,I)=0                                                    166000
      DO 475 I=1,200                                                    167000
      DESIGNO(I,1)=DESIGNO(I,2)=DESIGNO(I,3)=0                          168000
      LDESIGNO(I,1)=LDESIGNO(I,2)=LDESIGNO(I,3)=0                       169000
      LDESIGS(I)=8H                                                     170000
 475  IDESIGS(I)=8H                                                     171000
      DO 476 I=1,50                                                     172000
      ALERTNO(I)=COMINNO(I)=0.                                          173000
 476  NNTYPES(I)=8H                                                     174000
C                                                                       175000
C READ IN DATE OF GAME                                                  176000
C                                                                       177000
603   READ 500,NDATE,DATE                                              178000
500   FORMAT(A8,2X,F8.2)                                                179000
C                                                                       180000
C IS THIS THE RIGHT CARD                                                181000
C                                                                       182000
      IF(NDATE.EQ.4HDATE) 400,902                                       183000
C                                                                       184000
C READ FIRST OPTION CONTROL CARD                                        185000
C                                                                       186000
 400  DO 504 II=1,2                                                     187000
      READ 501,NSIDE,LSIDE,LPOSTURE,LPLAN,LTASK                         188000
501   FORMAT(A8,2X,A8,12X,A8,12X,A8,12X,A8)                             189000
C                                                                       190000
C TEST AND SET INDEX FOR CURRENT SIDE                                   191000
C                                                                       192000
      JSLOT=2                                                           193000
      ISLOT=1                                                           194000
      IF(NSIDE.EQ.4HSIDE) 401,903                                       195000
401   IF(LSIDE.EQ.3HRED) 402,403                                        196000
402   ISLOT=2                                                           197000
      JSLOT=1                                                           198000
C                                                                       199000
C SET POSTURE FOR CURRENT SIDE                                          200000
C                                                                       201000
403   NPOSTURE(ISLOT)=NUMGET(LPOSTURE,8)                                202000
C                                                                       203000
C SET TASK FOR CURRENT SIDE                                             204000
C                                                                       205000
      DECODE (8,60000,LTASK) NTASK(JSLOT)                               206000
```

```
60000 FORMAT (1R1)                                                      207000
C                                                                       208000
C CHECK TO SEE IF PLAN IS INDIA OR ROMEO                                209000
C                                                                       210000
      IF(LPLAN.EQ.5HINDIA) 404,4041                                     211000
C                                                                       212000
C CURRENT PLAN IS INDIA                                                 213000
C                                                                       214000
 404  PLANTEST(ISLOT)=2                                                 215000
      GO TO 406                                                         216000
 4041 IF(LPLAN.EQ.6HSIERRA) 4042,4043                                   217000
 4042 PLANTEST(ISLOT)=1                                                 218000
      GO TO 406                                                         219000
 4043 IF(LPLAN.EQ.5HROMEO) 4044,9051                                    220000
C                                                                       221000
C CURRENT PLAN IS ROMEO                                                 222000
C                                                                       223000
 4044 PLANTEST(ISLOT)=3                                                 224000
C                                                                       225000
C READ SECOND OPTION CONTROL CARD                                       226000
C                                                                       227000
  406 READ 502,NPOP,XPPOP,NTARS,NZONES,NNIGIW                           228000
 502  FORMAT(A8,2X,F8.4,12X,A8,12X,A8,12X,A8)                           229000
C                                                                       230000
C IS THIS THE RIGHT CARD                                                231000
C                                                                       232000
      IF(NPOP.EQ.7HPCT-POP) 503,904                                     233000
C                                                                       234000
C SET PERCENT OF POP FOR CURRENT SIDE                                   235000
C                                                                       236000
503   XPOP(JSLOT)=XPPOP                                                 237000
      ZPOP(JSLOT)=1.-XPPOP                                              238000
C                                                                       239000
C IF TARGETS ARE TO BE CONSIDERED, SET NTARIT=1                         240000
C                                                                       241000
      IF(NTARS.EQ.3HYES) 5031,5032                                      242000
 5031 NTARIT(JSLOT)=1                                                   243000
C                                                                       244000
C IF ZONES ARE TO BE CONSIDERED,SET NZONEIT=1                           245000
C                                                                       246000
 5032 IF(NZONES.EQ.3HYES) 5033,5034                                     247000
 5033 NZONEIT(JSLOT)=1                                                  248000
 5034 NIGIW=NUMGET(NNIGIW,8)                                            249000
C                                                                       250000
C IF THERE ARE COUNTRIES WITH VALUES OF MINIGIW, READ IN THE LIST NOW   251000
C                                                                       252000
      IF(NIGIW) 5035,5038                                               253000
 5035 NOIGIWS(1,JSLOT)=NIGIW                                            254000
      DO 5037 I=1,NIGIW                                                 255000
      READ 5036,JCOUNTRY(I,JSLOT),NCNLOC                                256000
 5036 FORMAT(A8,2X,A8)                                                  257000
      MINIGIW(I,JSLOT)=NUMGET(NCNLOC,8)                                 258000
 5037 CONTINUE                                                          259000
 5038 CONTINUE                                                          260000
C                                                                       261000
C READ IN SCALING FACTORS FOR THE CALCULATION OF NOINCOM AND NOALERT    262000
```

```
C
      CALL RDTYPES(LSIDE)                                                    263000
C                                                                            264000
C PRINT INPUT                                                                265000
C                                                                            266000
      PRINT 10001                                                            267000
10001 FORMAT (1H1,28X,16HINPUT PARAMETERS////)                               268000
      PRINT 10000,NPRINT,JFREQ,JGJW                                          269000
10000 FORMAT (1X,3(A7,3X)//)                                                 270000
      PRINT 10010,NDATE,DATE                                                 271000
10010 FORMAT (1X,A4,5X,F8.2//)                                               272000
      PRINT 10020,NSIDE,LSIDE,LPOSTURE,LPLAN,LTASK                           273000
10020 FORMAT (1X,A7,3X,A7,3X,7HPOSTURE,3X,A7,3X,4HPLAN,6X,A7,3X,4HTASK,      274000
     1 6X,A7//)                                                              275000
      PRINT 10030,NPOP,XPPOP,NTARS,NZONES,NNIGIW                             276000
10030 FORMAT (1X,A7,1X,F8.4,4X,6HTARDEF,4X,A7,3X,4HZONE,6X,A7,3X,            277000
     1 5HNIGIW,5X,A7/)                                                       278000
      IF(NIGIW .GT.0)11000,13000                                             279000
11000 CONTINUE                                                               280000
      DO 12000 MM=1,NIGIW                                                    281000
      PRINT 11010,JCOUNTRY(MM,JSLOT),NCNLOC                                  282000
11010 FORMAT (1X,A7,3X,A7/)                                                  283000
12000 CONTINUE                                                               284000
13000 CONTINUE                                                               285000
      PRINT 13010, MTYPES(II)                                                286000
13010 FORMAT (/,1X,7HNOTYPES,3X,A7//)                                        287000
      IF(NRTYPES .GT. 0)14000,20000                                          288000
14000 CONTINUE                                                               289000
      IF(LSIDE .EQ. 4HBLUE)16000,17000                                       290000
16000 CONTINUE                                                               291000
      MLOW=1                                                                 292000
      GO TO 18000                                                            293000
17000 CONTINUE                                                               294000
      MLOW=51                                                                295000
18000 CONTINUE                                                               296000
      MUP=MLOW+NRTYPES(II)-1                                                 297000
      DO 19000 KK=MLOW,MUP                                                   298000
      PRINT 18010, NNTYPES(KK),COMINNO(KK),ALERTNO(KK)                       299000
18010 FORMAT (1X,A7,2(F8.3,2X)/)                                             300000
19000 CONTINUE                                                               301000
20000 CONTINUE                                                               302000
 504  CONTINUE                                                               303000
      CALL PAGESKP                                                           304000
C                                                                            305000
CSUBR     DBMOD1    3NOV71    ********************************************     1000
C INITIALIZE INPUT AND OUTPUT ROUTINES                                       10000
C                                                                            2000
      CALL INITAPE                                                           3000
      IF(NTARIT(1).EQ.1.OR.NTARIT(2).EQ.1) 971,972                           4000
 972  IF(NZONEIT(1).EQ.1.OR.NZONEIT(2).EQ.1) 971,974                         5000
 971  ITP=9                                                                  6000
C                                                                            7000
C READ THE TAPE FROM PROGRAM STACKER                                         8000
C                                                                            9000
      CALL STKRIN                                                            10000
 974  CONTINUE                                                               11000
                                                                             12000
```

```
C                                                                       13000
C NOUT EQUALS THE NUMBER OF OUTPUT TAPES                                14000
C                                                                       15000
      NOUT=1                                                            16000
C                                                                       17000
C JOUT EQUALS THE LOGICAL UNIT FOR OUTPUT                               18000
C                                                                       19000
      JOUT = 1                                                          20000
C                                                                       21000
C LOAD ITOUT ARRAY WITH THE LOGICAL OUTPUT UNIT                         22000
C                                                                       23000
      ITOUT(1) = 1                                                      24000
      MYIDENT = THQKM0008                                               25000
      CALL INITEDIT(8)                                                  26000
C                                                                       27000
C BRING THE FIRST ITEM INTO MEMORY                                      28000
C                                                                       29000
      CALL INPITEM                                                      30000
C                                                                       31000
C IS ITEM A TARGET                                                      32000
C                                                                       33000
   50 CONTINUE                                                          34000
      IF (ICLASS .EQ. 0)9997,1                                          35000
C                                                                       36000
C IS SIDE BLUE OR RED                                                   37000
C                                                                       38000
 1    IF(SIDE.EQ.4HBLUE) 2,3                                            39000
C                                                                       40000
C SIDE IS BLUE                                                          41000
C                                                                       42000
2     IPOST=1                                                           43000
      GO TO 10                                                          44000
C                                                                       45000
C SIDE IS RED                                                           46000
C                                                                       47000
3     IPOST=2                                                           48000
   10 CONTINUE                                                          49000
      GO TO (4,4,4,5,4,5,5,5,5,5,5,5,5,955,955),ICLASS                  50000
    4 IF(RESERVE.EQ.0)300,5                                             51000
C                                                                       52000
C DOES ITEM EXIST FOR DATE OF GAME                                      53000
C                                                                       54000
5     IF(DATE.GE.DATEIN.AND.DATE.LT.DATEOUT) 6,300                      55000
C                                                                       56000
C EXCLUDE THOSE ITEMS WITH IMPROPER TASK                                57000
C                                                                       58000
    6 CONTINUE                                                          59000
      DECODE (8,70000,TASK) KTASK                                       60000
70000 FORMAT (1R1)                                                      61000
      IF (KTASK .LE. NTASK(IPOST))7,300                                 62000
    7 CONTINUE                                                          63000
      IF (KTASK .GE. 1RA)8,900                                          64000
C                                                                       65000
C DETERMINE LOCAL SUBROUTINE TO EVALUATE ITEM                           66000
C                                                                       67000
    8 CONTINUE                                                          68000
```

```
      GO TO (20,325,325,9,30,9,9,9,9,9,9,9,40,955,955),ICLASS          69000
 325  CONTINUE                                                         70000
C                                                                      71000
C ASSIGN THE APPROPRIATE VALUES TO NOPERSQN,NOALERT,NOINCOM            72000
C                                                                      73000
CHANGE    NOPERSQN                                                     74000
      NC=   23
      CALL CHANGE
CHANGE    NOALERT                                                      75000
      NC=   25
      CALL CHANGE
CHANGE    NOINCOM                                                      76000
      NC=   26
      CALL CHANGE
      GO TO (326,327,3271),PLANTEST(IPOST)                             77000
 326  NOPERSQN=NOPERSQ1                                                78000
      GO TO 328                                                        79000
 327  NOPERSQN=NOPERSQ2                                                80000
      GO TO 328                                                        81000
 3271 NOPERSQN=NOPERSQ3                                                82000
 328  IF(SIDE.EQ.3HRED) 329,330                                        83000
 329  JJJ=ITLE(TYPE,NNTYPES(2),NRTYPES(2))                             84000
      GO TO 331                                                        85000
 330  JJJ=ITLE(TYPE,NNTYPES,NRTYPES(1))                                86000
 331  IF(JJJ)332,333                                                   87000
 332  NOALERT=NOPERSQN*ALERTNO(JJJ)+.5                                 88000
      NOINCOM=NOPERSQN*COMINNO(JJJ)+.5                                 89000
      GO TO 20                                                         90000
 333  NOALERT=NOINCOM=NOPERSQN                                         91000
      IF(PLANTEST(IPOST).EQ.3) 3334,20                                 92000
 3334 NOALERT=NOALERT-NUMDBL                                           93000
C                                                                      94000
C LOCAL SUBROUTINE TO SET PROPER DBL FOR PLAN                          95000
C                                                                      96000
20    CONTINUE                                                         97000
CHANGE    ALERTDBL                                                     98000
      NC=   90
      CALL CHANGE
CHANGE    NALRTDBL                                                     99000
      NC=   91
      CALL CHANGE
      GO TO (21,21,22),PLANTEST(IPOST)                                 100000
21    ALERTDBL=ADBLI                                                   101000
      NALRTDBL=NADBLI                                                  102000
      GO TO 9                                                          103000
22    ALERTDBL=ADBLR                                                   104000
      NALRTDBL=NADBLR                                                  105000
      GO TO 9                                                          106000
 30   CONTINUE                                                         107000
C                                                                      108000
C ASSIGN THE APPROPRIATE VALUES FOR VAL,TYPE,EFECTNES                  109000
C                                                                      110000
CHANGE    VAL                                                          111000
      NC=   43
      CALL CHANGE
CHANGE    TYPE                                                         112000
```

```
      NC=   2                                                          113000
      CALL CHANGE
CHANGE    EFECTNES
      NC=  113                                                         114000
      CALL CHANGE                                                      115000
      GO TO (31,32,32,32), NPOSTURE(IPOST)                             116000
 31   EFECTNES=EFECNES1                                                117000
      VAL=VAL1                                                         118000
      TYPE=TYPE1                                                       119000
      GO TO 33                                                         120000
 32   EFECTNES=EFECNES2                                                121000
      VAL=VAL2                                                         122000
      TYPE=TYPE2                                                       123000
   33 GO TO 9                                                          124000
C                                                                      125000
C IGIW IS INDUSTRIAL VALUE FOR SIDE BLUE                               126000
C                                                                      127000
 40   CONTINUE                                                         128000
      IF(TYPE.EQ.6HXPOINT.OR.TYPE.EQ.6HCOMDEG) 9,1784                  129000
 1784 CONTINUE                                                         130000
 4000 NTOGO=NOIGIWS(1,IPOST)                                           131000
      DO 41 I=1,NTOGO                                                  132000
      IF(CNTRYLOC.EQ.JCOUNTRY(I,IPOST)) 42,41                          133000
 41   CONTINUE                                                         134000
      GO TO 4311                                                       135000
 42   IF(IGIW.LT.MINIGIW(I,IPOST)) 300,4311                            136000
 4311 IF(JGJW.EQ.4HIGIW) 43,4373                                       137000
 4373 XIND=NUMGET(PIGIW,8)                                             138000
      GO TO 431                                                        139000
 43   XIND=IGIW                                                        140000
C                                                                      141000
C CALCULATE VALUE FOR U/I TARGETS                                      142000
C                                                                      143000
 431  CONTINUE
CHANGE    VAL
      NC=   43                                                         144000
      CALL CHANGE                                                      145000
      VAL=ZPOP(IPOST)*XIND+XPOP(IPOST)*POP                             146000
      IF(VAL.LE.0.) 300,9                                              147000
C                                                                      148000
C OMIT THE ITEM IF RESERVE=0                                           149000
C                                                                      150000
 9    IF(RESERVE.EQ.0) 300,9889                                        151000
 9889 MYSIDE=SIDE                                                      152000
C                                                                      153000
C IF TARDEFS ARE TO BE CONSIDERED, DO THE NECESSARY PROCESSING         154000
C                                                                      155000
      IF(NTARIT(IPOST)) 950,951                                        156000
 950  CALL TARDEFS(NTARHI,NTARLO,LAT,LONG,SIDE)                        157000
      IF(NTARHI.GT.0) 3751,3752                                        158000
3751  CONTINUE
CHANGE    TARDEFHI
      NC=   47                                                         159000
      CALL CHANGE                                                      160000
      TARDEFHI=NTARHI
3752  IF(NTARLO.GT.0) 3753,951
```

```
 3733  CONTINUE                                                          161000
CHANGE    TARDEFLO                                                      162000
      NC=   48
      CALL CHANGE
      TARDEFLO=NTARLO                                                   163000
C                                                                       164000
C IS ITEM DEFCONTR OR INTCPTOR                                          165000
C                                                                       166000
 951  IF(ICLASS.EQ.4.OR.ICLASS.EQ.5) 952,955                            167000
C                                                                       168000
C IF ZONES ARE TO BE PROCESSED, DO SO                                   169000
C                                                                       170000
 952  IF(NZONEIT(IPOST)) 953,955                                        171000
 953  NZONE=MYZONE(LAT,LONG)                                            172000
      IF(NZONE.GT.0) 954,955                                            173000
 954  CONTINUE                                                          174000
CHANGE    ZONE                                                          175000
      NC=   28
      CALL CHANGE
      ZONE=NZONE                                                        176000
C                                                                       177000
C IF ITEM IS TO BE KEPT, RECORD IT                                      178000
C                                                                       179000
 955  CALL COUNTDES(IPOST,DESIG,IREGION)                                180000
      CALL ADDVAL(IPOST,ICLASS,TYPE,VAL,CLASS)                          181000
CHANGE    IREG                                                          182000
      NC=   51
      CALL CHANGE
      IREG=IREGION                                                      183000
CHANGE    FLAG                                                          184000
      NC=  180
      CALL CHANGE
C                                                                       185000
C SET FLAG ACCORDING TO FOLLOWING CRITERIA FOR RISOP-72 INDIA/SIERRA    186000
C                                                                       187000
      IF(SIDE.EQ.4HBLUE)8001,995                                        188000
 8001 IF(ICLASS.GT.15)GO TO 8550                                        189000
      GO TO (8000,8100,8100,8200,8100,8300,8400,8100,8550,8550,8300,    190000
     1 8550,8550,8550,8500), ICLASS                                     191000
 8000 FLAG=1                                                            192000
      GO TO 995                                                         193000
 8100 FLAG=2                                                            194000
      GO TO 995                                                         195000
 8200 FLAG=3                                                            196000
      GO TO 995                                                         197000
 8300 FLAG=4                                                            198000
      GO TO 995                                                         199000
 8400 FLAG=5                                                            200000
      GO TO 995                                                         201000
 8500 FLAG=6                                                            202000
      GO TO 995                                                         203000
 8550 IF(TYPE.EQ.8HRO/NI/HA)8600,8650                                   204000
 8600 FLAG=7                                                            205000
      GO TO 995                                                         206000
C DEFAULT VALUE FOR FLAG IS 8                                           207000
 8650 FLAG=8                                                            208000
```

```
 995  CONTINUE                                                          209000
      CALL PRINTIT                                                      210000
C                                                                       211000
C PUT ITEM ON OUTPUT TAPE                                               212000
C                                                                       213000
 9997 CALL OUTITEM                                                      214000
      GO TO 3300                                                        215000
C                                                                       216000
C IF ITEM IS TO BE OMITTED, RECORD IT                                   217000
C                                                                       218000
 300  CALL NUMDEL(IPOST,DESIG,IREG)                                     219000
 3300 CONTINUE                                                          220000
      NORECORD=NORECORD+1                                               221000
C                                                                       222000
C BRING IN THE NEXT ITEM                                                223000
C                                                                       224000
      CALL NEXTITEM                                                     225000
      GO TO (50,688),ISWTERM                                            226000
C                                                                       227000
C THE FOLLOWING ARE ERROR MESSAGES                                      228000
C                                                                       229000
900   PRINT 1000                                                        230000
 1000 FORMAT(10X,31HERROR IN TASK IN FOLLOWING ITEM)                    231000
      IERROR=1                                                          232000
      CALL PRITEM                                                       233000
      GO TO 300                                                         234000
902   PRINT 1002                                                        235000
 1002 FORMAT(10X,25HERROR IN DATA CARD (DATE))                          236000
      GO TO 60                                                          237000
903   PRINT 1003                                                        238000
 1003 FORMAT(10X,25HERROR IN DATA CARD (SIDE))                          239000
      GO TO 60                                                          240000
904   PRINT 1004                                                        241000
 1004 FORMAT(10X,28HERROR IN DATA CARD (PCT-POP))                       242000
      GO TO 60                                                          243000
 9051 PRINT 4793                                                        244000
 4793 FORMAT(10X,19HPLAN NAME INCORRECT   )                             245000
      GO TO 60                                                          246000
C                                                                       247000
C OUTPUT SUMMARIES                                                      248000
C                                                                       249000
C                                                                       250000
C PRINT THE TOTAL NUMBER OF RECORDS PROCESSED                           251000
C                                                                       252000
 688  PRINT 861,NORECORD                                                253000
 861  FORMAT(1H0,10X,26HTOTAL RECORDS PROCESSED = ,I8)                  254000
C                                                                       255000
C DO FOR BOTH SIDES                                                     256000
C                                                                       257000
      DO 7555 J=1,2                                                     258000
      CALL PAGESKP                                                      259000
C                                                                       260000
C PRINT THE SUMMARY BY REGION AND TYPE OF TARGETS KEPT                  261000
C                                                                       262000
      PRINT 8620, IWSIDE(J)                                             263000
 8620 FORMAT(10X,27HTARGET COUNT BY REGION FOR ,A5,7HTARGETS  /)        264000
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```
      PRINT 8623                                                        265000
 8623 FORMAT(10X,42HDESIG  IREG1     IREG2     IREG3     TOTAL  /)      266000
      ITOTRG1=ITOTRG2=ITOTRG3=0                                         267000
      IDOWNS=KKMIN(J)                                                   268000
      IUPS=IDOWNS+NODESIGS(J)-1                                         269000
      DO 8621 I=IDOWNS,IUPS                                             270000
      ITOTRG1=ITOTRG1+DESIGNO(I,1)                                      271000
      ITOTRG2=ITOTRG2+DESIGNO(I,2)                                      272000
      ITOTRG3=ITOTRG3+DESIGNO(I,3)                                      273000
      JTOTAL=DESIGNO(I,1)+DESIGNO(I,2)+DESIGNO(I,3)                     274000
 8621 PRINT 8622,IDESIGS(I),DESIGNO(I,1),DESIGNO(I,2),DESIGNO(I,3),     275000
     *JTOTAL                                                            276000
 8622 FORMAT(10X,A2,5X,4(I5,5X))                                        277000
      PRINT 8625                                                        278000
 8625 FORMAT(1H0,17X,35H-----     -----     -----     -----  )          279000
      JTOTAL=ITOTRG1+ITOTRG2+ITOTRG3                                    280000
      PRINT 8626,ITOTRG1,ITOTRG2,ITOTRG3,JTOTAL                         281000
 8626 FORMAT(17X,4(I5,5X)//)                                            282000
 7555 CONTINUE                                                          283000
C                                                                       284000
C DO FOR BOTH SIDES                                                     285000
C                                                                       286000
      DO 1135 J=1,2                                                     287000
      CALL PAGESKP                                                      288000
C                                                                       289000
C PRINT THE SUMMARY BY REGION AND TYPE OF TARGETS OMITTED               290000
C                                                                       291000
      PRINT 1130,I#SIDE(J)                                              292000
 1130 FORMAT(10X,30HTARGETS DELETED BY REGION FOR ,A5,7HTARGETS /)       293000
      PRINT 8623                                                        294000
      ITOTRG1=ITOTRG2=ITOTRG3=0                                         295000
      IDOWNS=LLMIN(J)                                                   296000
      IUPS=IDOWNS+LODESIGS(J)-1                                         297000
      DO 1132 I=IDOWNS,IUPS                                             298000
      ITOTRG1=ITOTRG1+LDESIGNO(I,1)                                     299000
      ITOTRG2=ITOTRG2+LDESIGNO(I,2)                                     300000
      ITOTRG3=ITOTRG3+LDESIGNO(I,3)                                     301000
      JTOTAL=LDESIGNO(I,1)+LDESIGNO(I,2)+LDESIGNO(I,3)                  302000
 1132 PRINT 8622,LDESIGS(I),LDESIGNO(I,1),LDESIGNO(I,2),                303000
     *LDESIGNO(I,3),JTOTAL                                              304000
      PRINT 8625                                                        305000
      JTOTAL=ITOTRG1+ITOTRG2+ITOTRG3                                    306000
      PRINT 8626,ITOTRG1,ITOTRG2,ITOTRG3,JTOTAL                         307000
 1135 CONTINUE                                                          308000
C                                                                       309000
C PRINT SUMMARY OF CUMULATIVE VALUE FOR CLASS AND TYPE                  310000
C                                                                       311000
      CALL PRNTVAL (X,X,X,X,X)                                          312000
   60 RETURN                                                            313000
      END                                                               314000
```

IDENT DBMOD

PROGRAM LENGTH		02454
ENTRY POINTS	DBMOD	00450
BLOCK NAMES		
	PROCESS	01173
	EDITERM	00001
	EDITAPE	00615
	ITP	00001
	NOPRINT	00001
	MYIDENT	00001
	CUTIGIN	00146
	IDESIGS	03720
	NODESIGS	00004
	NRTYPES	00460
	MYSIDE	00001
	PRINTS	00003
	LDESIGS	03720
	LODESIGS	00004
EXTERNAL SYMBOLS		
	THEND.	
	Q1Q10100	
	QRQDICT.	
	NUMGET	
	RDTYPES	
	PAGESKP	
	INITAPE	
	STKRIN	
	INITEDIT	
	INPITEM	
	CHANGE	
	ITLE	
	TARDEFS	
	MYZONE	
	COUNTDES	
	ADDVAL	
	PRINTIT	
	OUTITEM	
	NUMDEL	
	NEXTITEM	
	PRITEM	
	PRNTVAL	
	TSH.	
	DEC.	
	STH.	
	QNSINGL.	

```
C00312  ABRATE
C00334  ADBLI       01420   01420
C00340  ADBLR       01423   01423
X00020  ADDVAL      01633
C00414  ADEFCMP
C00413  ADEFZON
C00363  AGX
C00364  AGY
C00367  AHOB
C00300  ALERTDBL    01421   01424
C00302  ALERTDLY
C00150  ALERTNO     00574   01146   01360   01361
C00203  AREA
C00241  ASMTYPE
C00321  ATTRCORR
C00320  ATTRLEG
C00325  ATTRSUPR
C00416  AZON1
C00417  AZON2
C00420  AZON3
C00361  BCODE
P02362  BEGIN.     02363
C00161  BENO
C00210  BLEGNO
C00166  CATCODE
C00304  CCREL
C00267  CEP
X00013  CHANGE      01312   01315   01320   01407   01412   01430   01433   01436   01531   01566   01577
                    01622   01643   01650
C00147  CLASS       01637
C00377  CLASST
C00153  CNTRYLOC    01472   01472
C00152  CNTRYOWN
C00401  CNTYLOCT
C00400  CNTYOWNT
P02271  CNVRT1.     00473   00475   00476   00604   00606   00422   00624   00625   00626   00627   00660
                    00706   00710   00711   00712   00713   00754   00757   01012   01013   01014   01024
                    01025   01035   01036   01037   01040   01041   01051   01052   01053   01054   01055
                    01075   01077   01114   01144   01145   01146   01261   02016   02033   02100   02101
                    02102   02103   02105   02131   02132   02133   02134   02153   02220   02221   02222
                    02223   02225   02251   02252   02253   02254
C00360  CODE
C00314  COMINNO     00573   00574   01145   01371   01371
X00017  COUNTDES    01626
C00421  CPACTY
P00023  CRFMT.      00502   00612   00633   00664   00717   00763   01005   01017   01030   01044   01060
                    01102   01117   01151   01255   01750   01763   01772   02001   02010   02021   02036
                    02044   02114   02122   02137   02156
P02376  DATE        00607   01025   01247   01252
C00213  DATEIN      01250   01250
C00214  DATEOUT     01253   01253
P00450  DBMOD       00450
X00030  DEC.        00655   01256
C01133  DEF
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C00323 DEFRANGE
C00343 DELAY
C00244 DELTA
C00171 DESIG 01630 01727
C00764 DESIGNO 00555 00556 00556 00557 02057 02040 02062 02062 02064 02065 02066
02067 02067 02070 02101 02102 02103
C00365 DGX
C00366 DGY
C00370 DHOB
P00001 DICT. 00452 00471 00501 00507 00602 00611 00620 00632 00650 00656 00663
00704 00716 00736 00752 00762 00744 00775 01001 01004 01007 01016
01021 01027 01032 01043 01046 01057 01071 01101 01110 01116 01140
01150 01157 01167 01176 01206 01211 01257 01264 01313 01316 01321
01340 01346 01410 01413 01431 01434 01437 01514 01532 01555 01567
01600 01613 01623 01627 01634 01644 01651 01721 01723 01726 01735
01744 01747 01753 01757 01762 01746 01771 01775 02000 02004 02007
02013 02020 02025 02030 02035 02040 02043 02074 02107 02116 02121
02127 02136 02145 02150 02155 02140 02163 02214 02227 02235 02241
02247 02256 02263
C00437 EFECNES1 01445 01445
C00440 EFECNES2 01451 01451
C00327 EFECTNES 01446 01452
P02364 ENDING. 00453 02267 02362
C00350 EVENT
C00351 EVENTN
P00000 EXIT. 02365
C00243 FFRAC
C00432 FLAG 01675 01676 01677 01700 01701 01702 01703 01704 01705 01706 01707
01710 01714 01715 01716 01717
C00160 FLTNO
P00023 FORMAT. 00454 00456 00462 00502 00516 00536 00552 00567 00612 00631 00641
00664 00671 00676 00717 00725 00731 01122 01203 01215 01334 01456
01510 01652 01711
C00154 FUNCTION
C00245 FVALH1
C00251 FVALT1
C00252 FVALT2
P00502 GG00000. 00467
P00612 GG00001. 00600
P00633 GG00002. 00616
P00654 GG00003. 00654
P00717 GG00004. 00702
P00763 GG00005. 00750
P01005 GG00006. 00777
P01017 GG00007. 01005
P01030 GG00010. 01017
P01044 GG00011. 01030
P01060 GG00012. 01044
P01102 GG00013. 01067
P01117 GG00014. 01106
P01151 GG00015. 01136
P01265 GG00016. 01255
P01750 GG00017. 01742
P01763 GG00020. 01755

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P01772  GG00021.  01764
P02001  GG00022.  01773
P02010  GG00023.  02002
P02021  GG00024.  02011
P02036  GG00025.  02026
P02044  GG00026.  02036
P02110  GG00027.  02072
P02122  GG00030.  02114
P02137  GG00031.  02125
P02156  GG00032.  02146
P02164  GG00033.  02156
P02230  GG00034.  02212
P02242  GG00035.  02234
P02257  GG00036.  02245
C00163  H1
C00164  H2
C00324  HILOATTR
P02377  I         00517  00521  00534  00547  00552  00554  00570  00572  00745  00770  01467
                  01476  02053  02057  02076  02110  02173  02177  02216  02230  02305
C00344  IALERT
C00354  IALT
C00224  IARDEF
C00404  IATTACK
C00227  ICLASS    01212  01212  01227  01227  01273  01273  01603  01603  01605  01605  01635
                  01654  01654  01660  01660
C00373  ICLASST
C00235  ICOMPLEX
C00422  ICORR
C00424  IDBL
C00000  IDESIGS   00565  00565  02077  02077
P02400  IDOWNS    02050  02053  02170  02173
C00362  IDUD
P02401  IERROR    01751
P01164  IF00001.
P01171  IF00002.
P01252  IF00003.  01251
P01461  IF00004.
P01605  IF00005.
C00000  IFREQ     00464  00465  00511  00511  00514  00515
C00216  IGIW      01503  01503  01522  01522
P02402  IGOTO.    01230  01274  01323  01415  01441  01661  01737
C00204  IGROUP
P02403  II        00615  01112  01131  01154
C00423  IMIRV
P02272  IN00002.  00541  02277  02313  02315  02325
P02273  IN00005.  00755  00766  02276  02310  02347
P02274  IN00006.  01073  02327  02337  02350
P02275  IN00013.  01473  01504  02276  02311  02360
C00174  INDEXNO
C00346  INOV
X00007  INITAPE   01160
X00011  INITEDIT  01205
C00003  INITEM
P02362  INITIAL.  00453
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X00012	INPITEM	01210										
C00347	INTAR											
C00000	INTP											
C00233	IOTHER											
C00402	IPENMODE											
C00212	IPOINT											
P02404	IPOST	01221	01225	01266	01322	01400	01414	01440	01464	01533	01551	01607
		01630	01635	01727	02354							
C00002	IPRINT	00466	00504	00505								
C00001	IPRT	00465										
C00403	IRECMODE											
C00232	IREFUEL											
C00231	IREG	01646	01646	01730								
P02405	IREGION	01631	01645									
C00265	IREP											
C00330	ISITE											
P02406	ISLOT	00636	00644	00652	00667	00674	00781					
C00000	ISWTERM	01736	01736									
C00236	ITGT											
C00426	ITIME											
X00014	ITLE	01337	01345									
P02407	ITOTRG1	02046	02056	02061	02122	02131	02166	02176	02201	02242	02251	
P02410	ITOTRG2	02045	02061	02063	02123	02132	02165	02201	02203	02243	02252	
P02411	ITOTRG3	02045	02064	02066	02123	02133	02165	02204	02206	02243	02253	
C00002	ITOUT	01202										
C00000	ITP	01173	01174									
C00230	ITYPE											
C00374	ITYPET											
P02412	IUPS	02052	02112	02172	02232							
C00331	IVULN											
P00003	IWSIDE	00455	00456	02033	02153							
C00326	IWTYP2											
P01215	.1	01213										
P01227	.10	01223										
P01657	.100001											
P01660	.100002	01655	01656									
P01063	.11000											
P02212	.1132											
P02257	.1135											
P01102	.12000											
P01106	.13000	01061	01062									
P01122	.14000											
P01124	.16000											
P01126	.17000	01123										
P01464	.1784	01463										
P01130	.18000	01125										
P01151	.19000											
P01154	.20000	01120	01121									
P01220	.2											
P01405	.20	01275	01375	01402								
P01420	.21	01416	01417									
P01423	.22	01417										
P01224	.3	01217										
P01426	.30	01300										

P01725	.300	01246	01251	01254	01254	01267	01507	01542	01543	01546	01754
P01445	.31	01442									
P01451	.32	01443	01444	01444							
P01310	.325	01276	01277								
P01326	.326	01324									
P01330	.327	01325									
P01332	.3271	01325									
P01334	.328	01327	01331								
P01337	.329										
P01345	.330	01336									
P01455	.33	01450									
P01732	.3300	01724									
P01352	.331	01344									
P01354	.332	01353									
P01376	.333	01353									
P01403	.3334										
P01564	.3751										
P01572	.3752	01562	01563								
P01575	.3753										
P00614	.400										
P01244	.4	01231	01232	01233	01234						
P01456	.40	01306									
P01464	.4000										
P00641	.401	00640									
P00643	.402										
P00647	.403	00642									
P00666	.404										
P00671	.4041	00665									
P00673	.4042										
P00676	.4043	00672									
P00700	.4044										
P00702	.406	00670	00675								
P01476	.41	01475									
P01503	.42	01475									
P01522	.43	01512									
P01527	.431	01521									
P01510	.4311	01502	01506	01506							
P01513	.4373	01511									
P00564	.475										
P00575	.476										
P01212	.50	01740									
P01247	.5	01233	01235	01236	01236	01237	01240	01241	01241	01242	01245
P00721	.503										
P00727	.5031										
P00731	.5032	00726									
P00733	.5033										
P00735	.5034	00732									
P00742	.5035	00741									
P00770	.5037										
P00774	.5038	00741									
P01154	.504										
P00531	.600										
P01255	.6										
P02267	.60	01763	01772	02001	02010						

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P00544  .601
P00600  .603
P02011  .688        01741
P01270  .7          01267
P02137  .7555
P00504  .7900
P00514  .7901       00512
P00516  .7902       00503   00513
P01273  .8          01271
P01675  .8000       01662
P01654  .8001
P01677  .8100       01663   01664   01665   01667
P01701  .8200       01664
P01703  .8300       01666   01672
P01705  .8400       01667
P01707  .8500       01674
P01711  .8550       01657   01670   01671   01672   01673   01674
P01714  .8600
P02072  .8621
P01716  .8650       01713
P01544  .9          01277   01301   01302   01302   01303   01304   01305   01305   01422   01425   01455
                    01460   01463   01543
P01742  .900        01272
P01755  .902        00613
P01764  .903        00640
P01773  .904        00720
P02002  .9051       00677
P01554  .950        01552
P01603  .951        01553   01573   01574
P01607  .952        01604
P01612  .953        01610
P01620  .954
P01626  .955        01243   01243   01307   01307   01606   01611   01617   01617
P01173  .971        01163   01166   01170
P01167  .972        01165
P01177  .974        01172
P01547  .9889       01545
P01720  .995        01653   01676   01700   01702   01704   01706   01710   01715
P01722  .9997       01214
P02366  .ERASER.    01535   01537
P00023  ..100000    00454
P00127  ..10000     01010
P00267  ..1000      01745
P00024  ..100001    00456
P00025  ..100002    00462
P00034  ..100003    00503
P00035  ..100004    00522
P00036  ..100005    00542
P00037  ..100006    00562
P00040  ..100007    00564
P00041  ..100008    00575
P00047  ..100009    00613
P00116  ..10001     01002
P00063  ..100010    00637
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P00070	..100012	00665							
P00071	..100013	00672							
P00072	..100014	00677							
P00106	..100015	00720							
P00107	..100016	00725							
P00110	..100017	00732							
P00242	..100018	01123							
P00254	..100019	01203							
P00255	..100020	01216							
P00261	..100021	01335							
P00262	..100022	01457							
P00263	..100023	01462							
P00264	..100024	01511							
P00265	..100025	01653							
P00266	..100026	01712							
P00137	..10010	01022							
P00146	..10020	01033							
P00277	..1002	01760							
P00174	..10030	01047							
P00307	..1003	01767							
P00317	..1004	01776							
P00222	..11010	01072							
P00434	..1130	02151							
P00231	..13010	01111							
P00243	..18010	01141							
P00327	..4793	02005							
P00042	..500	00603							
P00050	..501	00621							
P00073	..502	00705							
P00111	..5036	00753							
P00065	..60000	00657							
P00256	..70000	01260							
P00026	..801	00472							
P00336	..861	02014							
P00351	..8620	02031							
P00400	..8622	02075	02215						
P00365	..8623	02041	02161						
P00411	..8625	02117	02237						
P00424	..8626	02130	02250						
P02413	J	00537	02022	02032	02137	02142	02152	02257	02322
C00000	JCOUNTRY	00543	00543	00756	00756	01074	01074	01474	01474
P02414	JFREQ	00476	00510	01013					
P02415	JGJN	00477	01014	01510					
P02416	JJJ	01343	01351	01352	01360				
C00014	JOUT	01201							
P02417	JSLOT	00634	00645	00661	00722	00730	00734	00743	02343
P02420	JTOTAL	02071	02104	02124	02134	02211	02224	02244	02254
C00237	JTYPE								
C00375	JTYPET								
P02421	KK	01134	01142	01151					
C00002	KKMIN	02046	02047						
C00322	KORSTYLE								
P02422	KTASK	01262	01265	01270					

C00204	LAT	01557	01614									
C00764	LDESIGNO	00560	00560	00561	00561	02177	02200	02202	02202	02204	02205	02206
		02207	02207	02210	02221	02222	02223					
C00000	LDESIGS	00563	00563	02217	02217							
C00206	LEGNO											
C01153	LGLOB											
C00201	LINK											
C00002	LLMIN	02166	02167									
C00000	LODESIGS	02170	02171									
C00205	LONG	01557	01614									
P02423	LPLAN	00627	00664	00671	00676	01040						
P02424	LPOSTURE	00626	00651	01037								
P02425	LSIDE	00625	00641	00776	01036	01122						
P02426	LTASK	00630	00657	01041								
C00167	MAJOR											
C00256	MAXFACTV											
C00255	MAXFRACV											
C00254	MAXKILL											
C00357	MCODE											
C00062	MINIGIW	00544	00545	00767	00767	01505	01505					
C00253	MINKILL											
C00170	MINOR											
C00223	MISDEF											
P02427	MLOW	01125	01127	01130	01134							
P02430	MM	01064	01102	02334								
C00002	MTYPES	01113	01113									
P02431	MUP	01133	01152									
C00217	MVA											
C00407	MWHDS											
C00000	MYIDENT	00463	00463	01204	01204							
C00000	MYSIDE	01550	01550									
X00016	MYZONE	01612										
C00332	NADBLI	01421										
C00333	NADBLR	01424										
C00415	NAINT											
C00405	NAL											
C00301	NALRTDBL	01422	01425									
C00303	NALRTDLY											
C00156	NAME											
C00335	NAREADEC											
C00262	NASMS											
C00002	NC	01310	01311	01314	01317	01405	01406	01411	01426	01427	01432	01435
		01527	01530	01564	01565	01575	01576	01620	01621	01641	01642	01647
C00263	NCM											
P02432	NCNLOC	00760	00765	01076								
P02433	NDATE	00605	00612	01023								
C00242	NDECOYS											
C00411	NDET											
X00024	NEXTITEM	01734										
C00211	NEXTZONE											
C00000	NI											
P02434	NIGIW	00740	00742	00772	01060	01104						
C00176	NMPSITE											
P02435	NNIGIW	00714	00737	01055								

C00004	NNTYPES	00576	00576	01143	01143	01341	01347			
C00177	NOALERT	01364	01364	01377	01403	01403	01404			
C00260	NOBOMB1									
C00261	NOBOMB2									
C00000	NODESIGS	02050	02051							
C00144	NOIGIWS	00525	00526	00743	00744	01465	01465			
C00200	NOINCOM	01374	01374	01377						
C00433	NOPERSQ1	01326	01326							
C00434	NOPERSQ2	01330	01330							
C00435	NOPERSQ3	01332	01332							
C00175	NOPERSQN	01327	01331	01333	01354	01354	01365	01365	01376	01376
C00000	NOPRINT	00460	00461							
P02436	NORECORD	00457	01732	01733	02015					
C00001	NOUT	01177	01200							
C00410	NPEN									
P02437	NPOP	00707	00717	01050						
P00005	NPOSTURE	00523	00653	01441						
P02440	NPRINT	00474	00502	01011						
C00000	NRTYPES	00530	00530	01117	01117	01131	01132	01342	01350	
P02441	NSIDE	00623	00637	01034						
C00356	NTARG									
P02442	NTARHI	01556	01561	01570						
P00021	NTARIT	00524	00730	01162	01164	01552				
P02443	NTARLO	01556	01572	01601						
P02444	NTARS	00712	00725	01053						
P00007	NTASK	00523	00661	01266						
C00337	NTINT									
P02445	NTOGO	01466	01500							
C00436	NUMDBL	01404								
X00023	NUMDEL	01725								
X00004	NUMGET	00506	00647	00735	00763	01513				
C00001	NV									
C00336	NWHDS									
CC0355	NWPNS									
C00345	NWTYPE									
P02446	NZONE	01615	01616	01624						
P00017	NZONEIT	00525	00734	01167	01171	01610				
P02447	NZONES	00713	00731	01054						
X00022	OUTITEM	01722								
P02276	P00000.U	02302								
P02315	P00001.U	02317								
P02327	P00003.U	02331								
X00006	PAGESKP	01156	02024	02144						
C00412	PARRIVE									
C00264	PAYLOAD									
C00315	PDES									
C00266	PDUD									
C00277	PEN									
C00316	PFPF									
P02450	PIGIW	01515								
C00314	PINC									
C00317	PKMIS									
C00425	PKNAV									
C00311	PLABT									

C00352	PLACE											
C00353	PLACEN											
P00013	PLANTEST	00527	00667	00674	00701	01323	01401	01415				
C00215	POP	01536	01536									
C00173	POSTURE											
C00313	PRART											
C00372	PRIMETAR											
X00021	PRINTIT	01720										
X00025	PRITEM	01752										
X00026	PRNTVAL	02262										
C00427	PSASW											
X00002	Q1Q10100	01363	01373									
X00003	Q8QDICT.	00000	00451									
X00032	QNSINGL.	02270										
C00220	RADIUS											
C00270	RANGE											
C00271	RANGEDEC											
C00272	RANGEREF											
X00005	RDTYPES	00774										
C00276	REL											
C00207	RESERVE	01244	01244	01544	01544							
C00151	SIDE	01215	01215	01334	01334	01547	01547	01560	01652			
C00155	SITENO											
C00275	SPDASH											
C00274	SPDLO											
C00273	SPEED											
C00157	SQNNO											
X00031	STH.	01000	01006	01020	01031	01045	01070	01107	01137	01743	01756	01765
		01774	02003	02012	02027	02037	02073	02115	02126	02147	02157	02213
		02235	02246									
X00010	STKRIN	01175										
C00246	T1											
C00247	T2											
C00250	T3											
C00406	TAIM											
C00225	TARDEFHI	01571	01571									
C00226	TARDEFLO	01602	01602									
X00015	TARDEFS	01554										
C00172	TASK	01260										
C00431	TGTSTAT											
X00001	THEND.	00500	00610	00631	00662	00715	00761	01003	01015	01026	01042	01056
		01100	01115	01147	01263	01746	01761	01770	01777	02006	02017	02034
		02042	02106	02120	02135	02154	02162	02226	02240	02255		
C00342	TIME											
C00341	TIMEN											
C00306	TMDEL											
C00430	TPASW											
C00310	TRETARG											
P00772	TS00007.	00747										
P01104	TS00010.	01066										
P01152	TS00011.	01135										
P01500	TS00012.	01471										
P02112	TS00014.	02055										
P02232	TS00016.	02175										

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X00027  TSH.      00470   00601   00617   00703   00751
C00305  TTOS
C00307  TVUL
C00150  TYPE      01341   01347   01450   01454   01456   01456   01461   01461   01636   01711   01711
C00443  TYPE1     01447
C00444  TYPE2     01453
C00376  TYPET
P02304  UP00000.  00520   00535   00550   00553   00571   00746   00771   01470   01477   02054   02111
                  02174   02231   02300   02305   02306   02307   02313   02314
P02321  UP00001.  00540   02023   02140   02143   02260   02315   02322   02323   02324   02326   02326
P02333  UP00003.  01065   01103   02327   02334   02335   02336   02340   02340
P02342  UP00006.  00635   00646   02343   02344   02345   02351   02351
P02353  UP00007.  01222   01226   01637   01640   01731   02354   02355   02356   02360   02361
C00221  VAL       01447   01453   01540   01540   01541   01636
C00441  VAL1      01446
C00442  VAL2      01452
C00222  VALU
C00147  VALUE
C00162  VULN
C00165  WACNO
C00240  WHDTYPE
C00371  WHDTYPEN
P00522  WS00001.  00533
P00536  WS00002.  00551
P00542  WS00003.  00546
P00555  WS00004.  00566
P00573  WS00005.  00577
P00616  WS00006.  01155
P00750  WS00007.  00773   00773
P01067  WS00010.  01105   01105
P01136  WS00011.  01153   01153
P01472  WS00012.  01501   01501
P02024  WS00013.  02141
P02056  WS00014.  02113   02113
P02144  WS00015.  02261
P02176  WS00016.  02233   02233
P02451  X         02264   02264   02265   02265   02266
P02452  XIND      01521   01526   01534
P00011  XPOP      00532   00722   01535
P02453  XPPOP     00711   00721   00723   01052
C00257  YIELD
C00202  ZONE      01625   01625
P00015  ZPOP      00532   00724   01534
   01047 SYMBOLS
```

```
      FUNCTION INDEXTYP(NUMBATTS,ISIDE)                                 1000
CSUBS      INDEXTYP  140CT70  ********************************************  14000
C                                                                       2000
C                                                                       3000
C THIS SUBROUTINE DETERMINES IN WHICH SEGMENT OF THE RANGE OF VALUES AS   4000
C CONTAINED IN THE ARRAY NTARTEST THE GIVEN VALUE OF NUMBATTS LIES        5000
C                                                                       6000
C                                                                       7000
C ***********************************************************************  8000
C                                                                       9000
CUSE       XLAT       140CT70  ********************************************  10000
      COMMON/XLAT/ALAT(1000),XLONG(1000),RADIUS(1000),NBATTS(1000),     1000
     1JINDEX(200),LINDEX(200),ATEST(200),NBAREAS,NRAREAS,NTARSHI(20),   2000
     2NTARSLO(20),NTARTEST(20),XTEST(2),MAXHI(2),MAXLOW(2),FACLOW(2),   3000
     3LAREAS(2),LNLOW(2),ILOW(2),IHIGH(2),ITARTAPE(2),JJLOW(2),JAREAS(2)  4000
     4,JLOCS(2)                                                         5000
      COMMON/JSIDE/JSIDE                                                6000
CEND       XLAT       ********************************************************  10000
      JLOW=ILOW(JSIDE)                                                  11000
      JHIGH=IHIGH(JSIDE)                                                12000
 3    DO 4 J=JLOW,JHIGH                                                 13000
      IF(NUMBATTS.LE.NTARTEST(J)) 5,4                                   14000
 4    CONTINUE                                                          15000
 5    INDEXTYP=J                                                        16000
      RETURN                                                            17000
      END                                                               18000
```

IDENT INDEXTYP

PROGRAM LENGTH		00067
ENTRY POINTS	INDEXTYP	00003
BLOCK NAMES		
	XLAT	11116
	JSIDE	00001
EXTERNAL SYMBOLS		
	QBQDICT.	

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C10460  ATEST
P00031  BEGIN.      00045   00054   00060
P00001  DICT.       00005   00034   00035
P00046  ENDING.     00006   00027   00031   00032   00032   00033   00033
P00000  EXIT.       00052
C11074  FACLOW
P00016  FP00001.    00043   00044
P00063  GETPL.      00036
P00053  GETPU.      00041   00057
C11104  IHIGH       00012   00012
C11102  ILOW        00010   00010
P00003  INDEXTYP    00003
P00031  INITIAL.    00006
P00003  ISIDE
C11106  ITARTAPE
P00014  .3
P00023  .4          00021
P00026  .5          00021   00022
P00064  J           00015   00017   00023   00026
C11112  JAREAS
P00065  JHIGH       00013   00024
C07640  JINDEX
C11110  JJLOW
C11114  JLOCS
P00066  JLOW        00011   00014
C00000  JSIDE       00007   00007
C11076  LAREAS
C10150  LINDEX
C11100  LNLOW
C11070  MAXHI
C11072  MAXLOW
C10770  NBAREAS
C05670  NBATTS
C10771  NRAREAS
C10772  NTARSHI
C11016  NTARSLO
C11042  NTARTEST    00020   00020
P00003  NUMBATTS    00016
P00045  PF00002.    00042
X00031  Q80DICT.    00000   00004
C03720  RADIUS
P00024  TS00001.    00015
P00030  VALUE.      00027   00051
P00016  WS00001.    00025   00025
C00000  XLAT
C01750  XLONG
C11066  XTEST
   00057 SYMBOLS
```

```
      SUBROUTINE INDMOD                                                 1000
CSU8R     INDMOD    20JUL71  ********************************************  25000
CDECLAREX                                                               2000
      COMMON/PROCESS/NI,NV,NC,INITEM(100),VALUE(500),DEF(500),LGLOB(500)
      TYPE INTEGER VALUE
      TYPE LOGICAL DEF,LGLOB
      COMMON/EDITERM/ISWTERM
      COMMON/EDITAPE/INTP,NOUT,ITOUT(10),JOUT
      EQUIVALENCE(CLASS    ,VALUE(   1))
      TYPE INTEGER CLASS
      EQUIVALENCE(TYPE     ,VALUE(   2))
      TYPE INTEGER TYPE
      EQUIVALENCE(SIDE     ,VALUE(   3))
      TYPE INTEGER SIDE
      EQUIVALENCE(CNTRYOWN,VALUE(   4))
      TYPE INTEGER CNTRYOWN
      EQUIVALENCE(CNTRYLOC,VALUE(   5))
      TYPE INTEGER CNTRYLOC
      EQUIVALENCE(FUNCTION,VALUE(   6))
      TYPE INTEGER FUNCTION
      EQUIVALENCE(SITENO   ,VALUE(   7))
      TYPE INTEGER SITENO
      EQUIVALENCE(NAME     ,VALUE(   8))
      TYPE INTEGER NAME
      EQUIVALENCE(SQNNO    ,VALUE(   9))
      TYPE INTEGER SQNNO
      EQUIVALENCE(FLTNO    ,VALUE(  10))
      TYPE INTEGER FLTNO
      EQUIVALENCE(BENO     ,VALUE(  11))
      TYPE INTEGER BENO
      EQUIVALENCE(VULN     ,VALUE(  12))
      TYPE INTEGER VULN
      EQUIVALENCE(H1       ,VALUE(  13))
      TYPE INTEGER H1
      EQUIVALENCE(H2       ,VALUE(  14))
      TYPE INTEGER H2
      EQUIVALENCE(WACNO    ,VALUE(  15))
      TYPE INTEGER WACNO
      EQUIVALENCE(CATCODE  ,VALUE(  15))
      TYPE INTEGER CATCODE
      EQUIVALENCE(MAJOR    ,VALUE(  17))
      TYPE INTEGER MAJOR
      EQUIVALENCE(MINOR    ,VALUE(  18))
      TYPE INTEGER MINOR
      EQUIVALENCE(DESIG    ,VALUE(  19))
      TYPE INTEGER DESIG
      EQUIVALENCE(TASK     ,VALUE(  20))
      TYPE INTEGER TASK
      EQUIVALENCE(POSTURE  ,VALUE(  21))
      TYPE INTEGER POSTURE
      EQUIVALENCE(INDEXNO  ,VALUE(  22))
      TYPE INTEGER INDEXNO
      EQUIVALENCE(NOPERSON,VALUE(  23))
      TYPE INTEGER NOPERSON
      EQUIVALENCE(NMPSITE  ,VALUE(  24))
      TYPE INTEGER NMPSITE
```

```
      EQUIVALENCE(NOALERT ,VALUE( 25))
      TYPE INTEGER NOALERT
      EQUIVALENCE(NOINCOM ,VALUE( 26))
      TYPE INTEGER NOINCOM
      EQUIVALENCE(LINK    ,VALUE( 27))
      TYPE INTEGER LINK
      EQUIVALENCE(ZONE    ,VALUE( 28))
      TYPE INTEGER ZONE
      EQUIVALENCE(AREA    ,VALUE( 29))
      TYPE REAL    AREA
      EQUIVALENCE(LAT     ,VALUE( 30))
      TYPE REAL    LAT
      EQUIVALENCE(LONG    ,VALUE( 31))
      TYPE REAL    LONG
      EQUIVALENCE(LEGNO   ,VALUE( 32))
      TYPE INTEGER LEGNO
      EQUIVALENCE(RESERVE ,VALUE( 33))
      TYPE INTEGER RESERVE
      EQUIVALENCE(BLEGNO  ,VALUE( 34))
      TYPE INTEGER BLEGNO
      EQUIVALENCE(NEXTZONE,VALUE( 35))
      TYPE INTEGER NEXTZONE
      EQUIVALENCE(IPOINT  ,VALUE( 36))
      TYPE INTEGER IPOINT
      EQUIVALENCE(DATEIN  ,VALUE( 37))
      TYPE REAL    DATEIN
      EQUIVALENCE(DATEOUT ,VALUE( 38))
      TYPE REAL    DATEOUT
      EQUIVALENCE(POP     ,VALUE( 39))
      TYPE REAL    POP
      EQUIVALENCE(IGIW    ,VALUE( 40))
      TYPE INTEGER IGIW
      EQUIVALENCE(MVA     ,VALUE( 41))
      TYPE INTEGER MVA
      EQUIVALENCE(RADIUS  ,VALUE( 42))
      TYPE REAL    RADIUS
      EQUIVALENCE(VAL     ,VALUE( 43))
      TYPE REAL    VAL
      EQUIVALENCE(VALU    ,VALUE( 44))
      TYPE REAL    VALU
      EQUIVALENCE(MISDEF  ,VALUE( 45))
      TYPE INTEGER MISDEF
      EQUIVALENCE(IARDEF  ,VALUE( 46))
      TYPE INTEGER IARDEF
      EQUIVALENCE(TARDEFHI,VALUE( 47))
      TYPE INTEGER TARDEFHI
      EQUIVALENCE(TARDEFLO,VALUE( 48))
      TYPE INTEGER TARDEFLO
      EQUIVALENCE(ICLASS  ,VALUE( 49))
      TYPE INTEGER ICLASS
      EQUIVALENCE(ITYPE   ,VALUE( 50))
      TYPE INTEGER ITYPE
      EQUIVALENCE(IREG    ,VALUE( 51))
      TYPE INTEGER IREG
      EQUIVALENCE(IREFUEL ,VALUE( 52))
      TYPE INTEGER IREFUEL
```

```
      EQUIVALENCE(IOTHER  ,VALUE(  53))
      TYPE INTEGER IOTHER
      EQUIVALENCE(IGROUP  ,VALUE(  54))
      TYPE INTEGER IGROUP
      EQUIVALENCE(ICOMPLEX,VALUE(  55))
      TYPE INTEGER ICOMPLEX
      EQUIVALENCE(ITGT    ,VALUE(  56))
      TYPE INTEGER ITGT
      EQUIVALENCE(JTYPE   ,VALUE(  57))
      TYPE INTEGER JTYPE
      EQUIVALENCE(WHDTYPE ,VALUE(  58))
      TYPE INTEGER WHDTYPE
      EQUIVALENCE(ASMTYPE ,VALUE(  59))
      TYPE INTEGER ASMTYPE
      EQUIVALENCE(NDECOYS ,VALUE(  60))
      TYPE INTEGER NDECOYS
      EQUIVALENCE(FFRAC   ,VALUE(  61))
      TYPE REAL    FFRAC
      EQUIVALENCE(DELTA   ,VALUE(  62))
      TYPE REAL    DELTA
      EQUIVALENCE(FVALM1  ,VALUE(  63))
      TYPE REAL    FVALM1
      EQUIVALENCE(T1      ,VALUE(  64))
      TYPE REAL    T1
      EQUIVALENCE(T2      ,VALUE(  65))
      TYPE REAL    T2
      EQUIVALENCE(T3      ,VALUE(  66))
      TYPE REAL    T3
      EQUIVALENCE(FVALT1  ,VALUE(  67))
      TYPE REAL    FVALT1
      EQUIVALENCE(FVALT2  ,VALUE(  68))
      TYPE REAL    FVALT2
      EQUIVALENCE(MINKILL ,VALUE(  69))
      TYPE REAL    MINKILL
      EQUIVALENCE(MAXKILL ,VALUE(  70))
      TYPE REAL    MAXKILL
      EQUIVALENCE(MAXFRACV,VALUE(  71))
      TYPE REAL    MAXFRACV
      EQUIVALENCE(MAXFACTV,VALUE(  72))
      TYPE REAL    MAXFACTV
      EQUIVALENCE(YIELD   ,VALUE(  73))
      TYPE REAL    YIELD
      EQUIVALENCE(NOBOMB1 ,VALUE(  74))
      TYPE INTEGER NOBOMB1
      EQUIVALENCE(NOBOMB2 ,VALUE(  75))
      TYPE INTEGER NOBOMB2
      EQUIVALENCE(NASMS   ,VALUE(  76))
      TYPE INTEGER NASMS
      EQUIVALENCE(NCM     ,VALUE(  77))
      TYPE INTEGER NCM
      EQUIVALENCE(PAYLOAD ,VALUE(  78))
      TYPE INTEGER PAYLOAD
      EQUIVALENCE(IREP    ,VALUE(  79))
      TYPE INTEGER IREP
      EQUIVALENCE(PDUD    ,VALUE(  80))
      TYPE REAL    PDUD
```

```
      EQUIVALENCE(CEP      ,VALUE( 81))
      TYPE REAL     CEP
      EQUIVALENCE(RANGE    ,VALUE( 82))
      TYPE REAL     RANGE
      EQUIVALENCE(RANGEDEC,VALUE( 83))
      TYPE REAL     RANGEDEC
      EQUIVALENCE(RANGEREF,VALUE( 84))
      TYPE REAL     RANGEREF
      EQUIVALENCE(SPEED    ,VALUE( 85))
      TYPE REAL     SPEED
      EQUIVALENCE(SPDLO    ,VALUE( 86))
      TYPE REAL     SPDLO
      EQUIVALENCE(SPDASH   ,VALUE( 87))
      TYPE REAL     SPDASH
      EQUIVALENCE(REL      ,VALUE( 88))
      TYPE REAL     REL
      EQUIVALENCE(PEN      ,VALUE( 89))
      TYPE REAL     PEN
      EQUIVALENCE(ALERTDBL,VALUE( 90))
      TYPE REAL     ALERTDBL
      EQUIVALENCE(NALRTDBL,VALUE( 91))
      TYPE REAL     NALRTDBL
      EQUIVALENCE(ALERTDLY,VALUE( 92))
      TYPE REAL     ALERTDLY
      EQUIVALENCE(NALRTDLY,VALUE( 93))
      TYPE REAL     NALRTDLY
      EQUIVALENCE(CCREL    ,VALUE( 94))
      TYPE REAL     CCREL
      EQUIVALENCE(TTOS     ,VALUE( 95))
      TYPE REAL     TTOS
      EQUIVALENCE(TMDEL    ,VALUE( 96))
      TYPE REAL     TMDEL
      EQUIVALENCE(TVUL     ,VALUE( 97))
      TYPE REAL     TVUL
      EQUIVALENCE(TRETARG  ,VALUE( 98))
      TYPE REAL     TRETARG
      EQUIVALENCE(PLABT    ,VALUE( 99))
      TYPE REAL     PLABT
      EQUIVALENCE(ABRATE   ,VALUE(100))
      TYPE REAL     ABRATE
      EQUIVALENCE(PRABT    ,VALUE(101))
      TYPE REAL     PRABT
      EQUIVALENCE(PINC     ,VALUE(102))
      TYPE REAL     PINC
      EQUIVALENCE(PDES     ,VALUE(103))
      TYPE REAL     PDES
      EQUIVALENCE(PFPF     ,VALUE(104))
      TYPE REAL     PFPF
      EQUIVALENCE(PKMIS    ,VALUE(105))
      TYPE REAL     PKMIS
      EQUIVALENCE(ATTRLEG  ,VALUE(106))
      TYPE REAL     ATTRLEG
      EQUIVALENCE(ATTRCORR,VALUE(107))
      TYPE REAL     ATTRCORR
      EQUIVALENCE(KORSTYLE,VALUE(108))
      TYPE INTEGER KORSTYLE
```

```
      EQUIVALENCE(DEFRANGE,VALUE( 109))
      TYPE REAL     DEFRANGE
      EQUIVALENCE(HILOATTR,VALUE( 110))
      TYPE REAL     HILOATTR
      EQUIVALENCE(ATTRSUPF,VALUE( 111))
      TYPE REAL     ATTRSUPF
      EQUIVALENCE(IWTYP2  ,VALUE( 112))
      TYPE INTEGER IWTYP2
      EQUIVALENCE(EFECTNES,VALUE( 113))
      TYPE REAL     EFECTNES
      EQUIVALENCE(ISITE   ,VALUE( 114))
      TYPE INTEGER ISITE
      EQUIVALENCE(IVULN   ,VALUE( 115))
      TYPE INTEGER IVULN
      EQUIVALENCE(NADBLI  ,VALUE( 116))
      TYPE REAL     NADBLI
      EQUIVALENCE(NADBLR  ,VALUE( 117))
      TYPE REAL     NADBLR
      EQUIVALENCE(ADBLI   ,VALUE( 118))
      TYPE REAL     ADBLI
      EQUIVALENCE(NAREADEC,VALUE( 119))
      TYPE INTEGER NAREADEC
      EQUIVALENCE(NWHDS   ,VALUE( 120))
      TYPE INTEGER NWHDS
      EQUIVALENCE(NTINT   ,VALUE( 121))
      TYPE INTEGER NTINT
      EQUIVALENCE(ADBLR   ,VALUE( 122))
      TYPE REAL     ADBLR
      EQUIVALENCE(TIMEN   ,VALUE( 123))
      TYPE REAL     TIMEN
      EQUIVALENCE(TIME    ,VALUE( 124))
      TYPE REAL     TIME
      EQUIVALENCE(DELAY   ,VALUE( 125))
      TYPE REAL     DELAY
      EQUIVALENCE(IALERT  ,VALUE( 126))
      TYPE INTEGER IALERT
      EQUIVALENCE(NWTYPE  ,VALUE( 127))
      TYPE INTEGER NWTYPE
      EQUIVALENCE(INDV    ,VALUE( 128))
      TYPE INTEGER INDV
      EQUIVALENCE(INTAR   ,VALUE( 129))
      TYPE INTEGER INTAR
      EQUIVALENCE(EVENT   ,VALUE( 130))
      TYPE INTEGER EVENT
      EQUIVALENCE(EVENTN  ,VALUE( 131))
      TYPE INTEGER EVENTN
      EQUIVALENCE(PLACE   ,VALUE( 132))
      TYPE INTEGER PLACE
      EQUIVALENCE(PLACEN  ,VALUE( 133))
      TYPE INTEGER PLACEN
      EQUIVALENCE(IALT    ,VALUE( 134))
      TYPE INTEGER IALT
      EQUIVALENCE(NWPNS   ,VALUE( 135))
      TYPE INTEGER NWPNS
      EQUIVALENCE(NTARG   ,VALUE( 136))
      TYPE INTEGER NTARG
```

```
      EQUIVALENCE(MCODE   ,VALUE( 137))
      TYPE INTEGER MCODE
      EQUIVALENCE(CODE    ,VALUE( 138))
      TYPE INTEGER CODE
      EQUIVALENCE(BCODE   ,VALUE( 139))
      TYPE INTEGER BCODE
      EQUIVALENCE(IDUD    ,VALUE( 140))
      TYPE INTEGER IDUD
      EQUIVALENCE(AGX     ,VALUE( 141))
      TYPE INTEGER AGX
      EQUIVALENCE(AGY     ,VALUE( 142))
      TYPE INTEGER AGY
      EQUIVALENCE(DGX     ,VALUE( 143))
      TYPE INTEGER DGX
      EQUIVALENCE(DGY     ,VALUE( 144))
      TYPE INTEGER DGY
      EQUIVALENCE(AHOB    ,VALUE( 145))
      TYPE INTEGER AHOB
      EQUIVALENCE(DHOB    ,VALUE( 146))
      TYPE INTEGER DHOB
      EQUIVALENCE(WHOTYPEN,VALUE( 147))
      TYPE INTEGER WHOTYPEN
      EQUIVALENCE(PRIMETAR,VALUE( 148))
      TYPE INTEGER PRIMETAR
      EQUIVALENCE(ICLASST ,VALUE( 149))
      TYPE INTEGER ICLASST
      EQUIVALENCE(ITYPET  ,VALUE( 150))
      TYPE INTEGER ITYPET
      EQUIVALENCE(JTYPET  ,VALUE( 151))
      TYPE INTEGER JTYPET
      EQUIVALENCE(TYPET   ,VALUE( 152))
      TYPE INTEGER TYPET
      EQUIVALENCE(CLASST  ,VALUE( 153))
      TYPE INTEGER CLASST
      EQUIVALENCE(CNTYOWNT,VALUE( 154))
      TYPE INTEGER CNTYOWNT
      EQUIVALENCE(CNTYLOCT,VALUE( 155))
      TYPE INTEGER CNTYLOCT
      EQUIVALENCE(IPENMODE,VALUE( 156))
      TYPE INTEGER IPENMODE
      EQUIVALENCE(IRECMODE,VALUE( 157))
      TYPE INTEGER IRECMODE
      EQUIVALENCE(IATTACK ,VALUE( 158))
      TYPE INTEGER IATTACK
      EQUIVALENCE(NAL     ,VALUE( 159))
      TYPE INTEGER NAL
      EQUIVALENCE(TAIM    ,VALUE( 160))
      TYPE INTEGER TAIM
      EQUIVALENCE(MWHDS   ,VALUE( 161))
      TYPE INTEGER MWHDS
      EQUIVALENCE(NPEN    ,VALUE( 162))
      TYPE INTEGER NPEN
      EQUIVALENCE(NDET    ,VALUE( 163))
      TYPE INTEGER NDET
      EQUIVALENCE(PARRIVE ,VALUE( 164))
      TYPE REAL    PARRIVE
```

```
      EQUIVALENCE(ADEFZON ,VALUE( 165))
      TYPE INTEGER ADEFZON
      EQUIVALENCE(ADEFCMP ,VALUE( 166))
      TYPE INTEGER ADEFCMP
      EQUIVALENCE(NAINT   ,VALUE( 167))
      TYPE INTEGER NAINT
      EQUIVALENCE(AZON1   ,VALUE( 168))
      TYPE INTEGER AZON1
      EQUIVALENCE(AZON2   ,VALUE( 169))
      TYPE INTEGER AZON2
      EQUIVALENCE(AZON3   ,VALUE( 170))
      TYPE INTEGER AZON3
      EQUIVALENCE(CPACTY  ,VALUE( 171))
      TYPE INTEGER CPACTY
      EQUIVALENCE(ICORR   ,VALUE( 172))
      TYPE INTEGER ICORR
      EQUIVALENCE(IMIRV   ,VALUE( 173))
      TYPE INTEGER IMIRV
      EQUIVALENCE(IDBL    ,VALUE( 174))
      TYPE INTEGER IDBL
      EQUIVALENCE(PKNAV   ,VALUE( 175))
      TYPE REAL    PKNAV
      EQUIVALENCE(ITIME   ,VALUE( 176))
      TYPE INTEGER ITIME
      EQUIVALENCE(PSASW   ,VALUE( 177))
      TYPE REAL    PSASW
      EQUIVALENCE(TPASW   ,VALUE( 178))
      TYPE REAL    TPASW
      EQUIVALENCE(TGTSTAT ,VALUE( 179))
      TYPE INTEGER TGTSTAT
      EQUIVALENCE(FLAG    ,VALUE( 180))
      TYPE INTEGER FLAG
      EQUIVALENCE(NOPERSQ1,VALUE( 181))
      TYPE INTEGER NOPERSQ1
      EQUIVALENCE(NOPERSQ2,VALUE( 182))
      TYPE INTEGER NOPERSQ2
      EQUIVALENCE(NOPERSQ3,VALUE( 183))
      TYPE INTEGER NOPERSQ3
      EQUIVALENCE(NUMDBL  ,VALUE( 184))
      TYPE INTEGER NUMDBL
      EQUIVALENCE(EFECNES1,VALUE( 185))
      TYPE REAL    EFECNES1
      EQUIVALENCE(EFECNES2,VALUE( 186))
      TYPE REAL    EFECNES2
      EQUIVALENCE(VAL1    ,VALUE( 187))
      TYPE REAL    VAL1
      EQUIVALENCE(VAL2    ,VALUE( 188))
      TYPE REAL    VAL2
      EQUIVALENCE(TYPE1   ,VALUE( 189))
      TYPE INTEGER TYPE1
      EQUIVALENCE(TYPE2   ,VALUE( 190))
      TYPE INTEGER TYPE2
C                                                                      3000
C                                                                      4000
C THIS SUBROUTINE CONTROLS THE INFORMATION PROCESSING WHEN PROGRAM     5000
C BASEMOD IS RUN AFTER PROGRAM INDEXER.  THE REQUIRED INPUT AND OUTPUT 6000
```

```
C FILES ARE AS FOLLOWS                                                          7000
C                                                                               8000
C INPUT TAPES                                                                   9000
C       LTN 04 = INDEXDB TAPE                                                  10000
C                                                                              11000
C OUPTUT TAPES                                                                 12000
C       LTN 06 = INMODDB TAPE                                                  13000
C                                                                              14000
C                                                                              15000
C ***************************************************************************  16000
C                                                                              17000
CUSE      INTRAA    19OCT70   ********************************************     18000
      COMMON/TYPENAME/INDBEG(250),TYPENAME(250),CUMNO(15),BTYPES(15),           1000
     1INDCLAS(15)                                                               2000
      COMMON/JCARD/JCARD(4)                                                     3000
CEND      INTRAA    ********************************************************  18000
C                                                                              18050
C     COMMON/TYPENAME/INDBEG(NT),TYPENAME(NT),CUMNO(NC),BTYPES(NC),            18100
C     INDCLAS(NC)                                                              18150
C                                                                              18200
C NT                NUMBER OF TYPES                                            18250
C NC                NUMBER OF CLASSES                                          18300
C INDBEG(NT)        SMALLEST INDEX NUMBER FOR EACH TYPE                        18350
C TYPENAMES(NT)     TYPE NAMES IN ORDER OF INCREASING INDEX NUMBER             18400
C CUMNO(NC)         CUMULATIVE NUMBER OF TYPES IN EACH CLASS                   18450
C BTYPES(NC)        NUMBER OF BLUE SIDE TYPES IN EACH CLASS                    18500
C INDCLAS(NC)       SMALLEST INDEX NUMBER IN EACH CLASS                        18550
C                                                                              18600
C                                                                              19000
C     COMMON/JCARD/JCARD(4)                                                    20000
C                                                                              21000
C JCARD(1)          PRINT, IF PRINT OF ITEMS IN DATA BASE IS DESIRED,          22000
C                   BLANK, OTHERWISE                                           23000
C JCARD(2)          FREQUENCY OF ABOVE PRINT                                   24000
C JCARD(3)          SELECT, IF ITEMS IN COUNTRY LIST ARE TO BE KEPT,           25000
C                   DELETE, IF THEY ARE TO BE DELETED                          26000
C JCARD(4)          NUMBER OF COUNTRIES IN THE COUNTRY LIST                    27000
C                                                                              28000
C ***************************************************************************  29000
C                                                                              30000
CUSE      IWSIDE    14OCT70   ********************************************     31000
      DIMENSION IWSIDE(2)                                                       1000
CEND      IWSIDE    ********************************************************  31000
C                                                                              32000
C USED IN SUBROUTINE PRTCOUNT                                                  33000
C                                                                              34000
C ***************************************************************************  35000
C                                                                              36000
CUSE      ITP       14OCT70   ********************************************     37000
      COMMON/ITP/ITP                                                            1000
      COMMON/NOPRINT/NOPRINT                                                    2000
      COMMON/MYIDENT/MYIDENT                                                    3000
CEND      ITP       ********************************************************  37000
C                                                                              38000
C USED IN SUBROUTINE SKIPFILE                                                  39000
C                                                                              40000
```

```
C ITP                TAPE NUMBER                                              41000
C                                                                             42000
C ***********************************************************************     43000
C                                                                             44000
CUSE      LDESIGS   140CT70   ***************************************         45000
      COMMON/LDESIGS/LDESIGS(500),LDESIGNO(500,3)                              1000
      COMMON/LDDESIGS/LDDESIGS(2),LLMIN(2)                                     2000
CEND      LDESIGS   ***************************************************       45000
C                                                                             46000
C USED IN SUBROUTINE NUMDELM                                                  47000
C                                                                             48000
C     COMMON/LDESIGS/LDESIGS(NT),LDESIGNO(NT,NR)                              49000
C                                                                             50000
C NT                 TOTAL NUMBER OF TYPES FOR BOTH SIDES COMBINED            51000
C NR                 NUMBER OF REGIONS                                        52000
C LDESIGS(NT)        FIRST TWO LETTERS OF TARGET DESIGNATOR CODE              53000
C LDESIGNO(NT,NR)    ARRAY CONTAINING SUMMARIES BY REGION AND TYPE OF         54000
C                    ITEMS OMITTED                                            55000
C                                                                             56000
C     COMMON/LDDESIGS/LDDESIGS(NS),LLMIN(NS)                                  57000
C NS                 NUMBER OF SIDES                                          58000
C LDDESIGS(NS)       NUMBER OF DIFFERENT TYPES OF WEAPONS DELETED             59000
C LLMIN(NS)          INTERNAL INDEX PARAMETER, =1 FOR BLUE, =251 FOR RED      60000
C                                                                             61000
C ***********************************************************************     62000
C                                                                             63000
CUSE      IDESIGS   140CT70   ***************************************         64000
      COMMON/IDESIGS/IDESIGS(500),DESIGNO(500,3)                               1000
      COMMON/NDDESIGS/NDDESIGS(2),KKMIN(2)                                     2000
      TYPE INTEGER DESIGNO                                                     3000
CEND      IDESIGS   ***************************************************       64000
C                                                                             65000
C USED IN SUBROUTINES CNTDES AND PRTCOUNT                                     66000
C                                                                             67000
C     COMMON/IDESIGS/IDESIGS(NT),DESIGNO(NT,NR)                               68000
C                                                                             69000
C NT                 TOTAL NUMBER OF TYPES FOR BOTH SIDES COMBINED            70000
C NR                 NUMBER OF REGIONS                                        71000
C IDESIGS(NT)        FIRST TWO LETTERS OF TARGET DESIGNATOR CODE              72000
C DESIGNO(NT,NR)     ARRAY CONTAINING SUMMARIES BY REGION AND TYPE OF         73000
C                    ITEMS KEPT                                               74000
C                                                                             75000
C     COMMON/NDDESIGS/NDDESIGS(NS),KKMIN(NS)                                  76000
C                                                                             77000
C NS                 NUMBER OF SIDES                                          78000
C NDDESIGS(NS)       NUMBER OF DIFFERENT TYPES OF WEAPONS KEPT                79000
C KKMIN(NS)          INTERNAL INDEX PARAMETER, =1 FOR BLUE, =251 FOR RED      80000
C                                                                             81000
C ***********************************************************************     82000
C                                                                             83000
C                                                                             84000
      DIMENSION CNTRLST(25)                                                   85000
      TYPE INTEGER CNTRLST                                                    85500
      DATA(MYOUT=6),(MYIN=4)                                                  86000
C                                                                             87000
C ***********************************************************************     88000
```

```
      C                                                                 89000
      C                                                                 90000
            CALL STORAGE                                                91000
      C                                                                 92000
      C INITIALIZATION                                                  93000
      C                                                                 94000
            IWSIDE(1)=4HBLUE                                            95000
            IWSIDE(2)=3HRED                                             96000
            ITROUBLE = 0                                                97000
            IZ = 1H0                                                    98000
            DO 500 M = 1,200                                            99000
            LDESIGS(M) = IDESIGS(M) = 8H                               100000
            DO 500 I = 1,3                                             101000
        500 LDESIGNO(M,I) = DESIGNO(M,I) = 0                           102000
            NOPRINT = 1                                                105000
            CALL PAGESKP                                               107000
            JFREQ = NFREQ = 0                                          108000
            MYIDENT = 8H BASEMOD                                       109000
            CALL INITAPE                                               110000
            NOUT=1                                                     111000
            ITOUT(1)=MYOUT                                             112000
            JOUT=MYOUT                                                 113000
      C                                                                114000
      C READ USER INPUT PARAMETERS                                     115000
      C                                                                116000
            READ 3500, (JCARD(JJ),JJ=1,4)                              117000
       3500 FORMAT (4(A8,2X))                                          118000
            NCNTRY=NUMGET(JCARD(4),8)                                  118500
            IF(NCNTRY .LE. 0)3501,3502                                 119000
       3501 CONTINUE                                                   120000
            ICFLG=0                                                    121000
            GO TO 3504                                                 122000
       3502 CONTINUE                                                   123000
            ICFLG=1                                                    124000
            READ 3503,(CNTRLST(JJJ),JJJ=1,NCNTRY)                      125000
       3503 FORMAT(8(A2,8X)/)                                          126000
       3504 CONTINUE                                                   127000
      C                                                                128000
      C WRITE USER INPUT PARAMETERS                                    129000
      C                                                                130000
            PRINT 3505                                                 131000
       3505 FORMAT (1H1,28X,16HINPUT PARAMETERS////)                   132000
            PRINT 3506, (JCARD(JJ),JJ=1,4)                             133000
       3506 FORMAT (1X,4(A7,3X)//)                                     134000
            IF (ICFLG .EQ. 0)3509,3507                                 135000
       3507 CONTINUE                                                   136000
            PRINT 3508, (CNTRLST(JJ), JJ=1,NCNTRY)                     137000
       3508 FORMAT (1X,8(A2,8X))                                       138000
       3509 CONTINUE                                                   139000
            PRINT 35081                                                140000
      35081 FORMAT (1H1)                                               140500
      C                                                                141000
      C DETERMINE FREQUENCY OF PRINTS FOR DATA BASE ITEMS              142000
      C                                                                143000
            IF (JCARD(1).EQ.5HPRINT) 3510,3520                         144000
       3510 CONTINUE                                                   145000
```

```
      JFREQ = NUMGET(JCARD(2),8)                                        146000
      IF (JFREQ) 3520,3512                                              147000
 3512 CONTINUE                                                          148000
      JFREQ = 1                                                         149000
 3520 CONTINUE                                                          150000
      MYIDENT = 7HINMODDB                                               151000
      CALL INITEDIT(MYIN)                                               152000
C                                                                       153000
C READ ITEM INTO MEMORY                                                 154000
C                                                                       155000
      CALL INPITEM                                                      156000
 995  CONTINUE                                                          157000
C                                                                       157100
C IS ITEM A TARGET                                                      157200
C                                                                       157300
      IF (ICLASS .GE. 1 .AND. ICLASS .LE. 15)9951,91                    157400
 9951 CONTINUE                                                          157500
C                                                                       158000
C SHOULD ITEM BE SELECTED OR DELETED ON THE BASIS OF CNTRYLOC           159000
C                                                                       160000
      IF(ICFLG .EQ.0)4965,4958                                          161000
 4958 CONTINUE                                                          162000
      IF (SIDE .EQ. 4HBLUE)49581,49582                                  162100
49581 CONTINUE                                                          162200
      II=1                                                              162300
      GO TO 49583                                                       162400
49582 CONTINUE                                                          162500
      II=2                                                              162600
49583 CONTINUE                                                          162700
      IF(JCARD(3) .EQ. 6HDELETE)4959,4962                               163000
C                                                                       164000
C DELETE ITEM IF CNTRYLOC IS CONTAINED IN CNTRLST                       165000
C                                                                       166000
 4959 CONTINUE                                                          167000
      DO 4961 LL=1,NCNTRY                                               168000
      IF(CNTRYLOC .EQ. CNTRLST(LL))4960,4961                            169000
 4960 CONTINUE                                                          170000
      CALL NUMDEL(II,DESIG,IREG)                                        171000
      GO TO 4005                                                        172000
 4961 CONTINUE                                                          173000
      GO TO 4965                                                        174000
C                                                                       175000
C SELECT ITEM IF CNTRYLOC IS CONTAINED IN CNTRLST                       176000
C                                                                       177000
 4962 CONTINUE                                                          178000
      DO 4964 LL=1,NCNTRY                                               179000
      IF(CNTRYLOC .EQ. CNTRLST(LL))4965,4964                            180000
 4964 CONTINUE                                                          181000
      CALL NUMDEL(II,DESIG,IREG)                                        182000
      GO TO 4005                                                        183000
 4965 CONTINUE                                                          184000
      CALL COUNTDES(II,DESIG,IREG)                                      184500
      IF (JFREQ) 3732,91                                                185000
 3732 CONTINUE                                                          186000
      NFREQ = NFREQ + 1                                                 187000
      IF (NFREQ.EQ.JFREQ) 3733,91                                       188000
```

```
 3733 CONTINUE                                                          189000
      NFREQ = 0                                                         190000
92    CALL PRITEM                                                       191000
   91 CONTINUE                                                          192000
      CALL OUTITEM                                                      193000
 4005 CONTINUE                                                          194000
      CALL NEXTITEM                                                     195000
      GO TO (995,60),ISWTERM                                            196000
60    CONTINUE                                                          197000
C                                                                       197200
C TRANSFER BRKPNT FILE FROM MYIN TO MYOUT                               197400
C                                                                       197600
      ITP=MYIN                                                          198000
      MYIDENT = 8HOBINDEX                                               198200
      CALL SETREAD                                                      198600
      CALL SKIPFILE(MYIN)                                               199000
      BUFFER IN(MYIN,1) (INDREG,INDCLAS(15))                            202000
 10   IF(UNIT,MYIN) 10,11,12,13                                         203000
   11 CONTINUE                                                          204000
      ITP=MYOUT                                                         204300
      CALL SETREAD                                                      204450
      CALL SKIPFILE(MYOUT)                                              204500
      BUFFER OUT(MYOUT,1) (INDBEG,INDCLAS(15))                          205000
 15   IF(UNIT,MYOUT) 15,14,12,13                                        206000
   14 CONTINUE                                                          207000
      ENDFILE MYOUT                                                     208000
      REWIND MYOUT                                                      209000
      REWIND MYIN                                                       210000
      GO TO 20                                                          212000
   12 CONTINUE                                                          213000
      PRINT 21,ITP                                                      214000
21    FORMAT(16HONO EOF ON UNIT ,I3)                                    215000
      GO TO 25                                                          216000
   13 CONTINUE                                                          217000
      PRINT 22,ITP                                                      218000
22    FORMAT(22H0PARITY ERROR ON UNIT ,I3)                              219000
   25 CONTINUE                                                          220000
      CALL ABORT                                                        220100
C                                                                       220200
C PRINT OUTPUT SUMMARIES                                                220400
C                                                                       220600
20    CONTINUE                                                          222000
      CALL PRTCOUNT                                                     223000
      DO 1135 J=1,2                                                     224000
      CALL PAGESKP                                                      225000
      PRINT 1130,IWSIDE(J)                                              226000
1130  FORMAT(10X,30HTARGETS DELETED BY REGION FOR ,A5,7HTARGETS /)      227000
      PRINT 8623                                                        228000
      ITOTRG1=ITOTRG2=ITOTRG3=0                                         229000
      IDOWNS=LLMIN(J)                                                   230000
      IUPS=IDOWNS+LDESIGS(J)-1                                          231000
      DO 1132 I=IDOWNS,IUPS                                             232000
      ITOTRG1=ITOTRG1+LDESIGNO(I,1)                                     233000
      ITOTRG2=ITOTRG2+LDESIGNO(I,2)                                     234000
      ITOTRG3=ITOTRG3+LDESIGNO(I,3)                                     235000
      JTOTAL=LDESIGNO(I,1)+LDESIGNO(I,2)+LDESIGNO(I,3)                  236000
```

```
      PRINT 8622,LDESIGS(I),LDESIGNO(I,1),LDESIGNO(I,2:,                238000
     *LDESIGNO(I,3),JTOTAL                                              239000
 1132 CONTINUE                                                          239500
      PRINT 8625                                                        240000
      JTOTAL=ITOTRG1+ITOTRG2+ITOTRG3                                    241000
      PRINT 8626,ITOTRG1,ITOTRG2,ITOTRG3,JTOTAL                         242000
 8626 FORMAT(17X,4(I5,5X)//)                                            243000
 8625 FORMAT(1H0,17X,35H<-----      -----      -----      ----- )       244000
 8622 FORMAT(10X,A2,5X,4(I5,5X))                                        245000
 8623 FORMAT(10X,42HDESIG  IREG1      IREG2      IREG3      TOTAL  /)   246000
 1135 CONTINUE                                                          247000
      RETURN                                                            249000
      END                                                               250000
```

IDENT INDMOD

PROGRAM LENGTH		01044
ENTRY POINTS	INDMOD	00223
BLOCK NAMES		
	PROCESS	01173
	EDITERM	00001
	EDITAPE	00015
	TYPENAME	01041
	JCARD	00004
	ITP	00001
	NOPRINT	00001
	MYIDENT	00001
	LDESIGS	03720
	LODESIGS	00004
	IDESIGS	03720
	NODESIGS	00004
EXTERNAL SYMBOLS		
	THEND.	
	QBQDICT.	
	STORAGE	
	PAGESKP	
	INITAPE	
	NUMGET	
	INITEDIT	
	INPITEM	
	NUMDEL	
	COUNTDES	
	PRITEM	
	OUTITEM	
	NEXTITEM	
	SETREAD	
	SKIPFILE	
	ABORT	
	PRTCOUNT	
	QBQIFUNI	
	EFT.	
	REW.	
	TSH.	
	BFI.	
	STH.	
	BFO.	
	QNSINGL.	

X00020	ABORT	00636										
C00312	ABRATE											
C00334	ADBLI											
C00340	ADBLR											
C00414	ADEFCMP											
C00413	ADEFZON											
C00363	AGX											
C00364	AGY											
C00367	AHOB											
C00300	ALERTDBL											
C00302	ALERTDLY											
C00203	AREA											
C00241	ASMTYPE											
C00321	ATTRCORR											
C00320	ATTRLEG											
C00325	ATTRSUPF											
C00416	AZONI											
C00417	AZON2											
C00420	AZON3											
C00361	BCODE											
P01012	BEGIN.	01013										
C00161	BENO											
X00026	BFI.	00552										
X00030	BFO.	00573										
C00210	BLEGNO											
C01003	BTYPES											
C00166	CATCODE											
C00304	CCREL											
C00267	CEP											
C00147	CLASS											
C00377	CLASST											
P00005	CNTRLST	00335	00377	00463	00501							
C00153	CNTRYLOC	00461	00461	00477	00477							
C00152	CNTRYOWN											
C00401	CNTYLOCT											
C00400	CNTYOWNT											
P00762	CNVRTI.	00304	00333	00360	00377	00622	00433	00653	00717	00720	00721	00722
		00724	00750	00751	00752	00753						
C00360	CODE											
X00012	COUNTDES	00513										
C00421	CPACTY											
P00040	CRFMT.	00313	00342	00350	00365	00405	00413	00625	00636	00656	00756	00756
		00756	00756									
C00764	CUMNO											
C00213	DATEIN											
C00214	DATEOUT											
C01133	DEF											
C00323	DEFRANGE											
C00343	DELAY											
C00244	DELTA											
C00171	DESIG	00466	00510	00515								
C00764	DESIGNO	00247	00250									
C00365	DGX											
C00366	DGY											

C00370	DMOB										
P00001	DICT.	00225	00230	00261	00267	00300	00312	00314	00327	00341	00344	00347
		00352	00364	00372	00404	00407	00412	00417	00430	00433	00465	00507
		00514	00527	00531	00533	00544	00546	00553	00557	00565	00567	00574
		00600	00605	00610	00613	00617	00624	00630	00635	00637	00641	00645
		00650	00655	00660	00663	00714	00726	00735	00740	00746	00755	
C00437	EFECNES1										
C00440	EFECNES2										
C00327	EFECTNES										
X00023	EFT.	00604									
P01014	ENDING.	00226	00760	01012							
C00359	EVENT										
C00351	EVENTN										
P00000	EXIT.	01015									
C00243	FFRAC										
C00432	FLAG										
C00160	FLTNO										
P00040	FORMAT.	00231	00233	00235	00236	00264	00413	00425	00445	00454	00541	
C00154	FUNCTION										
C00245	FVALH1										
C00251	FVALT1										
C00252	FVALT2										
P00313	GG00000.	00276									
P00342	GG00001.	00325									
P00350	GG00002.	00342									
P00365	GG00003.	00350									
P00405	GG00004.	00370									
P00413	GG00005.	00405									
P00625	GG00010.	00615									
P00636	GG00011.	00626									
P00656	GG00012.	00646									
P00664	GG00013.	00656									
P00727	GG00014.	00712									
P00741	GG00015.	00733									
P00756	GG00016.	00744									
C00163	H1										
C00164	H2										
C00324	HILOATTR										
P01020	I	00244	00673	00677	00727	01004					
C00344	IALERT										
C00354	IALT										
C00224	IARDEF										
C00404	IATTACK										
P01021	ICFLG	00322	00324	00365	00442						
C00227	ICLASS	00434	00434	00437	00437						
C00373	ICLASST										
C00235	ICOMPLEX										
C00422	ICORR										
C00424	IDRL										
C00000	IDESIGS	00241	00242								
P01022	IDOWNS	00670	00673								
C00362	IDUO										
P00437	IF00001.	00435									
C00216	IGIW										

```
P01023  IGOTO.      00535
C00234  IGROUP
P01024  II          00451   00453   00469   00510   00515
C00423  IMIRV
P00763  IN00002.    00246   00764   00774   00776   01010
C00000  IND8EG      00554   00575
C01022  INDCLAS     00554   00575
C00174  INDEXNO
P00223  INDMOD      00223
C00346  INDV
X00005  INITAPE     00266
X00007  INITEDIT    00427
C00003  INITEM
P01012  INITIAL.    00226
X00010  INPITEM     00432
C00347  INTAR
C00000  INTP
C00233  IOTHER
C00402  IPENMODE
C00212  IPOINT
C00403  IRECMODE
C00232  IREFUEL
C00231  IREG        00467   00511   00519
C00265  IREP
C00330  ISITE
C00000  ISWTERM     00534   00534
C00236  ITGT
C00426  ITIME
P01025  ITOTRG1     00666   00676   00701   00741   00750
P01026  ITOTRG2     00665   00701   00703   00742   00751
P01027  ITOTRG3     00665   00704   00706   00742   00752
C00002  ITOUT       00272   00273
C00000  ITP         00540   00540   00563   00563   00621   00621   00632   00632
P01030  ITROUBLE    00234
C00230  ITYPE
C00374  ITYPET
P01031  IUPS        00672   00731
C00331  IVULN
P00003  IWSIDE      00232   00233   00653
C00326  IWTYP2
P01032  IZ          00235
P00555  .10         00560
P00562  .11         00560
P00727  .1132
P00756  .1135
P00615  .12         00561   00602
P00626  .13         00561   00602
P00603  .14         00601
P00576  .15         00601
P00640  .20         00614
P00636  .25         00625
P00321  .3501       00320
P00323  .3502       00320
P00342  .3504       00322
```

```
P00370  .3507      00366
P00405  .3509      00367
P00416  .3510
P00423  .3512
P00425  .3520      00415  00422
P00521  .3732      00520
P00524  .3733
P00532  .4005      00470  00512
P00445  .4958      00443
P00450  .49581
P00452  .49582     00447
P00454  .49583     00451
P00457  .4959
P00464  .4960
P00471  .4961      00463
P00475  .4962      00456
P00503  .4964      00501
P00513  .4965      00444  00474  00502
P00247  .500
P00537  .60
P00530  .91        00436  00441  00520  00523
P00526  .92
P00434  .995       00536
P00442  .9951      00440
P00040  ..100000   00231
P00041  ..100001   00233
P00042  ..100002   00235
P00043  ..100003   00240
P00044  ..100004   00264
P00116  ..100005   00414
P00117  ..100006   00425
P00120  ..100007   00446
P00121  ..100008   00455
P00122  ..100009   00541
P00140  ..1130     00651
P00123  ..21       00620
P00131  ..22       00631
P00045  ..3500     00301
P00053  ..3503     00330
P00062  ..3505     00345
P00073  ..3506     00353
P00103  ..3508     00373
P00112  ..35081    00410
P00177  ..8622     00715
P00210  ..8623     00661
P00164  ..8625     00736
P00154  ..8626     00747
P01033  J          00643  00652  00756
C00000  JCARD      00306  00306  00315  00357  00357  00413  00413  00420  00454  00454
P01034  JFREQ      00263  00421  00424  00517  00523
P01035  JJ         00303  00305  00307  00355  00356  00381  00375  00376  00400
P01036  JJJ        00331  00334  00335
C00014  JOUT       00274  00275
P01037  JTOTAL     00711  00723  00743  00753
```

C00237	JTYPE										
C00375	JTYPET										
C00002	KKMIN										
C00322	KORSTYLE										
C00204	LAT										
C00764	LDESIGNO	00250	00251	00677	00700	00702	00702	00704	00705	00706	00707	00707
		00710	00720	00721	00722							
C00000	LDESIGS	00242	00243	00716	00716							
C00206	LEGNO											
C01153	LGLOB											
C00201	LINK											
P01040	LL	00460	00462	00471	00476	00500	00503					
C00002	LLMIN	00666	00667									
C00000	LODESIGS	00670	00671									
C00205	LONG											
P01041	M	00236	00241	00253	00771							
C00167	MAJOR											
C00256	MAXFACTV											
C00255	MAXFRACV											
C00254	MAXKILL											
C00357	MCODE											
C00253	MINKILL											
C00170	MINOR											
C00223	MISDEF											
C00217	MVA											
C00407	MWHDS											
C00000	MYIDENT	00264	00265	00428	00426	00542	00542					
P00037	MYIN	00431	00537	00547	00550	00555	00611					
P00036	MYOUT	00272	00274	00562	00570	00571	00576	00603	00606			
C00332	NADBLI											
C00333	NADBLR											
C00415	NAINT											
C00405	NAL											
C00301	NALRTDBL											
C00303	NALRTOLY											
C00156	NAME											
C00335	NAREADEC											
C00262	NASMS											
C00002	NC											
C00263	NCM											
P01042	NCNTRY	00316	00317	00336	00401	00472	00504					
C00242	NDECOYS											
C00411	NDET											
X00015	NEXTITEM	00532										
C00211	NEXTZONE											
P01043	NFREQ	00263	00521	00522	00525							
C00000	NI											
C00176	NMPSITE											
C00177	NOALERT											
C00260	NOBOMB1											
C00261	NOBOMB2											
C00000	NODESIGS											
C00200	NOINCOM											
C00433	NOPERSQ1											

C00434	NOPERSQ2		
C00435	NOPERSQ3		
C00175	NOPERSQN		
C00000	NOPRINT	00256	00257
C00001	NOUT	00270	00271
C00410	NPEN		
C00356	NTARG		
C00337	NTINT		
C00436	NUMDBL		
X00011	NUMDEL	00464	00506
X00006	NUMGET	00313	00416
C00001	NV		
C00336	NWHDS		
C00355	NWPNS		
C00345	NWTYPE		
X00014	OUTITEM	00530	
P00764	P00000.U	00766	
P00776	P00001.U	01001	
X00004	PAGESKP	00260	00644
C00412	PARRIVE		
C00264	PAYLOAD		
C00315	PDES		
C00266	PDUD		
C00277	PEN		
C00316	PFPF		
C00314	PINC		
C00317	PKMIS		
C00425	PKNAV		
C00311	PLABT		
C00352	PLACE		
C00353	PLACEN		
C00215	POP		
C00173	POSTURE		
C00313	PRABT		
C00372	PRIMETAR		
X00013	PRITEM	00526	
X00021	PRTCOUNT	00640	
C00427	PSASW		
X00002	Q8QDICT.	00000	00224
X00022	Q8QIFUNI	00556	00577
X00031	QNSINGL.	00761	
C00220	RADIUS		
C00270	RANGE		
C00271	RANGEDEC		
C00272	RANGEREF		
C00276	REL		
C00207	RESERVE		
X00024	REW.	00607	00612
X00016	SETREAD	00543	00564
C00151	SIDE	00445	00445
C00155	SITENO		
X00017	SKIPFILE	00545	00566
C00275	SPDASH		
C00274	SPDLO		

C00273	SPEED										
C00157	SQNNO										
X00027	STH.	00343	00351	00371	00406	00616	00627	00647	00657	00713	00734	00745
X00003	STORAGE	00227										
C00246	T1										
C00247	T2										
C00250	T3										
C00406	TAIM										
C00225	TARDEFHI										
C00226	TARDEFLO										
C00172	TASK										
C00431	TGTSTAT										
X00001	THEND.	00311	00340	00346	00363	00403	00411	00623	00634	00654	00662	00725
		00737	00754									
C00342	TIME										
C00341	TIMEN										
C00306	TMDEL										
C00430	TPASW										
C00310	TRETARG										
P00336	TS00004.	00332									
P00401	TS00006.	00375									
P00472	TS00007.	00460									
P00504	TS00010.	00476									
P00731	TS00012.	00675									
X00025	TSH.	00277	00326								
C00305	TTOS										
C00307	TVUL										
C00150	TYPE										
C00443	TYPE1										
C00444	TYPE2										
C00372	TYPENAME										
C00376	TYPET										
P00770	UP00000.	00237	00254	00764	00771	00772	00773	00775	00775		
P01003	UP00001.	00245	00674	00730	00777	01004	01005	01006	01010	01011	
C00221	VAL										
C00441	VAL1										
C00442	VAL2										
C00222	VALU										
C00147	VALUE										
C00162	VULN										
C00165	WACNO										
C00240	WHDTYPE										
C00371	WHDTYPEN										
P00240	WS00001.	00255									
P00247	WS00002.	00252									
P00304	WS00003.	00310									
P00333	WS00004.	00337	00337								
P00356	WS00005.	00362									
P00576	WS00006.	00402	00402								
P00461	WS00007.	00473	00473								
P00477	WS00010.	00505	00505								
P00644	WS00011.	00757									
P00676	WS00012.	00732	00732								
C00257	YIELD										

C00202 ZONE
00563 SYMBOLS

```
      FUNCTION MYZONE(ZLAT,ZLONG)                                        1000
CSUBR      MYZONE    14OCT70  ***************************************** 16000
C                                                                        2000
C                                                                        3000
C THIS SUBROUTINE DETERMINES IN WHICH DEFENSIVE ZONE A GIVEN TARGET IS   4000
C LOCATED                                                                5000
C                                                                        6000
C                                                                        7000
C ********************************************************************** 8000
C                                                                        9000
CUSE       MYZONES   14OCT70  ***************************************** 10000
      COMMON/MYZONES/BLAT(500),BLONG(500),IZIT(500),ILINK(500)           1000
     1,              MINBLUE,MAXBLUE,MINRED,MAXRED                       2000
     2,             MINTEST,JLINK,NTEST,MIN                             3000
CEND       MYZONES   ********************************************************** 10000
CUSE       MYSIDE    14OCT70  ***************************************** 11000
      COMMON/MYSIDE/MYSIDE                                               1000
CEND       MYSIDE    ********************************************************** 11000
      IF(MYSIDE.EQ.3HRED) 101,102                                        12000
 101  IZMIN=MINRED                                                       13000
      IZMAX=MAXRED                                                       14000
      GO TO 103                                                          15000
 102  IZMIN=MINBLUE                                                      16000
      IZMAX=MAXBLUE                                                      17000
 103  CONTINUE                                                           18000
      DO 400 ITIMES=IZMIN,IZMAX                                          19000
      THETA=0.                                                           20000
C                                                                        21000
C CONSIDER FIRST ZONE                                                    22000
C                                                                        23000
      MINTEST=MIN=IZIT(ITIMES)                                           24000
      IF(MIN.LE.0) 400,104                                               25000
C                                                                        26000
C CALCULATE SUM OF ANGLES                                                27000
C                                                                        28000
 104  NTEST=0                                                            29000
      MYZONE=ITIMES                                                      30000
 200  JLINK=ILINK(MIN)                                                   31000
      X1=BLAT(MIN)                                                       32000
      Y1=BLONG(MIN)                                                      33000
      X2=BLAT(JLINK)                                                     34000
      Y2=BLONG(JLINK)                                                    35000
      Y3=DIFFLONG(Y1,ZLONG)                                              36000
      X3=X1-ZLAT                                                         37000
      D1=X3*X3+Y3*Y3                                                     38000
      IF(D1.EQ.0.) 500,201                                               39000
 201  X4=X2-ZLAT                                                         40000
      Y4=DIFFLONG(Y2,ZLONG)                                              41000
      D2=X4*X4+Y4*Y4                                                     42000
      IF(D2.EQ.0.) 500,202                                               43000
 202  SS=SQRTF(D1*D2)                                                    44000
      Y5=DIFFLONG(Y1,Y2)                                                 45000
      T= ACOSF((D1+D2-(X1-X2)**2-Y5**2)/(2.*SS))                         46000
      IF(X3*Y4-X4*Y3) 203,500,204                                        47000
 203  SIGN=-1.0                                                          48000
      GO TO 205                                                          49000
```

```
      SIGN=1.0                                                          50000
      THETA=THETA+T*SIGN                                                51000
      IF(MINTEST.EQ.JLINK) 300,206                                      52000
206   MIN=JLINK                                                         53000
      NTEST=NTEST+1                                                     54000
      IF(NTEST.GT.25) 600,200                                           55000
300   IF(ABSF(THETA).GT.6.) 500,400                                     56000
400   CONTINUE                                                          57000
      MYZONE=0                                                          58000
500   CONTINUE                                                          59000
      RETURN                                                            60000
600   PRINT 601,NTEST,MYZONE                                            61000
601   FORMAT(10X,19HLOOP IN ZONE FINDER ,I3,19H ITERATIONS IN ZONE ,I3)  62000
      STOP                                                              63000
      END                                                               64000
```

IDENT MYZONE

PROGRAM LENGTH		00311
ENTRY POINTS	MYZONE	00021
BLOCK NAMES		
	MYZONES	03730
	MYSIDE	00001
EXTERNAL SYMBOLS		
	THEND.	
	Q8QSTOPS	
	Q8QDICT.	
	DIFFLONG	
	SQRTF	
	ACOSF	
	STH.	
	QNSINGL.	

X00006	ACOSF	00140									
P00220	BEGIN.	00242	00251	00255							
C00000	BLAT	00057	00063								
C00764	BLONG	00060	00061	00065	00065						
P00217	CNVRT1.	00205	00207								
P00003	CRFMT.	00212									
P00267	D1	00077	00116	00131							
P00270	D2	00113	00117	00131							
P00001	DICT.	00023	00070	00106	00121	00124	00141	00202	00211	00214	00223	00224
X00004	DIFFLONG	00067	00105	00123							
P00243	ENDING.	00024	00177	00214	00220	00221	00221	00222	00222		
P00000	EXIT.	00247									
P00003	FORMAT.	00025									
P00071	FP00001.	00240									
P00073	FP00002.	00232	00233								
P00103	FP00003.	00234	00235								
P00107	FP00004.	00241									
P00260	GETPL.	00225	00236								
P00250	GETPU.	00230	00254								
P00212	GG00000.	00200									
C02734	ILINK	00056									
P00220	INITIAL.	00024									
P00271	ITIMES	00042	00044	00054	00173						
C01750	IZIT	00045	00045								
P00272	IZMAX	00033	00040	00174							
P00273	IZMIN	00031	00036	00041							
P00030	.101										
P00035	.102	00027									
P00041	.103	00034									
P00052	.104	00050									
P00055	.200	00164	00164								
P00102	.201	00100									
P00116	.202	00114									
P00147	.203	00146									
P00151	.204	00146									
P00153	.205	00150									
P00160	.206	00157									
P00166	.300	00157									
P00173	.400	00050	00051	00171	00171						
P00177	.500	00101	00115	00145	00172						
P00200	.600	00165									
P00261	.ERASER.	00075	00077	00111	00113	00117	00127	00130	00132	00134	00134	00136
		00136	00137	00137	00143	00145						
P00003	..100000	00026									
P00004	..601	00203									
C03725	JLINK	00056	00062	00063	00156	00160	00160				
C03721	MAXBLUE	00037	00037								
C03723	MAXRED	00032	00032								
C03727	MIN	00046	00047	00055	00055	00161					
C03720	MINBLUE	00035	00035								
C03722	MINRED	00030	00030								
C03724	MINTEST	00046	00155	00156							
C00000	MYSIDE	00025	00025								
P00021	MYZONE	00021									

C03726	NTEST	00052	00053	00161	00162	00163	00204	00204
P00236	PF00002.	00231						
P00242	PF00003.	00237						
X00003	Q8QDICT.	00000	00022					
X00002	Q8QSTOPS	00213						
X00010	QNSINGL.	00216						
P00274	SIGN	00150	00152	00154				
X00005	SQRTF	00120						
P00275	SS	00122	00135					
X00007	STH.	00201						
P00276	T	00142	00153					
X00001	THEND.	00210						
P00277	THETA	00044	00154	00155	00166			
P00174	TS00001.	00042						
P00215	VALUE.	00054	00176	00206	00246			
P00043	WS00001.	00175	00175					
P00300	X1	00060	00072	00126				
P00301	X2	00064	00102	00127				
P00302	X3	00074	00075	00142				
P00303	X4	00104	00110	00111	00144			
P00304	Y1	00062	00071	00125				
P00305	Y2	00066	00107	00125				
P00306	Y3	00072	00076	00076	00144			
P00307	Y4	00110	00112	00112	00143			
P00310	Y5	00126	00132	00133				
P00003	ZLAT	00073	00103					
P00003	ZLONG	00071	00107					

00120 SYMBOLS

```
      SUBROUTINE NUMDEL(II,MYDESIG,IREG)                                    1000
CSUBR      NUMDEL    14OCT70   ********************************************* 18000
C                                                                           2000
C                                                                           3000
C THIS SUBROUTINE KEEPS A TALLY BY REGION AND TYPE OF THE TARGETS WHICH     4000
C HAVE BEEN DELETED FOR EACH SIDE                                           5000
C                                                                           6000
C                                                                           7000
C ************************************************************************ 8000
C                                                                           9000
CUSE       LOESIGS   14OCT70   ********************************************* 10000
      COMMON/LDESIGS/LDESIGS(500),LOESIGNO(500,3)                           1000
      COMMON/LODESIGS/LODESIGS(2),LLMIN(2)                                  2000
CEND       LOESIGS   ********************************************************** 10000
      DATA(LODESIGS=0,0),(LLMIN=1,251)                                      11000
C                                                                           12000
C SEPARATE THE TARGET DESIGNATOR CODE (MYDESIG) INTO THE ALPHABETIC          13000
C (LOES) AND THE NUMERIC (KDESIG) PORTIONS                                  14000
C                                                                           15000
      DECODE (8,100,MYDESIG)LOES,KDESIG                                     16000
  100 FORMAT (A2,I3,3X)                                                     17000
C                                                                           18000
C DETERMINE THE REGION IN WHICH THE TARGET IS LOCATED                       19000
C                                                                           20000
      IF (KDESIG.LT.500)1,2                                                 21000
    1 CONTINUE                                                              22000
      IREG = 1                                                              23000
      GO TO 5                                                               24000
    2 CONTINUE                                                              25000
      IF (KDESIG.LT.800)3,4                                                 26000
    3 CONTINUE                                                              27000
      IREG = 2                                                              28000
      GO TO 5                                                               29000
    4 CONTINUE                                                              30000
      IREG = 3                                                              31000
    5 CONTINUE                                                              32000
C                                                                           33000
C BLUE DATA ARE STORED IN SPACES 1 THROUGH 250, RED DATA ARE STORED IN       34000
C SPACES 251 THROUGH 500                                                    35000
C                                                                           36000
      KK=LLMIN(II)                                                          37000
      MAX=KK+LODESIGS(II)-1                                                 38000
C                                                                           39000
C CHECK TO SEE WHETHER OTHER TARGETS OF THIS TYPE HAVE BEEN RECORDED        40000
C FOR THIS SIDE                                                             41000
C                                                                           42000
      DO 20 J=KK,MAX                                                        43000
      IF(LOES.EQ.LOESIGS(J)) 11,20                                          44000
C                                                                           45000
C TARGET IS FIRST OF ITS TYPE, MAKE A RECORD OF IT TOGETHER WITH ITS        46000
C TYPE                                                                      47000
C                                                                           48000
 20   CONTINUE                                                             49000
      J=MAX+1                                                               50000
      LODESIGS(II)=LODESIGS(II)+1                                           51000
      LOESIGS(J)=LOES                                                       52000
```

```
      C                                                                 53000
      C INCREMENT THE NUMBER OF TARGETS OF THIS TYPE (IN THE APPROPRIATE 54000
      C REGION) BY ONE                                                  55000
      C                                                                 56000
         11 CONTINUE                                                    57000
            LDESIGNO(J,IREG)=LDESIGNO(J,IREG)+1                         58000
            RETURN                                                      59000
            END                                                         60000
```

IDENT NUMDEL

PROGRAM LENGTH		00216
ENTRY POINTS	NUMDEL	00010
BLOCK NAMES		
	LDESIGS	03720
	LODESIGS	00004
EXTERNAL SYMBOLS		
	THEND.	
	QBQDICT.	
	DEC.	
	QNSINGL.	

```
P00136  BEGIN.      00172   00200   00204
P00106  CNVRTL.     00020   00022
P00003  CRFMT.      00026
X00003  DEC.        00015
P00001  DICT.       00012   00016   00025   00142   00143
P00173  ENDING.     00013   00104   00137   00140   00140   00141   00141
P00000  EXIT.       00176
P00003  FORMAT.
P00017  FP00001.    00157
P00031  FP00002.    00164   00165
P00040  FP00003.    00166   00167
P00044  FP00004.    00170   00171
P00047  FP00005.    00151   00152
P00073  FP00006.    00153   00154
P00127  FP00007.    00162   00163
P00207  GETPL.      00144   00155
P00177  GETPU.      00147   00160   00203
P00026  GG00000.    00014
P00003  II          00047   00073
P00107  IN00003.    00101   00113   00123   00134
P00137  INITIAL.    00013
P00003  IREG        00032   00041   00045   00127
P00031  .1
P00101  .11         00063
P00064  .20         00062
P00035  .2          00027   00030
P00040  .3
P00044  .4          00036   00037
P00047  .5          00034   00043
P00003  ..100       00017
P00211  J           00055   00061   00064   00071   00077   00120
P00212  KDESIG      00023   00026   00035
P00213  KK          00051   00054
P00214  LDES        00021   00060   00076
C00764  LDESIGNO    00102   00102   00103
C00000  LDESIGS     00061   00062   00077   00100
C00002  LLMIN       C00002  00050   00050
C00000  LODESIGS    00003   00052   00052   00074   00074   00075
P00215  MAX         00054   00066   00070
P00003  MYDESIG     00017
P00010  NUMDEL      00010
P00113  P00000.U    00115
P00155  PF00002.    00150
P00160  PF00003.    00156
P00172  PF00004.    00161
X00002  QSQDICT.    00000   00011
X00004  QNSINGL.    00105
P00111  RELCON..    00136
X00001  THEND.      00024
P00066  TS00001.    00057
P00117  UP00000.    00054   00065   00072   00113   00120   00121   00122   00124   00124
P00126  UP00002.    00033   00042   00046   00110   00130   00131   00132   00134   00135
P00060  WS00001.    00067   00067
   00065 SYMBOLS
```

```
      SUBROUTINE PRINTIT                                                    1000
CSUBR      PRINTIT   140CT70  ********************************************* 19000
C                                                                           2000
C                                                                           3000
C THIS SUBROUTINE DETERMINES WHETHER THE ITEM BEING PROCESSED BY            4000
C SUBROUTINE DBMOD SHOULD BE PRINTED AND, IF SO, PRINTS IT                  5000
C                                                                           6000
C                                                                           7000
C ************************************************************************* 8000
C                                                                           9000
CUSE       PRINTS    140CT70  ********************************************* 10000
      COMMON/PRINTS/IFREQ,IPRT,IPRINT                                       1600
CEND       PRINTS    ********************************************************* 10000
 8519 IF(IPRINT .EQ. 1)8520,8522                                            11000
 8520 IPRT=IPRT+1                                                           12000
C                                                                           13000
C CHECK TO SEE WHETHER THIS ITEM IS TO BE PRINTED                           14000
C                                                                           15000
      IF(IPRT.EQ.IFREQ) 8521,8522                                           16000
 8521 IPRT=0                                                                17000
 8523 CALL PRITEM                                                           18000
 8522 RETURN                                                                19000
      END                                                                   20000
```

IDENT PRINTIT

```
PROGRAM LENGTH              00023
ENTRY POINTS     PRINTIT    00003
BLOCK NAMES
                 PRINTS     00003
EXTERNAL SYMBOLS
                 Q8QDICT.
                 PRITEM
```

```
P00021  BEGIN.      00021
P00001  DICT.       00005   00017
P00022  ENDING.     00006   00020
P00000  EXIT.       00022
C00000  IFREQ       00013
P00021  INITIAL.    00006
C00002  IPRINT      00007   00007
C00001  IPRT        00011   00011   00012   00014   00015
P00007  .8519
P00011  .8520
P00014  .8521
P00020  .8522       00010   00013
P00016  .8523
P00003  PRINTIT     00003
X00002  PRITEM      00016
X00001  QBQDICT.    00000   00004
   00020 SYMBOLS
```

```
      SUBROUTINE PRTCOUNT                                                1000
CSUBR      PRTCOUNT  14OCT70  ********************************************  33000
C                                                                        2000
C                                                                        3000
C THIS SUBROUTINE EFFECTS THE PRINTING OF THE RECORDS OF TARGET COUNT     4000
C BY REGION WHICH WERE KEPT BY SUBROUTINE CNTDES FOR THE TARGETS         5000
C PROCESSED AND KEPT BY SUBROUTINE INDMOD                                6000
C                                                                        7000
C                                                                        8000
C ***********************************************************************  9000
C                                                                       10000
CUSE       IDESIGS   14OCT70  ********************************************  11000
      COMMON/IDESIGS/IDESIGS(500),DESIGNO(500,3)                         1000
      COMMON/NODESIGS/NODESIGS(2),KKMIN(2)                               2000
      TYPE INTEGER DESIGNO                                               3000
CEND       IDESIGS   ***************************************************  11000
CUSE       IWSIDE    14OCT70  ********************************************  12000
      DIMENSION IWSIDE(2)                                                1000
CEND       IWSIDE    ***************************************************  12000
      IWSIDE(1)=4HBLUE                                                   13000
      IWSIDE(2)=3HRED                                                    14000
      DO 7555 J=1,2                                                      15000
      CALL PAGESKP                                                       16000
      PRINT 8620, IWSIDE(J)                                              17000
 8620 FORMAT(10X,27HTARGET COUNT BY REGION FOR ,A5,7HTARGETS  /)         18000
      PRINT 8623                                                         19000
      ITOTRG1=ITOTRG2=ITOTRG3=0                                          20000
      IDOWNS=KKMIN(J)                                                    21000
      IUPS=IDOWNS+NODESIGS(J)-1                                          22000
      DO 8621 I=IDOWNS,IUPS                                              23000
C                                                                        24000
C INCREMENT THE TOTAL NUMBER OF TARGETS PER REGION WHICH HAVE BEEN       25000
C PRINTED                                                                26000
C                                                                        27000
      ITOTRG1=ITOTRG1+DESIGNO(I,1)                                       28000
      ITOTRG2=ITOTRG2+DESIGNO(I,2)                                       29000
      ITOTRG3=ITOTRG3+DESIGNO(I,3)                                       30000
      JTOTAL=DESIGNO(I,1)+DESIGNO(I,2)+DESIGNO(I,3)                      31000
C                                                                        32000
C PRINT THE NUMBER OF TARGETS BY TYPE THAT ARE PRESENT IN EACH REGION    33000
C                                                                        34000
 8621 PRINT 8622,IDESIGS(I),DESIGNO(I,1),DESIGNO(I,2),DESIGNO(I,3),      35000
     *JTOTAL                                                             36000
      PRINT 8625                                                         37000
      JTOTAL=ITOTRG1+ITOTRG2+ITOTRG3                                     38000
C                                                                        39000
C PRINT THE TOTALS FOR EACH REGION                                       40000
C                                                                        41000
      PRINT 8626,ITOTRG1,ITOTRG2,ITOTRG3,JTOTAL                          42000
 8626 FORMAT(17X,4(I5,5X)//)                                             43000
 8625 FORMAT(1H0,17X,35H-----     -----     -----     ----- )            44000
 8622 FORMAT(10X,A2,5X,4(I5,5X))                                         45000
 8623 FORMAT(10X,42HDESIG  IREG1     IREG2     IREG3     TOTAL  /)       46000
 7555 CONTINUE                                                           47000
      RETURN                                                             48000
      END                                                                49000
```

IDENT PRTCOUNT

PROGRAM LENGTH		00232
ENTRY POINTS	PRTCOUNT	00372
BLOCK NAMES		
	IDESIGS	03720
	NODESIGS	00004
EXTERNAL SYMBOLS		
	THEND.	
	QBODICT.	
	PAGESKP	
	STH.	
	QNSINGL.	

```
P00220  BEGIN.      00220
P00217  CNVRT1.     00111   00155   00156   00157   00160   00162   00205   00206   00207   00210
P00005  CRFMT.      00114   002     00213   00213   00213
C00764  DESIGNO     00134   00135   00137   00137   00141   00142   00143   00144   00144   00145   00156
                    00157   00160
P00001  DICT.       00074   00103   00106   00113   00116   00121   00151   00164   00172   00175   00203
                    00212
P00221  ENDING.     00075   00215
P00000  EXIT.       00221
P00005  FORMAT.     00076   00100
P00114  GG00000.    00104
P00122  GG00001.    00114
P00165  GG00002.    00147
P00176  GG00003.    00170
P00213  GG00004.    00201
P00222  I           00131   00134   00153   00165
C00000  IDESIGS     00154   00154
P00223  IDOWNS      00126   00131
P00220  INITIAL.    00075
P00224  ITOTRG1     00124   00133   00139   00176   00205
P00225  ITOTRG2     00123   00136   00140   00177   00206
P00226  ITOTRG3     00123   00141   00143   00177   00207
P00227  IUPS        00130   00166
P00003  INSIDE      00077   00100   00111
P00213  .7555
P00147  .8621
P00005  ..100000    00076
P00006  ..100001    00100
P00007  ..8620      00107
P00046  ..8622      00152
P00057  ..8623      00117
P00033  ..8625      00173
P00023  ..8626      00204
P00230  J           00101   00110   00213
P00231  JTOTAL      00146   00161   00200   00210
C00002  KKMIN       00124   00125
C00000  NODESIGS    00126   00127
X00003  PAGESKP     00102
P00072  PRTCOUNT    00072
X00002  QRGDICT.    00000   00073
X00005  QNSINGL.    00216
X00004  STH.        00105   00115   00150   00171   00202
X00001  THEND.      00112   00120   00163   00174   00211
P00166  TS00002.    00132
P00102  WS00001.    00214
P00133  WS00002.    00167   00167
   00054 SYMBOLS
```

```
      SUBROUTINE RDTYPES(LSIDE)                                          1000
CSUBR      RDTYPES   14DEC70   ***************************************** 20000
C                                                                        2000
C                                                                        3000
C THIS SUBROUTINE READS IN THE VALUES OF THE SCALING FACTORS USED IN      4000
C THE CALCULATION OF NOINCOM AND NOALERT                                 5000
C                                                                        6000
C                                                                        7000
C ********************************************************************** 8000
C                                                                        9000
CUSE       NRTYPES   2NOV70    ***************************************** 10000
      COMMON/NRTYPES/NRTYPES(2),MTYPES(2),NNTYPES(100),ALERTNO(100),     1000
     1 COMINNO(100)                                                      2000
CEND       NRTYPES   ********************************************************** 10000
      IF (LSIDE .EQ. 3HRED)20,10                                         10100
   10 CONTINUE                                                           10200
      NS=1                                                               10300
      GO TO 30                                                           10400
   20 CONTINUE                                                           10500
      NS=2                                                               10600
   30 CONTINUE                                                           10700
      READ 1,JTYPES,MTYPES(NS)                                           11000
 1    FORMAT(A8,2X,A8)                                                   12000
C                                                                        13000
C IS PARAMETER IDENTIFIER CORRECT                                        14000
C                                                                        15000
      IF(JTYPES.EQ.7HNOTYPES) 2,8                                        16000
    2 NTYPES=NUMGET(MTYPES(NS),8)                                        17000
C                                                                        18000
C BLUE DATA ARE STORED IN SPACES 1 THROUGH 50, RED DATA ARE STORED IN     19000
C SPACES 51 THROUGH 100                                                  20000
C                                                                        21000
      IF(LSIDE.EQ.3HRED) 4,3                                             22000
 3    NRTYPES(1)=NTYPES                                                  23000
      MSMALL=1                                                           24000
      GO TO 5                                                            25000
 4    NRTYPES(2)=NTYPES                                                  26000
      MSMALL=51                                                          27000
 5    MBIG=MSMALL+NTYPES-1                                               28000
      DO 7 I=MSMALL,MBIG                                                 29000
      READ 6,NNTYPES(I),COMINNO(I),ALERTNO(I)                            30000
 6    FORMAT(A8,2X,2(F8.0,2X))                                           31000
 7    CONTINUE                                                           32000
      RETURN                                                             33000
C                                                                        34000
C ERROR MESSAGE                                                          35000
C                                                                        36000
 8    PRINT 9                                                            37000
 9    FORMAT(5X,39HNOTYPES CARD MISSING OR OUT OF SEQUENCE    )          38000
      STOP                                                               39000
      END                                                                40000
```

IDENT RDTYPES

PROGRAM LENGTH		00207
ENTRY POINTS	RDTYPES	00034
BLOCK NAMES		
	NRTYPES	00460
EXTERNAL SYMBOLS		
	THEND.	
	Q8QSTOPS	
	Q8QDICT.	
	NUMGET	
	TSM.	
	STM.	
	QNSINGL.	

```
C00150  ALERTNO     00122
P00144  BEGIN.      00162   00170   00174
P00143  CNVRTI.     00053   00055   00115   00120   00121
C00314  COMINNO     00121
P00003  CRFMT.      00062   00125   00137
P00001  DICT.       00036   00051   00061   00067   00113   00124   00133   00136   00141   00147   00150
P00163  ENDING.     00037   00130   00141   00144   00145   00145   00146   00146
P00000  EXIT.       00166
P00003  FORMAT.     00040   00062   00072
P00040  FP00001.    00156   00157
P00072  FP00002.    00160   00161
P00177  GETPL.      00151
P00167  GETPU.      00154   00173
P00062  GG00000.    00047
P00125  GG00001.    00111
P00137  GG00002.    00131
P00201  I           00110   00116   00125
P00144  INITIAL.    00037
P00043  .10         00042
P00064  .2
P00045  .20         00042
P00075  .3          00074
P00047  .30         00044
P00101  .4          00074
P00105  .5          00100
P00125  .7
P00131  .8          00063
P00004  ..1         00052
P00003  ..100000    00041
P00011  ..100001    00063
P00012  ..100002    00073
P00013  ..6         00114
P00023  ..9         00134
P00070  .Z00001.    00065
P00202  JTYPES      00054   00062
P00003  LSIDE       00040   00072
P00203  MBIG        00107   00126
P00204  MSMALL      00100   00104   00105   00107
C00002  MTYPES      00056   00057   00065   00070
C00004  NNTYPES     00117   00117
C00000  NRTYPES     00076   00076   00102   00102
P00205  NS          00044   00046   00056   00064
P00206  NTYPES      00071   00075   00101   00106
X00004  NUMGET      00066
P00162  PF00002.    00155
X00003  QBQDICT.    00000   00035
X00002  QBOSTOPS    00140
X00007  QNSINGL.    00142
P00034  RDTYPES     00034
X00006  STH.        00132
X00001  THEND.      00060   00123   00135
P00126  TS00001.    00110
X00005  TSH.        00056   00112
P00111  WS00001.    00127   00127
   00066 SYMBOLS
```

```
      SUBROUTINE STKRIN                                                  1000
CSUBR      STKRIN    14OCT70  ********************************************  21000
C                                                                        2000
C                                                                        3000
C THIS SUBROUTINE READS IN NECESSARY DATA FROM THE OUTPUT OF PROGRAM      4000
C STACKER                                                                5000
C                                                                        6000
C                                                                        7000
C ***********************************************************************  8000
C                                                                        9000
CUSE       ITP       14OCT70  ********************************************  10000
      COMMON/ITP/ITP                                                     1000
      COMMON/NOPRINT/NOPRINT                                             2000
      COMMON/MYIDENT/MYIDENT                                             3000
CEND       ITP       ********************************************************  10000
CUSE       XLAT      14OCT70  ********************************************  11000
      COMMON/XLAT/XLAT(1000),XLONG(1000),RADIUS(1000),NBATTS(1000),      1000
     1JINDEX(200),LINDEX(200),ATEST(200),NBAREAS,NRAREAS,NTARSHI(20),    2000
     2NTARSLO(20),NTARTEST(20),XTEST(2),MAXHI(2),MAXLOW(2),FACLOW(2),    3000
     3LAREAS(2),LNLOW(2),ILOW(2),IHIGH(2),ITARTAPE(2),JJLOW(2),JAREAS(2) 4000
     4,JLOCS(2)                                                          5000
      COMMON/JSIDE/JSIDE                                                 6000
CEND       XLAT      ********************************************************  11000
CUSE       MYZONES   14OCT70  ********************************************  12000
      COMMON/MYZONES/BLAT(500),BLONG(500),IZIT(500),ILINK(500)           1000
     1,              MINBLUE,MAXBLUE,MINRED,MAXRED                       2000
     2,              MINTEST,JLINK,NTEST,MIN                             3000
CEND       MYZONES   ********************************************************  12000
C                                                                        13000
C COMMON/MYZONES/BLAT(MLN),BLONG(MLN),IZIT(MLN),ILINK(MLN),MINBLUE,      14000
C    1MAXBLUE,MINRED,MAXRED,MINTEST,JLINK,NTEST,MIN                      15000
C                                                                        16000
C MLN                 MAXIMUM NUMBER OF LEGS                             17000
C BLAT(MLN)           LATITUDE ASSOCIATED WITH THE POINT OF ORIGIN OF A   18000
C                     LEG                                                19000
C BLONG(MLN)          LONGITUDE ASSOCIATED WITH THE POINT OF ORIGIN OF A  20000
C                     LEG                                                21000
C IZIT(MLN)           THE BLEGNO ASSOCIATED WITH THE LAST IPOINT WHICH    22000
C                     DESCRIBES A ZONE                                   23000
C ILINK(M3N)          VALUE OF LINK ASSOCIATED WITH BLEGNO               24000
C MINBLUE             MINIMUM INDEX OF BLUE ZONES                        25000
C MAXBLUE             MAXIMUM INDEX OF BLUE ZONES                        26000
C MINRED              MINIMUM INDEX OF RED ZONES                         27000
C MAXRED              MAXIMUM INDEX OF RED ZONES                         28000
C MINTEST             INTERNAL BLEGNO INDEX PARAMETER                    29000
C JLINK               INTERNAL LINK INDEX PARAMETER                      30000
C NTEST               INTERNAL COUNTER                                   31000
C MIN                 INTERNAL BLEGNO INDEX PARAMETER                    32000
C                                                                        33000
C ***********************************************************************  34000
C                                                                        35000
C                                                                        36000
C OPEN PROGRAM, SUBROUTINE DRMOD HAS ALREADY CALLED INITAPE, SUBROUTINE  37000
C DRMOD MUST SET ITP PRIOR TO CALLING THIS SUBROUTINE                    38000
C                                                                        39000
      NOPRINT=1                                                          40000
```

```
      MYIDENT =8HSTAKRTPE                                          41000
      CALL SETREAD                                                 42000
C                                                                  43000
C CALL RDARRAY TO BRING IN COMMON/XLAT/                            44000
C                                                                  45000
      CALL RDARRAY(XLAT(1),4686)                                   46000
C                                                                  47000
C BRING IN COMMON/MYZONES/                                         48000
C                                                                  49000
      CALL RDARRAY(BLAT(1),2008)                                   50000
C                                                                  51000
C END OF PROCESSING, CLOSE FILES AND EXIT                          52000
C                                                                  53000
      CALL TERMTAPE                                                54000
      DO 90 I=1,2                                                  55000
      XTEST(I)=3.                                                  56000
      MAXHI(I)=7                                                   57000
 90   FACLOW=.5                                                    58000
      MAXLOW(1)=3                                                  59000
      MAXLOW(2)=2                                                  60000
      RETURN                                                       61000
      END                                                          62000
```

IDENT STKRIN

PROGRAM LENGTH		00053
ENTRY POINTS	STKRIN	00004
BLOCK NAMES		
	ITP	00001
	NOPRINT	00001
	MYIDENT	00001
	XLAT	11116
	JSIDE	00001
	MYZONES	03730
EXTERNAL SYMBOLS		
	Q8QDICT.	
	SETREAD	
	RDARRAY	
	TERMTAPE	

C10460	ATEST					
P00042	BEGIN.	00043				
C00000	BLAT	00023				
C00764	BLONG					
P00001	DICT.	00006	00015	00017	00022	00025
P00044	ENDING.	00007	00041	00042		
P00000	EXIT.	00045				
C11074	FACLOW	00035	00035			
P00003	FORMAT.	00012				
P00052	I	00027	00027			
C11104	IHIGH					
C02734	ILINK					
C11102	ILOW					
P00042	INITIAL.	00007				
C11106	ITARTAPE					
C00000	ITP					
C01750	IZIT					
P00034	.90					
P00003	..100000	00012				
C11112	JAREAS					
C07640	JINDEX					
C11110	JJLOW					
C03725	JLINK					
C11114	JLOCS					
C00000	JSIDE					
C11076	LAREAS					
C10150	LINDEX					
C11100	LNLOW					
C03721	MAXBLUE					
C11070	MAXHI	00033				
C11072	MAXLOW	00037	00040			
C03723	MAXRED					
C03727	MIN					
C03720	MINBLUE					
C03722	MINRED					
C03724	MINTEST					
C00000	MYIDENT	00013	00013			
C10770	NBAREAS					
C05670	NBATTS					
C00000	NOPRINT	00010	00011			
C10771	NRAREAS					
C10772	NTARSHI					
C11016	NTARSLO					
C11042	NTARTEST					
C03726	NTEST					
X00001	Q8QDICT.	00000	00005			
C03720	RADIUS					
X00003	RDARRAY	00016	00021			
X00002	SETREAD	00014				
P00004	STKRIN	00004				
X00004	TERMTAPE	00024				
P00031	WS00001.	00036				
C00000	XLAT	00020				
C01750	XLONG					

C11066 XTEST 00032 00032
00067 SYMBOLS

```
      SUBROUTINE TARDEFS(JTARHI,JTARLO,YLAT,YLONG,ISIDE)                 1000
CSUBR      TARDEFS   18NOV70  ****************************************** 22000
C                                                                        2000
C                                                                        3000
C THIS SUBROUTINE ASSIGNS VALUES OF JTARHI AND JTARLO TO CHARACTERIZE     4000
C THE HIGH ALTITUDE AND LOW ALTITUDE DEFENSES, RESPECTIVELY, FOR THE      5000
C GIVEN TARGET                                                           6000
C                                                                        7000
C                                                                        8000
C ************************************************************************ 9000
C                                                                        10000
CUSE       XLAT      140CT70  ****************************************** 11000
      COMMON/XLAT/XLAT(1000),XLONG(1000),RADIUS(1000),NBATTS(1000),      1000
     1JINDEX(200),LINDEX(200),ATEST(200),NBAREAS,NRAREAS,NTARSHI(20),    2000
     2NTARSLO(20),NTARTEST(20),XTEST(2),MAXHI(2),MAXLOW(2),FACLOW(2),    3000
     3LAREAS(2),LNLOW(2),ILOW(2),IHIGH(2),ITARTAPE(2),JJLOW(2),JAREAS(2) 4000
     4,JLOCS(2)                                                          5000
      COMMON/JSIDE/JSIDE                                                 6000
CEND       XLAT      ****************************************************** 11000
C                                                                        12000
C     COMMON/XLAT/XLAT(TNC),XLONG(TNC),RADIUS(TNC),NUMBATTS(TNC),        13000
C    1JINDEX(MNA),LINDEX(MNA),ATEST(MNA),NRAREAS,NRAREAS,NTARSHI(20),    14000
C    2NTARSLO(20),NTARTEST(20),XTEST(NS),MAXHI(NS),MAXLOW(NS),           15000
C    3FACLOW(NS),LAREAS(NS),LNLOW(NS),ILOW(NS),IHIGH(NS),ITARTAPE(NS),   16000
C    4JJLOW(NS),JAREAS(NS),JLOCS(NS)                                     17000
C                                                                        18000
C TNC                MAXIMUM NUMBER OF COMPLEXES FOR BOTH SIDES COMBINED 19000
C MNA                MAXIMUM NUMBER OF AREAS                             20000
C NS                 NUMBER OF SIDES                                     21000
C XLAT(TNC)          ARRAY CONTAINING THE LATITUDES OF THE CENTROIDS OF  23000
C                    THE SAM SITE COMPLEXES (LOCATIONS 1 THROUGH 500     24000
C                    STORE BLUE DATA, 501 THROUGH 1000 STORE RED DATA)   25000
C XLONG(TNC)         ARRAY CONTAINING THE LONGITUDES OF THE CENTROIDS OF 26000
C                    THE SAM SITE COMPLEXES (SAME STORAGE SCHEME AS      27000
C                    ABOVE)                                              28000
C RADIUS(TNC)        THE RADIUS OF EFFECT OF THE SAM SITE COMPLEX        29000
C NBATTS(TNC)        NUMBER OF SAMS LOCATED WITHIN THE RADIUS OF THE     30000
C                    COMPLEX                                             31000
C JINDEX(MNA)        INDEX OF THE FIRST SAM SITE IN EACH OF THE AREAS    32000
C LINDEX(MNA)        INDEX OF THE LAST SAM SITE IN EACH OF THE AREAS     33000
C ATEST(MNA)         VALUES OF LONGITUDE WHICH SUBDIVIDE THE COMPLEXES   34000
C                    INTO REASONABLY WELL DEFINED SITES                  35000
C NBAREAS            NOT USED                                            36000
C NRAREAS            NOT USED                                            37000
C NTARSHI(20)        TARDEF NUMBER WHICH IS ASSOCIATED WITH A HIGH       38000
C                    ALTITUDE DEFENSE OF A GIVEN STRENGTH                39000
C NTARSLO(20)        TARDEF NUMBER WHICH IS ASSOCIATED WITH A LOW        40000
C                    ALTITUDE DEFENSE OF A GIVEN STRENGTH                41000
C NTARTEST(20)       CONTAINS VALUES WHICH DIVIDES THE TOTAL NUMBER OF   42000
C                    SAMS POSSIBLE INTO SEVERAL DISTINCT RANGES          43000
C XTEST(NS)          3.0,3.0                                             44000
C MAXHI(NS)          7,7 - THE MAXIMUM VALUE OF TARDEF WHICH CAN BE      45000
C                    ASSIGNED FOR HIGH ALTITUDE DEFENSES                 46000
C MAXLOW(NS)         3,2 - THE MAXIMUM VALUE OF TARDEF WHICH CAN BE      47000
C                    ASSIGNED FOR LOW ALTITUDE DEFENSES                  48000
C FACLOW(NS)         .5,.5 - FACTOR USED TO DETERMINE WHETHER A VALUE OF 49000
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C                       TARDEFLO SHOULD BE ASSIGNED TO A GIVEN TARGET          50000
C LAREAS(NS)            NUMBER OF AREAS INTO WHICH SAM SITES ARE DIVIDED        51000
C LNLOW(NS)             1, 101 - THE BEGINNING INDICES OF THE AREAS            52000
C ILOW(NS)              INDEX INDICATING WHERE STORAGE OF DATA BEGINS FOR       53000
C                       BLUE, RED, RESPECTIVELY, IN NTARSHI, NTARSLO,          54000
C                       NTARTEST                                               55000
C IHIGH(NS)             7, 17 - INDEX INDICATING WHERE THE STORAGE OF DATA      56000
C                       ENDS FOR BLUE, RED, RESPECTIVELY, IN THE ABOVE         57000
C                       MENTIONED ARRAYS                                       58000
C ITARTAPE(NS)          NOT USED                                               59000
C JJLOW(NS)             BEGINNING INDICES OF SAM COMPLEXES FOR BLUE AND RED,   60000
C                       RESPECTIVELY                                           61000
C JAREAS(NS)            NUMBER OF AREAS INTO WHICH COMPLEXES ARE DIVIDED        62000
C JLOCS(NS)             NUMBER OF SAM COMPLEXES FOR EACH SIDE                  63000
C                                                                              64000
C ***************************************************************************  65000
C                                                                              66000
      DATA(XTEST=3.,3.),(MAXHI=7,7),(MAXLOW=3,2),(FACLOW=.5,.5)                67000
      JTARHI=JTARLO=0                                                          68000
      IF(ISIDE.EQ.3HRED) 20,21                                                 69000
 20   JSIDE=2                                                                  70000
      GO TO 22                                                                 71000
 21   JSIDE=1                                                                  72000
C                                                                              73000
C DETERMINE IN WHICH AREA THE TARGET IS LOCATED                                74000
C                                                                              75000
 22   NHIGH=LAREAS(JSIDE)                                                      76000
      NLOW=LNLOW(JSIDE)                                                        77000
      DO 1 IN=NLOW,NHIGH                                                       78000
      IF(YLONG.LT.ATEST(IN)) 2,1                                               79000
 1    CONTINUE                                                                 80000
      GO TO 11                                                                 81000
 2    KLO=JINDEX(IN)                                                           82000
      KHI=LINDEX(IN)                                                           83000
C                                                                              84000
C CONSIDER THE FIRST SITE IN THE AREA                                          85000
C                                                                              86000
      DO 10 K=KLO,KHI                                                          87000
C                                                                              88000
C IS THE TARGET WITHIN THIS SITE                                               89000
C                                                                              90000
      YTEST=DIFFLONG(XLONG(K),YLONG)                                           91000
      IF(YTEST.GT.XTEST(JSIDE)) 11,3                                           92000
 3    IF(ABSF(YTEST).GT.XTEST(JSIDE)) 10,4                                     93000
 4    DIST=DSTF(YLAT,XLAT(K),YTEST)                                            94000
      IF(DIST.LE.RADIUS(K)) 5,10                                               95000
 5    NINDEX=INDEXTYP(NRATTS(K),ISIDE)                                         96000
C                                                                              97000
C ASSIGN VALUE OF JTARHI                                                       98000
C                                                                              99000
      JTARHI=JTARHI+NTARSHI(NINDEX)                                           100000
      IF(JTARHI.GT.MAXHI(JSIDE)) 6,7                                          101000
 6    JTARHI=MAXHI(JSIDE)                                                     102000
C                                                                             103000
C SHOULD VALUE OF JTARLO BE ASSIGNED                                          104000
C                                                                             105000
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      7    IF(DIST.LE.(RADIUS(K)*FACLOW(JSIDE))) 8,10                    106000
     C                                                                   107000
     C ASSIGN VALUE OF JTARLO                                            108000
     C                                                                   109000
      8    JTARLO=JTARLO+NTARSLO(NINDEX)                                 110000
           IF(JTARLO.GT.MAXLOW(JSIDE)) 9,10                              111000
      9    JTARLO=MAXLOW(JSIDE)                                          112000
     10    CONTINUE                                                      113000
     11    RETURN                                                        114000
           END                                                           115000
```

IDENT TARDEFS

PROGRAM LENGTH		00254
ENTRY POINTS	TARDEFS	00004
BLOCK NAMES		
	XLAT	11116
	JSIDF	00001
EXTERNAL SYMBOLS		
	QBQDICT.	
	DIFFLONG	
	DSTF	
	INDEXTYP	

C10460	ATEST	00033	00033					
P00150	BEGIN.	00225	00233	00237				
P00001	DICT.	00006	00054	00074	00165	00153	00154	
X00002	DIFFLONG	00053						
P00243	DIST	00077	00077	00127				
X00003	DSTF	00073						
P00226	ENDING.	00007	00147	00150	00151	00151	00152	00152
P00000	EXIT.	00231						
C11074	FACLOW	00126	00126	C11074				
P00003	FORMAT.	00013						
P00010	FP00001.	00206	00207					
P00012	FP00002.	00162	00163					
P00013	FP00003.	00222	00223					
P00031	FP00004.	00215	00216					
P00055	FP00005.	00217						
P00075	FP00006.	00212						
P00106	FP00007.	00224						
P00110	FP00010.	00164	00165					
P00113	FP00011.	00166	00167					
P00114	FP00012.	00170	00171					
P00122	FP00013.	00172	00173					
P00131	FP00014.	00200	00201					
P00134	FP00015.	00202	00203					
P00135	FP00016.	00204	00205					
P00143	FP00017.	00176	00177					
P00242	GETPL.	00155	00174	00213				
P00232	GETPU.	00160	00210	00220	00236			
C11104	IHIGH							
C11102	ILOW							
P00244	IN	00027	00032	00036	00042			
X00004	INDEXTYP	00104						
P00150	INITIAL.	00007						
P00003	ISIDE	00013	00106					
C11106	ITARTAPE							
P00036	.1	00034	00034					
P00144	.10	00070	00101	00130	00140	00140		
P00147	.11	00041	00062					
P00016	.20							
P00042	.2	00035						
P00020	.21	00015						
P00022	.22	00017						
P00063	.3	00061	00061					
P00071	.4	00067	00070					
P00102	.5	00101						
P00120	.6							
P00123	.7	00117	00117					
P00131	.8	00130						
P00141	.9							
P00003	..100000	00014						
P00055	.Z00001.	00052						
P00075	.Z00002.	00072						
P00106	.Z00003.	00103						
C11112	JAREAS							
C07640	JINDEX	00043	00043					

C11110	JJLOW										
C11114	JLOCS										
C00000	JSIDE	00016	00017	00020	00021	00022	00022	00057	00057	00065	00066	00115
		00115	00120	00120	00125	00125	00136	00136	00141	00141		
P00003	JTARHI	00012	00110	00113	00114	00122						
P00003	JTARLO	00011	00131	00134	00135	00143						
P00245	K	00047	00051	00071	00102	00123	00144					
P00246	KHI	00046	00145									
P00247	KLO	00044	00047									
C11076	LAREAS	00023	00023									
C10150	LINDEX	00045	00045									
C11100	LNLOW	00025	00025									
C11070	MAXHI	00116	00116	00121	00121	C11070						
C11072	MAXLOW	00137	00137	00142	00142	C11072						
C10770	NBAREAS											
C05670	NBATTS	00103	00106									
P00250	NHIGH	00024	00037									
P00251	NINDEX	00107	00111	00132								
P00252	NLOW	00026	00027									
C10771	NRAREAS											
C10772	NTARSHI	00112	00112									
C11016	NTARSLO	00133	00133									
C11042	NTARTEST											
P00174	PF00002.	00161										
P00210	PF00003.	00175										
P00213	PF00004.	00211										
P00220	PF00005.	00214										
P00225	PF00006.	00221										
X 001	Q8DICT.	00000	00005									
C03720	RADIUS	00100	00100	00124	00124							
P00004	TARDEFS	00004										
P00037	TS00001.	00030										
P00145	TS00002.	00050										
P00031	WS00001.	00040	00040									
P00051	WS00002.	00146	00146									
C00003	XLAT	00072	00075									
C01750	XLONG	00052	00055									
C11066	XTEST	00003	00060	00060	00066	00067						
P00003	YLAT	00076										
P00003	YLONG	00031	00055									
P00253	YTEST	00056	00056	00063	00076							

00136 SYMBOLS

```
      PROGRAM INDEXER                                                    1000
CSECT INDEXER  V4AUG71  ***************************************         1000
CUSE  DIRECTRY  START   ***************************************         2000
      COMMON/DIRECTRY/IDEF,LASTLST,NOIMLIP,NOIMLST,ATTNAME(500),         1000
     1IFORMAT(500),ICOM(500),DEFAULT(500),NI(500),                       2000
     2N2(500),LISTCHK(500),GLOB(500),LISTVLS(2000)                       3000
      DIMENSION FN2(500)                                                 4000
      DIMENSION FN1(500)                                                 5000
      TYPE LOGICAL LISTCHK,GLOB                                          6000
      TYPE INTEGER ATTNAME                                               7000
      EQUIVALENCE (FN1,FN1),(N2,FN2),(DEFAULT,IDEFALT)                   8000
      EQUIVALENCE (LOG1,LISTCHK),(LOG2,GLOB)                             9000
C                                                                        10000
      DIMENSION IDEFALT(500)                                             11000
      EQUIVALENCE(IDEFAULT,DEFAULT)                                      12000
      DIMENSION IDEFAULT(500),LISTCHEK(500),LISTVALS(2000)               13000
      TYPE LOGICAL LISTCHEK                                              14000
      EQUIVALENCE(IDEFAULT,IDEFALT),(LASTLIST,LASTLST),                  15000
     1 (LISTCHEK,LISTCHK), (LISTVALS,LISTVLS),(NOIMLIST,NOIMLST)         16000
CEND  DIRECTRY  ***************************************************** 2000
CUSE  AREADAT   START   ***************************************         3000
      COMMON/AREADAT/ AINT(20,3),ALPH(20),IOVERLP(20)                    1000
      TYPE INTEGER AINT                                                  2000
C                                                                        3000
CEND  AREADAT   ***************************************************** 3000
CUSE  IFTPRNT   START   ***************************************         4000
      COMMON/IFTPRNT/IFTPRNT(10)                                         1000
C                                                                        2000
CEND  IFTPRNT   ***************************************************** 4000
CUSE  ITP       START   ***************************************         5000
      COMMON/ITP/ITP                                                     1000
C                                                                        2000
CEND  ITP       ***************************************************** 5000
CUSE  KEY       START   ***************************************         6000
      COMMON/KEY/KEY(10)                                                 1000
      EQUIVALENCE(IMAND,KEY(6)),(INTA,KEY(7)),(IPLAT,KEY(8)),(IPLONG,KEY 2000
     1(9))                                                               3000
C                                                                        4000
CEND  KEY       *****************************************************c4000
CUSE  KEYC      START   ***************************************         7000
      COMMON/KEYC/KEYC1,KEYC2,MASK1,MASK2                                1000
C                                                                        2000
CEND  KEYC      ***************************************************** 7000
CUSE  KEYS      START   ***************************************         8000
      COMMON/KEYS/KEYS(12)                                               1000
      TYPE INTEGER TSTAT,TCOL,TAPDLO,TAPOPT,ZON                          2000
      TYPE INTEGER TVOLM                                                 3000
      EQUIVALENCE( TSTAT,KEYS(1)),                                       4000
     1            (TCOL, KEYS(2)),                                       5000
     2            (TAPDLO,KEYS(3)),                                      6000
     3            (TAPNUM, KEYS(4)),                                     7000
     4            (KATTACK, KEYS(5)),                                    8000
     5            (TVOLM, KEYS(6)),                                      9000
     6            (KAPDEF, KEYS(7)),                                    10000
     7            (NTAPE, KEYS(8)),                                     11000
     8            (ZON, KEYS(9)),                                       12000
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     9           (NEFFZON, KEYS(10)),                                    13000
     1           (NUFFC-P, KEYS(11))                                     14000
C                                                                        15000
CEND      KEYS      ********************************************************  M000
CUSE      MAX       START     ********************************************  9000
C      COMMON BLOCK CONTAINING ALL MAXIMUM VALUES FOR QUICK OCT 71        1000
C      VALUES INITIALIZED WITH DATA STATEMENTS IN INITIND                 2000
C                                                                         3000
       COMMON/MAX/MAXDEF, MALERT, MASMTYP, MBNODY, MCCHEGN,              4000
     )             MCLASS,   MCNTRYS,  MCORR,    MCORTYP,  MFUNFN,      5000
     2             MDEPNLG,  MGROUP,   MPAYLOD,  MRELOVR,               6000
     3             MRECVLG,  MREF,     MRTLEN,   MRTPT,                 7000
     4             MSPRMT,   MTANKHS,  MTBRCLS,  MTBRCOL,  MTBRCPX,     8000
     5             MTBRPS,   MTARGET,  MTARIND,  MTASFC,   MTARTEI,     9000
     6             MTARTYP,  MTBRVAL,  MTELMCM,  MTOTHAS,               10000
     7             MTYPE,    MVULN,    MWEAPGP,  MWHOTPE,  MZONEPT,     11000
     8MZONES, MTARPCL, MARMSIT                                           12000
C                                                                        13000
CEND      MAX       ********************************************************  9000
CUSE      MYIDENT   START     ********************************************  10000
       COMMON/MYIDENT/MYIDENT                                            1000
C                                                                        2000
CEND      MYIDENT   ********************************************************  10000
CUSE      NAVALTN   START     ********************************************  11000
       COMMON/NAVALTN/ IMASK(10,10),DBLASK(10,10), ITMAX,IDBLMAX         1000
C                                                                        2000
CEND      NAVALTN   ********************************************************  11000
CUSE      NOPRINT   START     ********************************************  12000
       COMMON/NOPRINT/NOPRINT                                            1000
C                                                                        2000
CEND      NOPRINT   ********************************************************  12000
CUSE      NADATA    START     ********************************************  13000
       COMMON/NADATA/PE(12),PA(12),DG(8),DA(8)                           1000
C                                                                        2000
CEND      NADATA    ********************************************************  13000
CUSE      PRNT      START     ********************************************  14000
       COMMON/PRNT/IPRNT(15)                                             1000
C                                                                        2000
CEND      PRNT      ********************************************************  14000
CUSE      SETAPE    START     ********************************************  15000
       COMMON/SETAPE/ICKSW,LASTAP,LENGDT,NRECLG                          1000
CEND      SETAPE    ********************************************************  15000
CUSE      TRANS     START     ********************************************  16000
       COMMON/TRANS/LMAX,NASMT,NVULN,NBLUPLN,MAXIND,NHEDPLD              1000
C                                                                        2000
C                                                                        3000
CEND      TRANS     ********************************************************  16000
CUSE      TWORD     START     ********************************************  17000
       COMMON/TWORD/ITWORD                                               1000
       EQUIVALENCE(IWORD,ITWORD)                                         2000
C                                                                        3000
CEND      TWORD     ********************************************************  17000
CUSE      WRIT      START     ********************************************  18000
       COMMON/WRIT/WR(4),NR(10),XLONG(10)                                1000
       DIMENSION IWR(4)                                                  2000
       EQUIVALENCE(WR,IWR)                                               3000
```

```
      DIMENSION KZON(3)                                                 4000
                                                                        5000
C
CEND      WRIT      ***************************************************** 18000
CUSE      1         START     ***************************************** 19000
      COMMON/1/NISL,NN,NCOL,NITEM,X(4000),Y(4000),Z(4000),IND(4000)     1000
      DIMENSION STATUS(12000)                                           2000
      EQUIVALENCE(STATUS,X)                                             3000
                                                                        4000
C
C     NISL = NUMBER OF COLLOCATED ISLANDS                               5000
C     NN = INDEX TO COLAR                                               6000
C     NCOL = NUMBER OF COLLOCATED TARGETS                               7000
C     NITEM = NUMBER OF ITEMS IN SEGMENT BEING PROCESSED.               8000
C     X,Y,Z = LONGITUDE, LATITUDE, CRITICAL DISTANCE                    9000
C     IND = INDEX NUMBER OF X,Y,Z                                      10000
C     STATUS = PACKED DATA FOR TARGETS                                 11000
C                                                                      12000
CEND      1         ***************************************************** 19000
CUSE      2         START     ***************************************** 20000
      COMMON/2/COL(4000), CL(4000),CLT(4000),CP(4000)                   1000
      TYPE LOGICAL COL,CL,CLT,CP                                        2000
                                                                        3000
C                                                                       4000
C
CEND      2         ***************************************************** 20000
CUSE      3         MAPP71    ***************************************** 21000
      COMMON/3/ICUR, ISTORE,COLAR(100), COMPLEX(4000)                   1000
      TYPE INTEGER COLAR, COMPLEX                                       2000
      DIMENSION CRUIST(100),CVULN(100)                                  3000
      TYPE INTEGER CVULN                                                4000
      EQUIVALENCE(CRUIST,COMPLEX),(CVULN,COMPLEX(101))                  5000
                                                                        6000
C
CEND      3         ***************************************************** 21000
CUSE      4         11JAN71   ***************************************** 22000
      COMMON/4/NULL, CUMAG(15), RTYPES(15), INDCLAS (15),               1000
     1INDREG(250),TYPENAM(80,15),TYPETBL(80,15),                        2000
     2IADCUR(250),BOM(80,7),                                            3000
     3    TANK(40,5),ASMT(20,2),HMD(50,3),ZONES(75,3),                  4000
     4CAPACTY(50,2),ICHK(250), MIRV(80,2),                              5000
     5IHMDTYP(50,2),INHMDS(50,2),INDECYS(40,2),INAMDEC(40,2)            6000
     6,NAMCLAS(15)                                                      7000
      DIMENSION FMIS(80,11),MIS(80,11)                                  8000
      DIMENSION NEWIND(4000)                                            9000
      EQUIVALENCE(NEWIND,MIS,FMIS,TYPENAM(251))                        10000
      TYPE INTEGER TYPENAM, TYPETBL, CUMAG, RTYPES                     11000
      DIMENSION IBOM(80,7),ITANK(40,5)                                 12000
      EQUIVALENCE( IBOM,BOM),(ITANK,TANK)                              13000
                                                                       14000
C
C                                                                      15000
CEND      4         ***************************************************** 22000
CUSE      5         START     ***************************************** 23000
      COMMON/5/ NTDEF, ITERM(512), NTINTX(512)                          1000
                                                                        2000
C
CEND      5         ***************************************************** 23000
CUSE      7         START     ***************************************** 24000
      COMMON/7/COLO(12000),COMP(12000)                                  1000
      DIMENSION LTERM(12000)                                            2000
      TYPE LOGICAL COLO,COMP,LTERM                                      3000
```

```
      EQUIVALENCE(COMP,LITEM)                                                4000
C                                                                            5000
CEND      7          ********************************************************  24000
CUSE      8          START      ********************************************  25000
      COMMON /87/ ICHKFLG(30),ICHKNUM(30),NCHKFLG(20),NCHKNUM(20)            1000
C                                                                            2000
CEND      9          ********************************************************  25000
CUSE      10         START      ********************************************  26000
      COMMON/10/KNAME*4Y(80)                                                 1000
C                                                                            2000
CEND      10         ********************************************************  26000
CUSE      COMMON     START      ********************************************  27000
      COMMON/COMMON/NMD,*2/DES,IBREAK                                        1000
CEND      COMMON     ********************************************************  27000
      DATA(VREDUMY = 0)                                                      27010
      DATA(VARKNVATM = 0)                                                    27020
      DATA(VARKMMPK =0)                                                      27030
C     NOTE FOLLOWING CARD IS A DECLARES CONTROL CARD. DO NOT REMOVE          28000
CDECLARES                                                                    29000
      COMMON/PROCESS/NV,NC,INITEM(100),VALUE(500),DEF(500),LGLOB(500)
      TYPE INTEGER VALUE
      TYPE LOGICAL DEF,LGLOB
      COMMON/EDITERR/ISWTEM
      COMMON/EDITAPE/INTP,NOUT,ITOUT(10),JOUT
      EQUIVALENCE(CLASS   ,VALUE(   1))
      TYPE INTEGER CLASS
      EQUIVALENCE(TYPE    ,VALUE(   2))
      TYPE INTEGER TYPE
      EQUIVALENCE(SIDE    ,VALUE(   3))
      TYPE INTEGER SIDE
      EQUIVALENCE(CNTRYDWN,VALUE(   4))
      TYPE INTEGER CNTRYDWN
      EQUIVALENCE(CNTRYLOC,VALUE(   5))
      TYPE INTEGER CNTRYLOC
      EQUIVALENCE(FUNCTION,VALUE(   6))
      TYPE INTEGER FUNCTION
      EQUIVALENCE(SITENO  ,VALUE(   7))
      TYPE INTEGER SITENO
      EQUIVALENCE(NAME    ,VALUE(   8))
      TYPE INTEGER NAME
      EQUIVALENCE(SUBNO   ,VALUE(   9))
      TYPE INTEGER SUBNO
      EQUIVALENCE(FLTNO   ,VALUE(  10))
      TYPE INTEGER FLTNO
      EQUIVALENCE(HEAD    ,VALUE(  11))
      TYPE INTEGER HEAD
      EQUIVALENCE(VOLN    ,VALUE(  12))
      TYPE INTEGER VOLN
      EQUIVALENCE(M1      ,VALUE(  13))
      TYPE INTEGER M1
      EQUIVALENCE(M2      ,VALUE(  14))
      TYPE INTEGER M2
      EQUIVALENCE(SACNO   ,VALUE(  15))
      TYPE INTEGER SACNO
      EQUIVALENCE(CATCODE ,VALUE(  16))
      TYPE INTEGER CATCODE
```

```
      EQUIVALENCE(MAJOR    ,VALUE( 17))
      TYPE INTEGER MAJOR
      EQUIVALENCE(MINOR    ,VALUE( 18))
      TYPE INTEGER MINOR
      EQUIVALENCE(DESIG    ,VALUE( 19))
      TYPE INTEGER DESIG
      EQUIVALENCE(TASK     ,VALUE( 20))
      TYPE INTEGER TASK
      EQUIVALENCE(POSTURE  ,VALUE( 21))
      TYPE INTEGER POSTURE
      EQUIVALENCE(INDEXNO  ,VALUE( 22))
      TYPE INTEGER INDEXNO
      EQUIVALENCE(NOPERSON ,VALUE( 23))
      TYPE INTEGER NOPERSON
      EQUIVALENCE(NOPSITE  ,VALUE( 24))
      TYPE INTEGER NOPSITE
      EQUIVALENCE(NOALERT  ,VALUE( 25))
      TYPE INTEGER NOALERT
      EQUIVALENCE(NOINCOM  ,VALUE( 26))
      TYPE INTEGER NOINCOM
      EQUIVALENCE(LINK     ,VALUE( 27))
      TYPE INTEGER LINK
      EQUIVALENCE(ZONE     ,VALUE( 28))
      TYPE INTEGER ZONE
      EQUIVALENCE(AREA     ,VALUE( 29))
      TYPE REAL    AREA
      EQUIVALENCE(LAT      ,VALUE( 30))
      TYPE REAL    LAT
      EQUIVALENCE(LONG     ,VALUE( 31))
      TYPE REAL    LONG
      EQUIVALENCE(LEGNO    ,VALUE( 32))
      TYPE INTEGER LEGNO
      EQUIVALENCE(RESERVE  ,VALUE( 33))
      TYPE INTEGER RESERVE
      EQUIVALENCE(NLEGNO   ,VALUE( 34))
      TYPE INTEGER NLEGNO
      EQUIVALENCE(NEATZONE ,VALUE( 35))
      TYPE INTEGER NEATZONE
      EQUIVALENCE(IPOINT   ,VALUE( 36))
      TYPE INTEGER IPOINT
      EQUIVALENCE(DATEIN   ,VALUE( 37))
      TYPE REAL    DATEIN
      EQUIVALENCE(DATEOUT  ,VALUE( 38))
      TYPE REAL    DATEOUT
      EQUIVALENCE(RP       ,VALUE( 39))
      TYPE REAL    RP
      EQUIVALENCE(NOI      ,VALUE( 40))
      TYPE INTEGER NOI
      EQUIVALENCE(MAX      ,VALUE( 41))
      TYPE INTEGER MAX
      EQUIVALENCE(HALIUS   ,VALUE( 42))
      TYPE REAL    HALIUS
      EQUIVALENCE(VAL      ,VALUE( 43))
      TYPE REAL    VAL
      EQUIVALENCE(VALU     ,VALUE( 44))
      TYPE REAL    VALU
```

```
      EQUIVALENCE(MISOFF  ,VALUE(  45))
      TYPE INTEGER MISOFF
      EQUIVALENCE(IANDEF  ,VALUE(  46))
      TYPE INTEGER IANDEF
      EQUIVALENCE(IANDEFHI,VALUE(  47))
      TYPE INTEGER IANDEFHI
      EQUIVALENCE(IANDEFLO,VALUE(  48))
      TYPE INTEGER IANDEFLO
      EQUIVALENCE(ICLASS  ,VALUE(  49))
      TYPE INTEGER ICLASS
      EQUIVALENCE(ITYPE   ,VALUE(  50))
      TYPE INTEGER ITYPE
      EQUIVALENCE(IREG    ,VALUE(  51))
      TYPE INTEGER IREG
      EQUIVALENCE(IREFUEL ,VALUE(  52))
      TYPE INTEGER IREFUEL
      EQUIVALENCE(IOTHER  ,VALUE(  53))
      TYPE INTEGER IOTHER
      EQUIVALENCE(IGROUP  ,VALUE(  54))
      TYPE INTEGER IGROUP
      EQUIVALENCE(ICOMPLEX,VALUE(  55))
      TYPE INTEGER ICOMPLEX
      EQUIVALENCE(ITGT    ,VALUE(  56))
      TYPE INTEGER ITGT
      EQUIVALENCE(JTYPE   ,VALUE(  57))
      TYPE INTEGER JTYPE
      EQUIVALENCE(XMDTYPE ,VALUE(  58))
      TYPE INTEGER XMDTYPE
      EQUIVALENCE(ASXTYPE ,VALUE(  59))
      TYPE INTEGER ASXTYPE
      EQUIVALENCE(NDECOYS ,VALUE(  60))
      TYPE INTEGER NDECOYS
      EQUIVALENCE(FFRAC   ,VALUE(  61))
      TYPE REAL    FFRAC
      EQUIVALENCE(DELTA   ,VALUE(  62))
      TYPE REAL    DELTA
      EQUIVALENCE(FVALMI  ,VALUE(  63))
      TYPE REAL    FVALMI
      EQUIVALENCE(T1      ,VALUE(  64))
      TYPE REAL    T1
      EQUIVALENCE(T2      ,VALUE(  65))
      TYPE REAL    T2
      EQUIVALENCE(T3      ,VALUE(  66))
      TYPE REAL    T3
      EQUIVALENCE(FVALT1  ,VALUE(  67))
      TYPE REAL    FVALT1
      EQUIVALENCE(FVALT2  ,VALUE(  68))
      TYPE REAL    FVALT2
      EQUIVALENCE(MINKILL ,VALUE(  69))
      TYPE REAL    MINKILL
      EQUIVALENCE(MAXKILL ,VALUE(  70))
      TYPE REAL    MAXKILL
      EQUIVALENCE(MAXFRACV,VALUE(  71))
      TYPE REAL    MAXFRACV
      EQUIVALENCE(MAXFACTV,VALUE(  72))
      TYPE REAL    MAXFACTV
```

```
EQUIVALENCE(YFEL    ,VALUE( 73))
TYPE REAL    YFEL
EQUIVALENCE(JO-OMEG ,VALUE( 74))
TYPE INTEGER JO-OMEG
EQUIVALENCE(JO-OMEG2,VALUE( 75))
TYPE INTEGER JO-OMEG2
EQUIVALENCE(LaSMS   ,VALUE( 76))
TYPE INTEGER LaSMS
EQUIVALENCE(MCA     ,VALUE( 77))
TYPE INTEGER MCA
EQUIVALENCE(PAYLOAD ,VALUE( 78))
TYPE INTEGER PAYLOAD
EQUIVALENCE(IMEP    ,VALUE( 79))
TYPE INTEGER IMEP
EQUIVALENCE(PDEG    ,VALUE( 80))
TYPE REAL    PDEG
EQUIVALENCE(CPP     ,VALUE( 81))
TYPE REAL    CPP
EQUIVALENCE(RANGE   ,VALUE( 82))
TYPE REAL    RANGE
EQUIVALENCE(RANGERAD,VALUE( 83))
TYPE REAL    RANGERAD
EQUIVALENCE(RANGEREF,VALUE( 84))
TYPE REAL    RANGEREF
EQUIVALENCE(SPEED   ,VALUE( 85))
TYPE REAL    SPEED
EQUIVALENCE(SPOLO   ,VALUE( 86))
TYPE REAL    SPOLO
EQUIVALENCE(SPDASH  ,VALUE( 87))
TYPE REAL    SPDASH
EQUIVALENCE(RFL     ,VALUE( 88))
TYPE REAL    RFL
EQUIVALENCE(REN     ,VALUE( 89))
TYPE REAL    REN
EQUIVALENCE(ALERTDRL,VALUE( 90))
TYPE REAL    ALERTDRL
EQUIVALENCE(NALRTDRL,VALUE( 91))
TYPE REAL    NALRTDRL
EQUIVALENCE(ALERTOLY,VALUE( 92))
TYPE REAL    ALERTOLY
EQUIVALENCE(NALRTOLY,VALUE( 93))
TYPE REAL    NALRTOLY
EQUIVALENCE(CCREL   ,VALUE( 94))
TYPE REAL    CCREL
EQUIVALENCE(TTGS    ,VALUE( 95))
TYPE REAL    TTGS
EQUIVALENCE(TMDEL   ,VALUE( 96))
TYPE REAL    TMDEL
EQUIVALENCE(TVUL    ,VALUE( 97))
TYPE REAL    TVUL
EQUIVALENCE(TWETARG ,VALUE( 98))
TYPE REAL    TWETARG
EQUIVALENCE(PLANT   ,VALUE( 99))
TYPE REAL    PLANT
EQUIVALENCE(AHRATE  ,VALUE(100))
TYPE REAL    AHRATE
```

```
      EQUIVALENCE(PHART   ,VALUE( 101))
      TYPE REAL     PHART
      EQUIVALENCE(PINC    ,VALUE( 102))
      TYPE REAL     PINC
      EQUIVALENCE(PDES    ,VALUE( 103))
      TYPE REAL     PDES
      EQUIVALENCE(PFPF    ,VALUE( 104))
      TYPE REAL     PFPF
      EQUIVALENCE(PKMIS   ,VALUE( 105))
      TYPE REAL     PKMIS
      EQUIVALENCE(ATTRLEG ,VALUE( 106))
      TYPE REAL     ATTRLEG
      EQUIVALENCE(ATTRCORR,VALUE( 107))
      TYPE REAL     ATTRCORR
      EQUIVALENCE(KOMSTYLE,VALUE( 108))
      TYPE INTEGER KOMSTYLE
      EQUIVALENCE(DEFRANGE,VALUE( 109))
      TYPE REAL     DEFRANGE
      EQUIVALENCE(HILOATTR,VALUE( 110))
      TYPE REAL     HILOATTR
      EQUIVALENCE(ATTRSUPF,VALUE( 111))
      TYPE REAL     ATTRSUPF
      EQUIVALENCE(ITYP2   ,VALUE( 112))
      TYPE INTEGER ITYP2
      EQUIVALENCE(EFECTNES,VALUE( 113))
      TYPE REAL     EFECTNES
      EQUIVALENCE(ISITE   ,VALUE( 114))
      TYPE INTEGER ISITE
      EQUIVALENCE(IVULN   ,VALUE( 115))
      TYPE INTEGER IVULN
      EQUIVALENCE(NADBLI  ,VALUE( 116))
      TYPE REAL     NADBLI
      EQUIVALENCE(NADBLR  ,VALUE( 117))
      TYPE REAL     NADBLR
      EQUIVALENCE(ADBLI   ,VALUE( 118))
      TYPE REAL     ADBLI
      EQUIVALENCE(NAREADEC,VALUE( 119))
      TYPE INTEGER NAREADEC
      EQUIVALENCE(NMMDS   ,VALUE( 120))
      TYPE INTEGER NMMDS
      EQUIVALENCE(NTINT   ,VALUE( 121))
      TYPE INTEGER NTINT
      EQUIVALENCE(ADBLR   ,VALUE( 122))
      TYPE REAL     ADBLR
      EQUIVALENCE(TIMEN   ,VALUE( 123))
      TYPE REAL     TIMEN
      EQUIVALENCE(TIME    ,VALUE( 124))
      TYPE REAL     TIME
      EQUIVALENCE(DELAY   ,VALUE( 125))
      TYPE REAL     DELAY
      EQUIVALENCE(IALERT  ,VALUE( 126))
      TYPE INTEGER IALERT
      EQUIVALENCE(NWTYPE  ,VALUE( 127))
      TYPE INTEGER NWTYPE
      EQUIVALENCE(INDV    ,VALUE( 128))
      TYPE INTEGER INDV
```

```
      EQUIVALENCE(INTAR    ,VALUE( 129))
      TYPE INTEGER INTAR
      EQUIVALENCE(EVENT    ,VALUE( 130))
      TYPE INTEGER EVENT
      EQUIVALENCE(EVENTN   ,VALUE( 131))
      TYPE INTEGER EVENTN
      EQUIVALENCE(PLACE    ,VALUE( 132))
      TYPE INTEGER PLACE
      EQUIVALENCE(PLACEN   ,VALUE( 133))
      TYPE INTEGER PLACEN
      EQUIVALENCE(IALT     ,VALUE( 134))
      TYPE INTEGER IALT
      EQUIVALENCE(NWPNS    ,VALUE( 135))
      TYPE INTEGER NWPNS
      EQUIVALENCE(NTARG    ,VALUE( 136))
      TYPE INTEGER NTARG
      EQUIVALENCE(MCODE    ,VALUE( 137))
      TYPE INTEGER MCODE
      EQUIVALENCE(CODE     ,VALUE( 138))
      TYPE INTEGER CODE
      EQUIVALENCE(NCODE    ,VALUE( 139))
      TYPE INTEGER NCODE
      EQUIVALENCE(IDUD     ,VALUE( 140))
      TYPE INTEGER IDUD
      EQUIVALENCE(AGX      ,VALUE( 141))
      TYPE INTEGER AGX
      EQUIVALENCE(AGY      ,VALUE( 142))
      TYPE INTEGER AGY
      EQUIVALENCE(DGX      ,VALUE( 143))
      TYPE INTEGER DGX
      EQUIVALENCE(DGY      ,VALUE( 144))
      TYPE INTEGER DGY
      EQUIVALENCE(AHOB     ,VALUE( 145))
      TYPE INTEGER AHOB
      EQUIVALENCE(DHOB     ,VALUE( 146))
      TYPE INTEGER DHOB
      EQUIVALENCE(WHOTYPEN,VALUE( 147))
      TYPE INTEGER WHOTYPEN
      EQUIVALENCE(PRIMETAR,VALUE( 148))
      TYPE INTEGER PRIMETAR
      EQUIVALENCE(ICLASST ,VALUE( 149))
      TYPE INTEGER ICLASST
      EQUIVALENCE(ITYPET   ,VALUE( 150))
      TYPE INTEGER ITYPET
      EQUIVALENCE(JTYPET   ,VALUE( 151))
      TYPE INTEGER JTYPET
      EQUIVALENCE(TYPET    ,VALUE( 152))
      TYPE INTEGER TYPET
      EQUIVALENCE(CLASST   ,VALUE( 153))
      TYPE INTEGER CLASST
      EQUIVALENCE(CNTYOWNT,VALUE( 154))
      TYPE INTEGER CNTYOWNT
      EQUIVALENCE(CNTYLOCT,VALUE( 155))
      TYPE INTEGER CNTYLOCT
      EQUIVALENCE(IPENMODE,VALUE( 156))
      TYPE INTEGER IPENMODE
```

```
      EQUIVALENCE(IRECMODE,VALUE( 157))
      TYPE INTEGER IRECMODE
      EQUIVALENCE(IATTACK ,VALUE( 158))
      TYPE INTEGER IATTACK
      EQUIVALENCE(NAL     ,VALUE( 159))
      TYPE INTEGER NAL
      EQUIVALENCE(TAIM    ,VALUE( 160))
      TYPE INTEGER TAIM
      EQUIVALENCE(MWHOS   ,VALUE( 161))
      TYPE INTEGER MWHOS
      EQUIVALENCE(NPEN    ,VALUE( 162))
      TYPE INTEGER NPEN
      EQUIVALENCE(NDET    ,VALUE( 163))
      TYPE INTEGER NDET
      EQUIVALENCE(PARRIVE ,VALUE( 164))
      TYPE REAL    PARRIVE
      EQUIVALENCE(ADEFZON ,VALUE( 165))
      TYPE INTEGER ADEFZON
      EQUIVALENCE(ADEFCMP ,VALUE( 166))
      TYPE INTEGER ADEFCMP
      EQUIVALENCE(NAINT   ,VALUE( 167))
      TYPE INTEGER NAINT
      EQUIVALENCE(AZON1   ,VALUE( 168))
      TYPE INTEGER AZON1
      EQUIVALENCE(AZON2   ,VALUE( 169))
      TYPE INTEGER AZON2
      EQUIVALENCE(AZON3   ,VALUE( 170))
      TYPE INTEGER AZON3
      EQUIVALENCE(CPACTY  ,VALUE( 171))
      TYPE INTEGER CPACTY
      EQUIVALENCE(ICORR   ,VALUE( 172))
      TYPE INTEGER ICORR
      EQUIVALENCE(IMIRV   ,VALUE( 173))
      TYPE INTEGER IMIRV
      EQUIVALENCE(IDBL    ,VALUE( 174))
      TYPE INTEGER IDBL
      EQUIVALENCE(PKNAV   ,VALUE( 175))
      TYPE REAL    PKNAV
      EQUIVALENCE(ITIME   ,VALUE( 176))
      TYPE INTEGER ITIME
      EQUIVALENCE(PSASW   ,VALUE( 177))
      TYPE REAL    PSASW
      EQUIVALENCE(TPASW   ,VALUE( 178))
      TYPE REAL    TPASW
      EQUIVALENCE(TGTSTAT ,VALUE( 179))
      TYPE INTEGER TGTSTAT
      EQUIVALENCE(FLAG    ,VALUE( 180))
      TYPE INTEGER FLAG
      EQUIVALENCE(NOPERSQ1,VALUE( 181))
      TYPE INTEGER NOPERSQ1
      EQUIVALENCE(NOPERSQ2,VALUE( 182))
      TYPE INTEGER NOPERSQ2
      EQUIVALENCE(NOPERSQ3,VALUE( 183))
      TYPE INTEGER NOPERSQ3
      EQUIVALENCE(NUMDRL  ,VALUE( 184))
      TYPE INTEGER NUMDRL
```

```
      EQUIVALENCE(EFECNES1,VALUE( 185))
      TYPE REAL    EFECNES1
      EQUIVALENCE(EFECNES2,VALUE( 186))
      TYPE REAL    EFECNES2
      EQUIVALENCE(VAL1    ,VALUE( 187))
      TYPE REAL    VAL1
      EQUIVALENCE(VAL2    ,VALUE( 188))
      TYPE REAL    VAL2
      EQUIVALENCE(ITYPE1   ,VALUE( 189))
      TYPE INTEGER ITYPE1
      EQUIVALENCE(ITYPE2   ,VALUE( 190))
      TYPE INTEGER ITYPE2
      CALL INITIND                                                    30000
      CALL READTN                                                     31000
      KEY(6)    = KEYMAKE(2,34,14)                                    32000
      KEY(7)    = KEYMAKE(2,22,12)                                    33000
      KEY(8)    = KEYMAKE(1,11,11)                                    34000
      KEY(9)    = KEYMAKE(1,0,11)                                     35000
      KTAP      = KEYMAKE(2,0,15)                                     36000
      KZON(1)   = KEYMAKE(2,15,6)                                     37000
      KZON(2)   = KEYMAKE(2,21,6)                                     38000
      KZON(3)   = KEYMAKE(2,27,6)                                     39000
      KEYC1     = KEYMAKE(2,0,18)                                     40000
      KEYC2     = KEYMAKE(2,18,12)                                    41000
      CALL BLOCDIR                                                    42000
      MYIDENT = 7HINDEXER                                             43000
      NOPRINT=1                                                       44000
      CALL INITAPE                                                    45000
      NOPRINT=0                                                       46000
      ICKS=3                                                          47000
      NOUT=1                                                          48000
      JOUT=2                                                          49000
      ITOUT(1)=2                                                      50000
      NOPRINT=1                                                       51000
      MYIDENT = 8HDATABASE                                            52000
      CALL READDIR(1)                                                 53000
      MYIDENT = 7HSCRATCH                                             54000
      CALL WRITEDR( ITOUT(1))                                         55000
      DO 7290 I = 1, IDEF                                             56000
      VALUE(I) = IDEFAULT(I)                                          57000
 7290 LGLOK(I) = 0                                                    58000
      NOPRINT=0                                                       59000
C*****PASS 1   **************                                        60000
      INTP = 1                                                        61000
      CALL INPITEM                                                    62000
      PRINT 6802, ICLASS,ISITE,ISIDE                                  63000
   90 CONTINUE                                                        64000
      IF( ICLASS .NE. 0) NAMCLAS(ICLASS) = CLASS                      65000
C     ASSIGN JTYPE=COUNT ITEMS MY CLASS AND TYPE                      66000
      IF((ICLASS.NE.1).OR.(ISITE.EQ.1))100,98                         67000
   98 JSITE=JSITE+1                                                   68000
      IF(NOPERSON.EQ.NMPSITE) 100,95                                  69000
   95 CONTINUE                                                        70000
CHANGE    ISITE                                                      71000
      NC=  114
      CALL CHANGE
```

```
      ISITE=JSITE                                                       72000
      GO TO 50                                                          73000
  100 IF(ICLASS.EQ.0)120,101                                            74000
  101 IF(STOF.EQ.4HBLUF)102,103                                         75000
  102 IF(ICHKFLG(ICLASS).EQ.0)810,811                                   76000
  810 IA=1                                                              77000
      IR=MTARPCL                                                        78000
      GO TO 104                                                         79000
  103 NTIND=ICLASS+MTARCLS                                              80000
      IF( ICHKFLG(NTIND) .NE. 0) GO TO 813                              81000
  812 IA=MTARPCL+1                                                      82000
      IR= MTARPCL *2                                                    83000
  104 DO 110 I=IA,IR                                                    84000
      NTN = TYPENAM(I,ICLASS)                                           85000
      IF( NTN .EQ. 0) GO TO 111                                         86000
      IF( NTN .EQ. TYPE ) GO TO 112                                     87000
  110 CONTINUE                                                          88000
      IF(IA.EQ.1) 814,815                                               89000
  814 ICHKFLG(ICLASS)=4HBLUE                                            90000
  811 ICHKNUM(ICLASS)=ICHKNUM(ICLASS)+1                                 91000
      GO TO 819                                                         92000
  815 NTIND=ICLASS+MTARCLS                                              93000
      ICHKFLG(NTIND)=3HRED                                              94000
  813 ICHKNUM(NTIND) = ICHKNUM(NTIND) + 1                               95000
      GO TO 819                                                         96000
  111 TYPENAM(I,ICLASS)=TYPE                                            97000
  112 CONTINUE                                                          98000
CHANGE    JTYPE                                                       99000
      NC=   57
      CALL CHANGE
      JTYPE=I                                                          100000
      NADD=1                                                           101000
      IF(ICLASS .EQ. 1)113,114                                         102000
  113 NADD = NOPERSON/ NMPSITE                                         103000
      JSITE=1                                                          104000
  114 TYPETPL(I,ICLASS)=TYPETPL(I,ICLASS)+NADD                         105000
  819 CONTINUE                                                         106000
C     SAVE ALL VALUES OF VULN                                          107000
C*****ASSIGN IVULN                                                     108000
      IF(NVULN.GT.MVULN) GO TO 835                                     109000
  836 CONTINUE                                                         110000
      DO 116 I = 1,MVULN                                               111000
      IF(CVULN(I).EQ.0)118,115                                         112000
  115 IF(CVULN(I).EQ.VULN)119,116                                      113000
  116 CONTINUE                                                         114000
      NCHKFLG(2)=5HVULNS                                               115000
  835 NVULN = NVULN+1                                                  116000
      NCHKNUM(2)=NVULN                                                 117000
      GO TO 120                                                        118000
  118 CVULN(I)=VULN                                                    119000
      NVULN=I                                                          120000
  119 CONTINUE                                                         121000
      IVSAVE=I                                                         122000
   50 CONTINUE                                                         123000
CHANGE    IVULN                                                       124000
      NC=  115
```

```
      CALL CHANGE
      IVOLN=IVSAVE                                                    125000
  120 CONTINUE                                                        126000
      CALL OUTITEM                                                    127000
      CALL NEXTITM                                                    128000
      GO TO (90,91)ISWTERM                                            129000
C     END PASS 1      ***************                                 130000
C     MAKE UP TABLES--BREAK-POINT,CUM.NO.OF TYPES, NO. OF BLUE TYPES  131000
   91 NULL = 0                                                        132000
      IND=1  $  L=1  $  J=1                                           133000
      DO 140 I=1,MTARCLS                                              134000
      IA=1                                                            135000
      IB=MTARPCL                                                      136000
  121 DO 130 K=IA,IB                                                  137000
      KTOM=K                                                          138000
      NCHKNUM(I)=NCHKNUM(I)+1                                         139000
      IF (NCHKNUM(I).GT.MTARTYP) 820,821                              140000
  820 NCHKFLG(I)=5HTYPES                                              141000
      L=MTARTYP                                                       142000
  821 CONTINUE                                                        143000
      INDREG(L)=IND                                                   144000
      TR=TYPETBL(K,I)                                                 145000
      IF(TR.EQ.0)122,128                                              146000
  122 IF(J.EQ.1)123,124                                               147000
  123 BTYPES(I) = KTOM - IA                                           148000
      J=2                                                             149000
      IA= MTARPCL +1                                                  150000
      IB= MTARPCL *2                                                  151000
      GO TO 121                                                       152000
  124 IF(I.EQ.1)125,126                                               153000
  125 CM=0  $  GO TO 127                                              154000
  126 CM=CUMNO(I-1)                                                   155000
  127 CUMNO(I) = BTYPES(I) + KTOM - IA + CM                           156000
      J=1  $  GO TO 140                                               157000
  128 IND=TR+INDREG(L)                                                158000
      TYPETBL(K,I)=L                                                  159000
      L=L+1                                                           160000
      IF(K.NE.MTARPCL) GO TO 1339                                     161000
 1338 KTOM=21                                                         162000
      GO TO 123                                                       163000
 1339 IF(K.NE.(2*MTARPCL)) GO TO 130                                  164000
 1337 KTOM = 2 * MTARPCL + 1                                          165000
      GO TO 124                                                       166000
  130 CONTINUE                                                        167000
  140 CONTINUE                                                        168000
      LMAX=L                                                          169000
      NEWCON = MTARCLS * (MTARPCL * 2)                                170000
      DO 150 I=1,NEWCON                                               171000
      L=TYPETBL(I)                                                    172000
      IF(L.EQ.0)150,145                                               173000
  145 TYPENAM(L) = TYPENAM(I)                                         174000
  150 CONTINUE                                                        175000
      TYPENAM(LMAX) = 1H                                              176000
      DO 152 L=1,MTARCLS                                              177000
      NTIND = 1 + CUMNO(L-1)                                          178000
      INDCLAS(L) = INDREG(NTIND)                                      179000
```

```
  152 CONTINUE                                                          180000
      IF(IPRNT(1))1149,1165                                             181000
 1149 CONTINUE                                                          182000
      PRINT 1150                                                        183000
      DO 1151 L=1,LMAX                                                  184000
 1151 PRINT 1152,L, TYPENAM(L),INDREG(L)                                185000
      PRINT 1161                                                        186000
      DO 1162 L = 1, MTARCLS                                            187000
 1162 PRINT 1163,CUMNO(L),MTYPES(L),INDCLAS(L)                          188000
 1165 CONTINUE                                                          189000
      CALL WRSIMT(1)                                                    190000
C     COMPUTE DISTANCES FOR COLOCATION                                  191000
      S=1./60.                                                          192000
      IF(NVULN .LE. MVULN) GO TO 5702                                   193000
 5701 NVULN = MVULN                                                     194000
 5702 CONTINUE                                                          195000
      NCHKNUM(2) = NVULN                                                195100
      DO 155 I=1,NVULN                                                  196000
      CRDIST(I) = S * VLRADI(1., CVULN(I),0.,FN  )                      197000
  155 CONTINUE                                                          198000
      IF(IPRNT(4))156,158                                               199000
  156 PRINT 157,(I,CVULN(I),I=1,NVULN)                                  200000
  158 CONTINUE                                                          201000
      CALL WRSIMT(2)                                                    202000
      DO 240 I=1,MTARSEC                                                203000
      IND(I)=0                                                          204000
      X(I)=0  $  Y(I)=0  $  Z(I)=0                                      205000
  240 CONTINUE                                                          206000
      LENGTH=0                                                          207000
      NITEM=0                                                           208000
      DO 241 I=1,10                                                     209000
  241 NR(I)=0                                                           210000
      MYIDENT = 7HSCRATCH                                               211000
      ITP=6                                                             212000
      CALL SETWIT                                                       213000
      NOUT=1                                                            214000
      JOUT=3                                                            215000
      ITOUT(1)=3                                                        216000
      MYIDENT = 8HSCRATCH                                               217000
      CALL READDIR(2)                                                   218000
      MYIDENT = 8HSCRATCH                                               219000
      CALL WRITEDR(ITOUT(1))                                            220000
      DO 7291 I = 1, IDEF                                               221000
      VALUE(I) = IDEFAULT(I)                                            222000
 7291 LGLOB(I) = 0                                                      223000
      LMAX = CUMNO(MTARCLS)                                             224000
      DO 250 L=1,LMAX                                                   225000
  250 INDCUR(L)=INDREG(L)                                               226000
      INTP = 2                                                          227000
      CALL INPITEM                                                      228000
C     PASS 2 ***************************************************>******* 229000
  200 CONTINUE                                                          230000
      IF(ICLASS.EQ.0)215,201                                            231000
C     ASSIGN INDEXNO                                                    232000
  201 IF(ISITE.GT.1)210,203                                             233000
  203 L=TYPETBL(JTYPE,ICLASS)                                           234000
```

```
      INDEX=INDCUR(L)                                                   235000
CHANGE    INDEXNO                                                       236000
      NC=   22
      CALL CHANGE
      INDEXNO=INDEX                                                     237000
CHANGE    ITYPE                                                         238000
      NC=   50
      CALL CHANGE
      ITYPE=L                                                           239000
      JTYPE=ITYPE-CUMNO(ICLASS-1)                                       240000
      NADD=1                                                            241000
      IF(ICLASS.EQ.1)204,205                                            242000
  204 NADD = NOPERSON/NMPSITE                                           243000
  205 INDCUR(L)=INDEX+NADD                                              244000
      GO TO 212                                                         245000
  210 IND=INDEX+ISITE-1                                                 246000
CHANGE    INDEXNO                                                       247000
      NC=   22
      CALL CHANGE
      INDEXNO=IND                                                       248000
  212 CONTINUE                                                          249000
C     SAVE INDEXNO,LAT,LONG,DISTANCE FOR COLOCATION                     250000
      CDIST=CDIST(IVULN)                                                251000
C *** IF XLONG TABLE DATA SET TO MORE THAN 6 VALUES CHG LOOP            251100
      DO 260 I=1,6                                                      252000
      IF(LONG.LE.XLONG(I))261,260                                       253000
  260 CONTINUE                                                          254000
      I=1                                                               255000
  261 NR(I)=NR(I)+1                                                     256000
      GO TO (264,264)I                                                  257000
  264 IF(NR(I).GT.MTARSEC) GO TO 215                                    258000
 2264 IWR(1)=INDEXNO                                                    259000
      WR(2)=LONG                                                        260000
      WR(3)=LAT                                                         261000
      WR(4)=CDIST                                                       262000
      ITP=6                                                             263000
      CALL WRARRAY(ITP,4)                                               264000
      LENGTH=LENGTH+1                                                   265000
      GO TO 215                                                         266000
  266 NITEM=NITEM+1                                                     267000
      IF(NITEM.GT.MTARSEC) GO TO 215                                    268000
  267 IND(NITEM)=INDEXNO                                                269000
      X(NITEM)=LONG                                                     270000
      Y(NITEM)=LAT                                                      271000
      Z(NITEM)=CDIST                                                    272000
  215 CONTINUE                                                          273000
      CALL OUTITEM                                                      274000
      CALL NEXTITM                                                      275000
      GO TO (200,230)ISYTEM                                             276000
C     END PASS 2   **********                                           277000
C     MAKE UP COLOCATION ISLANDS AND COMPLEX TARGETS                    278000
  230 CONTINUE                                                          279000
      ITP=6                                                             280000
      CALL TERMTAP                                                      281000
      ITP=2                                                             282000
      MYIDENT = #SCRATCH                                                283000
```

```
      CALL SETWAIT                                                      284000
      NCOL=0                                                            285000
      NISL=0                                                            286000
      DO 233 I=1,6                                                      287000
      IF(NR(I).LE.MTARSEC) GO TO 233                                    288000
  231 PRINT 232,I,NR(I)                                                 289000
      NR(I) = MTARSEC                                                   290000
      NITEM = XMINOF(NITEM, MTARSEC)                                    291000
  233 CONTINUE                                                          292000
      IF(IPRGT(5))1009,235                                              293000
 1009 PRINT 1010                                                        294000
  235 CONTINUE                                                          295000
      CALL COLOCAT                                                      296000
      LIN=6    S    LOUT=7                                             297000
C *** IF XLONG TABLE DATA SIT TO MORE THAN 4 VALUES CHG LOOP            297100
      DO 520 LPASS=2,6                                                  298000
      I=0                                                               299000
      TLONG=XLONG(LPASS)                                                300000
      MYIDENT = 7HSCRATCH                                               301000
      ITP=LIN    S    CALL SETREAD                                      302000
      ITP = LOUT                                                        303000
      MYIDENT = 7HSCRATCH                                               304000
      CALL SETWAIT                                                       1000
CSUBR     INDEXER1  24SEP71  ********************************************  2000
      DO 510 II=1,LENGTH                                                 3000
      ITP=LIN                                                            4000
      CALL MOARRAY(I,R,4)                                                5000
      IF(NR(2).LE.TLONG)508,505                                          6000
  505 ITP=LOUT                                                           7000
      CALL MOARRAY(I,R,4)                                                8000
      GO TO 510                                                          9000
  508 I=I+1                                                             10000
      N(I)=I+R(1)                                                       11000
      X(I)=R(2)                                                         12000
      Y(I)=R(3)                                                         13000
      Z(I)=R(4)                                                         14000
  510 CONTINUE                                                          15000
      NITEM=NR(1,PASS)                                                  16000
      LENGTH=LENGTH-NITEM                                               17000
C     ITP=LIN    S    CALL TERMTAPE                                     18000
      ITP = LIN                                                         19000
      CALL TERMTAP                                                      20000
      ITP = LOUT                                                        21000
      CALL TERMTAP                                                      22000
      JX=LIN                                                            23000
      LIN=LOUT                                                          24000
      LOUT=JX                                                           25000
      CALL COLOCAT                                                      26000
  520 CONTINUE                                                          27000
      ITP=7                                                             28000
      CALL TERMTAP                                                      29000
      IF(NCOL .LE. MTARCOL) GO TO 523                                   30000
  521 NCHKFLG(12)=NMCOL TGTS                                            31000
      NCHKNUM(12)=NCOL                                                  32000
523   CONTINUE                                                          33000
C     END COLOCATION********                                           34000
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      IF(IPRNT(4).OR.IPRNT(7).OR.IPRNT(8))275,278                        34000
  275 N=ICUR-1                                                           35000
      PRINT 276,NISL,NCOL,N,TSTORE                                       36000
  278 CONTINUE                                                           37000
      DO 309 I=1,MTARTYP                                                 38000
  309 ICHK(I)=0                                                          39000
      NTDEF=0                                                            40000
      DO 310 I=1,MTARTET                                                 41000
  310 ITERM(I)=NTINTX(I)=0                                               42000
      NASMT=0                                                            43000
      NWHD=0                                                             44000
      NREDPLD=0                                                          45000
      NBLUPLD=0                                                          46000
      NZONES=0                                                           47000
      DO 312 I=1,MTAMIND                                                 48000
  312 STATUS(I)=0                                                        49000
      ZON       = KEYMAKE(2,42,6)                                        50000
      TVULN     = KEYMAKE(2,15,6)                                        51000
      TSTAT     = KEYMAKE(2,0,3)                                         52000
      TCOL      = KEYMAKE(2,3,3)                                         53000
      TARDLO    = KEYMAKE(2,6,3)                                         54000
      TARDHI    = KEYMAKE(2,9,3)                                         55000
      KATTACK   = KEYMAKE(2,12,3)                                        56000
      KARDEF    = KEYMAKE(2,21,3)                                        57000
      KTERM     = KEYMAKE(2,24,9)                                        58000
      KDEFZON   = KEYMAKE(2,33,6)                                        59000
      KDEFCMP   = KEYMAKE(2,39,3)                                        60000
      NTIND = 1 + CUMNO(MTARCLS)                                         61000
      MAXIND = INDRES(NTIND)-1                                           62000
      NOUT=1                                                             63000
      ITOUT(1)=4                                                         64000
      JOUT=4                                                             65000
      MYIDENT = 8HSCRATCH                                                66000
      NOPRINT = 1                                                        67000
      CALL HEADDIR(3)                                                    68000
      MYIDENT = 8HDUMINDEX                                               69000
      CALL #RITEDR(ITOUT(1))                                             70000
      DO 7292 I = 1, IDEF                                                71000
      VALUE(I) = IDEFAULT(I)                                             72000
 7292 LGLOM(I) = 0                                                       73000
      IF(IPRNT(3))314,315                                                74000
  314 CALL PRNTORC                                                       75000
  315 CONTINUE                                                           76000
      INTP = 3                                                           77000
      CALL INPITEM                                                       78000
      NZONERR = 0                                                        78200
      ITP = 10                                                           78400
      MYIDENT = 8HSCRATCH                                                78600
      CALL SETWRIT                                                       78800
C     PASS 3       GET TYPE DATA,FILL STATUS      ********              79000
  320 CONTINUE                                                           80000
      IF(ICLASS.GT.0)335,325                                             81000
  325 IF(CLASS.EQ. 7HWARHEAD)330,326                                     82000
  326 IF(CLASS.EQ.3HASM)329,327                                          83000
  327 IF(CLASS.EQ.4HZONE)328,331                                         84000
  331 IF (CLASS .EQ. 7HPAYLOAD )  332, 321                               85000
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  321 IF(CLASS.EQ.7HORLDATA) GO TO 322                                  86000
      IF(CLASS.NE. 8HCORRIDOR  ) GO TO 380                              86010
      IF(TYPE .EQ. 5HDUMMY ) MRKDUMY = 1                                86020
      IF(TYPE.EQ. 8HNAVAILAIR) MRKNVAIR = 1                             86030
      GO TO 380                                                         86040
C                                                                       87000
C     TIME DEPENDENT ORL DATA TABLES                                    88000
C                                                                       89000
  322 IORLMAX = XMAX0F(IORLMAX, IORL)                                   90000
      TMASW(ITIME, IORL) = TPASW                                        91000
      ORLASW(ITIME, IORL) = PSASW                                       92000
      GO TO 380                                                         93000
  332 IF(SIDE.EQ.4HBLUE) 301,302                                        94000
  301 ISIDE=1                                                           95000
      NBLUPLD=NBLUPLD+1                                                 96000
      IF(NBLUPLD .LE. MPAYLOD) GO TO 901                                97000
  900 NCHKFLG(8)=8HBLU PLDS                                             98000
      NCHKNUM(8)=NBLUPLD                                                99000
      GO TO 304                                                        100000
  901 CONTINUE                                                         101000
      KNARRAY(PAYLOAD)=NBLUPLD                                         102000
CHANGE    PAYLOAD                                                    103000
      NC=   78
      CALL CHANGE
      PAYLOAD=NBLUPLD                                                  104000
      GO TO 304                                                        105000
  302 ISIDE=2                                                          106000
      NREDPLD=NREDPLD+1                                                107000
      IF(NREDPLD .LE. MPAYLOD) GO TO 911                               108000
  910 NCHKFLG(9)=8HRED PLDS                                            109000
      NCHKNUM(9)=NREDPLD                                               110000
      GO TO 304                                                        111000
  911 CONTINUE                                                         112000
      KNARRAY(PAYLOAD)=NREDPLD                                         113000
CHANGE    PAYLOAD                                                    114000
      NC=   78
      CALL CHANGE
      PAYLOAD=NREDPLD                                                  115000
  304 IF(NOHOMR1.EQ.0) 334,333                                         116000
  334 MIRV(PAYLOAD,ISIDE)=1                                            117000
  341 IF(NWHDS.EQ.0) 338,339                                           118000
  338 INWHDS(PAYLOAD,ISIDE)=1                                          119000
      GO TO 340                                                        120000
  333 MIRV(PAYLOAD,ISIDE)=NOHOMR1                                      121000
      GO TO 341                                                        122000
  339 INWHDS(PAYLOAD,ISIDE)=NWHDS                                      123000
  340 IWHDTYP(PAYLOAD,ISIDE)=WHDTYPE                                   124000
      INDECYS(PAYLOAD,ISIDE)=NDECOYS                                   125000
      INARDEC(PAYLOAD,ISIDE) = NAREADEC                                126000
      GO TO 380                                                        127000
  328 NZONES=XMAX0F(NZONES,ZONE)                                       128000
      IF(NZONES.GT.MZONES) GO TO 850                                   129000
  851 ZONES(ZONE,1)=AREA                                               130000
      GO TO 380                                                        131000
  850 NCHKFLG(7)=5HZONES                                               132000
      NCHKNUM(7)=NZONES                                                133000
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      GO TO 380                                                          134000
C     ASM TYPE DATA                                                      135000
 329  NASMT=NASMT+1                                                      136000
      IF(NASMT.GT.MASMTYP) GO TO 870                                     137000
 871  ASMT(ASMTYPE,1)=PLANT                                              138000
      ASMT(ASMTYPE,2)=CEP                                                139000
      GO TO 380                                                          140000
 870  NCHKFLG(5)=MASMS                                                   141000
      NCHKNUM(5)=NASMT                                                   142000
      GO TO 380                                                          143000
C     WARHEAD TYPE DATA                                                  144000
 330  NWHD=XMAXOF(NWHD,WHDTYPE)                                          145000
      IF(NWHD .GT. MWHDTYP) GO TO 860                                    146000
 861  WHD(WHDTYPE,1)=PROD                                                147000
      WHD(WHDTYPE,2)=YIELD                                               148000
      WHD(WHDTYPE,3)=CEP                                                 149000
      GO TO 380                                                          150000
 860  NCHKFLG(6)=MWARHEADS                                               151000
      NCHKNUM(6)=NWHD                                                    152000
      GO TO 380                                                          153000
C     ALL INDEXED ITEMS HERE                                             154000
 335  IF(INDEXNO.LE.MTARIND) GO TO 801                                   155000
 800  NCHKFLG(3)=MINDEXNOS                                               156000
      NCHKNUM(3) = XMAXOF(NCHKNUM(3),INDEXNO)                            157000
      GO TO 380                                                          158000
 801  CONTINUE                                                           159000
      IF(COLO(INDEXNO).EQ.0)343,336                                      160000
 336  CONTINUE                                                           161000
      CALL IPUT(TCOL,INDEXNO,1,STATUS)                                   162000
      IF(COMP(INDEXNO).EQ.0)343,337                                      163000
 337  CONTINUE                                                           164000
CHANGE    ICOMPLEX                                                      165000
      NC=   55
      CALL CHANGE
      ICOMPLEX = ICPL(INDEXNO,ISTORE)                                    166000
 343  CONTINUE                                                           167000
      CALL IPUT (TARDLO, INDEXNO, TARDEFLO, STATUS)                      168000
      CALL IPUT(TARDHI, INDEXNO, TARDEFHI, STATUS)                       169000
      CALL IPUT(KATTACK,INDEXNO,IATTACK,STATUS)                          170000
      CALL IPUT(TVULN,INDEXNO,IVULN,STATUS)                              171000
      CALL IPUT(KDEFZON,INDEXNO,ADEFZON,STATUS)                          173000
      CALL IPUT(KDEFCMP,INDEXNO,ADEFCMP,STATUS)                          174000
      IF( ADEFZON .LE. 0) IAREA = 0                                      174010
      IF( ADEFZON .GE. 1)  IAREA = 1                                     174020
      CALL IPUT( KARDEF,INDEXNO,IAREA,STATUS)                            174030
      IF(NTINT.GT.0) 531,530                                             175000
530   LTERM(INDEXNO)=0                                                   176000
      GO TO 532                                                          177000
 531  NTDEF=NTDEF+1                                                      178000
      IF(NTDEF.LE.MTARTFI) GO TO 831                                     179000
 830  NCHKFLG(4)=MNTERMDEFS                                              180000
      NCHKNUM(4)=NTDEF                                                   181000
      GO TO 532                                                          182000
 831  LTERM(INDEXNO)=I                                                   183000
      ITERM(NTDEF)=INDEXNO                                               184000
      NTINTX(NTDEF)=NTINT                                                185000
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  532  CONTINUE                                                          186000
       IF(IGTSTAT .EQ. 1) GO TO 345                                      187000
       IF (ICLASS .EQ. 14)  GO TO 345                                    187100
       IF (ICLASS .GT. 5)  GO TO 340                                     188000
  345  CONTINUE                                                          189000
       CALL IPUT(TSTAT,INDEXNO,5,STATUS)                                 190000
       IF (ICLASS .EQ. 14) GO TO 351                                     190050
       IF( ICLASS .GT. 5)  GO TO 380                                     190100
       IF(ICLASS.LT.4)360,347                                            191000
  347  CONTINUE                                                          192000
       IF( ZONE .GT. 0) GO TO 3447                                       192020
       ITP = 10                                                          192040
       ITWORD = SIDE                                                     192060
       CALL WRWORD                                                       192080
       ITWORD = ICLASS                                                   192100
       CALL WRWORD                                                       192120
       ITWORD = TYPE                                                     192140
       CALL WRWORD                                                       192160
       ITWORD = INDEXNO                                                  192180
       CALL WRWORD                                                       192200
       ITWORD = DESIG                                                    192220
       CALL WRWORD                                                       192240
       TWORD = LAT                                                       192260
       CALL WRWORD                                                       192280
       TWORD = LONG                                                      192300
       CALL WRWORD                                                       192320
       ITWORD = NAME                                                     192340
       CALL WRWORD                                                       192360
       NZONERR = NZONERR + 1                                             192380
 3447  CONTINUE                                                          192400
       CALL IPUT(ZONE,INDEXNO,ZONE,STATUS)                               193000
       LC = 2                                                            196000
       IF(ICLASS.EQ.4)349,348                                            197000
  348  LC=3                                                              198000
  349  ZONES(ZONE,LC) = ZONES(ZONE,LC) + EFFECTIVES                      199000
       IF(ICHK(ITYPE))380,350                                            200000
  350  LC=LC-1                                                           201000
       LR=ITYPE-CUMNO(ICLASS-1)                                          202000
       CAPACTY(LR,LC) = EFFECTIVES                                       203000
       ICHK(ITYPE)=1                                                     204000
       GO TO 340                                                         205000
C      AREA BALLISTIC MISSILE DEFENSE COMPONENTS HERE                    205100
C      IGNORE IF NO AREA BMD ZONE DEFINED                                205200
  351  IF (ADEFZON .LE. 0) GO TO 380                                     205300
       ICMP = ADEFCMP + 1                                                205400
C      DETERMINE IF A MISSILE SITE OR A LONG RANGE RADAR                 205500
       GO TO (380, 352, 352, 352, 353), ICMP                             205600
C      ABM BASES HERE                                                    206000
  352  AINT(ADEFZON,ADEFCMP)=MAINT                                       207000
       GO TO 340                                                         208000
C      LONG RANGE RADARS HERE                                            209000
  353  IF(AZON1.EQ.0)355,354                                             210000
  354  NLRR(AZON1)=NLRR(AZON1)+1                                         211000
  355  IF(AZON2.EQ.0)357,356                                             212000
  356  NLRR(AZON2)=NLRR(AZON2)+1                                         213000
  357  IF(AZON3.EQ.0)359,358                                             214000
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  358 NUMR(AZON3)=NUMR(AZON3)+1                                    215000
  359 CALL IPUT(KTAR,ADEFZON,INDEXNO,IOVERLP)                      216000
      CALL IPUT(KZON(1),ADEFZON,AZON1,IOVERLP)                     217000
      CALL IPUT(KZON(2),ADEFZON,AZON2,IOVERLP)                     218000
      CALL IPUT(KZON(3),ADEFZON,AZON3,IOVERLP)                     219000
      GO TO 380                                                    220000
C     MISSILES AND BOMBERS HERE                                    221000
  360 IF(ITYPE.EQ.0) 380,600                                       222000
  600 IF(PAYLOAD.EQ.0) 361,601                                     223000
  601 CONTINUE                                                     224000
CHANGE    PAYLOAD                                                  225000
      NC=   78
      CALL CHANGE
      PAYLOAD=KARRAY(PAYLOAD)                                      226000
  361 IF(ICHK(ITYPE))380,362                                       227000
  362 ICHK(ITYPE)=1                                                228000
      IF(ICLASS-2)365,370,375                                      229000
C     MISSILE TYPE DATA                                            230000
  365 FMIS(ITYPE,1)=PINC                                           231000
      FMIS(ITYPE,2)=PLANT                                          232000
      FMIS(ITYPE,3)=PDES                                           233000
      FMIS(ITYPE,4)=PEPF                                           234000
      FMIS(ITYPE,5)=TVOH                                           235000
      FMIS(ITYPE,6)=IRETARG                                        236000
      MIS(ITYPE,7)=IREP                                            237000
      FMIS(ITYPE,8)=CEP                                            238000
      FMIS(ITYPE,9)=PKMIS                                          239000
      FMIS(ITYPE,10)=DELTA                                         240000
      MIS(ITYPE,11) = FUNCTION                                     241000
      GO TO 380                                                    242000
C     BOMBER TYPE DATA                                             243000
  370 L=ITYPE-CUMNO(1)                                             244000
      BOM(L,1)=PLANT                                               245000
      BOM(L,2)=TMDEL                                               246000
      BOM(L,3)=ABRATE                                              247000
      BOM(L,4)=PRAST                                               248000
      BOM(L,5)=CEP                                                 249000
      BOM(L,6)=DELTA                                               250000
      IBOM(L,7) = FUNCTION                                         251000
      IF(PKMAV.GT.0) MARKAMMPK = 1                                 251010
      GO TO 380                                                    252000
C     TANKER TYPE DATA                                             253000
  375 L=ITYPE-CUMNO(2)                                             254000
      TANK(L,1)=PLANT                                              255000
      TANK(L,2)=TMDEL                                              256000
      TANK(L,3)=ABRATE                                             257000
      TANK(L,4)=DELTA                                              258000
      ITANK(L,5) = FUNCTION                                        259000
  380 CALL OUTITEM                                                 260000
      IF(IPRNT(2).EQ.0)378,377                                     261000
  377 CALL PRITEM                                                  262000
  378 CONTINUE                                                     263000
      CALL SKETCH                                                  264000
      GO TO (320,390)ISWTERM                                       265000
C     END PASS 3    ********                                       266000
  390 CONTINUE                                                     267000
```

```
      IFIPRNT(10) = 0                                                   267050
      ITP = 10                                                          267100
      ITWORD = RHENDZONER                                               267200
      DO 3448 I = 1, 8                                                  267300
 3448 CALL RRWORD                                                       267400
      ITP = 10                                                          267500
      CALL TERMTAP                                                      267600
C     ARRAY COLOR WILL BE READ INTO COMPLEX                             268000
      IF (NCHKFLG(12)) 916,915                                          269000
  915 CONTINUE                                                          270000
      MYIDENT = RHSCRATCH                                               271000
      ITP=2                                                             272000
      CALL SETREAD                                                      273000
      CALL RDARRAY(COLAR,NCOL)                                          274000
      CALL RRSIMT(3)                                                    275000
      ITP=2                                                             276000
      CALL TERMTAP                                                      277000
      ISTORE=NCOL                                                       278000
      CALL TDEFSTT                                                      279000
  916 CALL RRSIMT(4)                                                    280000
      ITP=4                                                             281000
      JJITP=4                                                           282000
 7775 CONTINUE                                                          283000
      MYIDENT = RHDMINDEX                                               283300
      CALL SETREAD                                                      283600
      CALL SKIPFILE (JJITP)                                             283900
 7774 READFMTOUT(JJITP,1) (CUMNO,TYPENAM(250))                          284000
      CALL RRPRNT                                                       285000
      CALL ARDVRFL                                                      286000
      IF( MRKDUMY .NE. 0) GO       TO 991                               286010
      PRINT 990                                                         286020
  990 FORMAT( 1X, 50HDUMMY CORRIDOR FOR TACTICAL AIR NOT DEFINED        286030
     1 /, 1X, 100( 1H*), //)                                            286040
  991 IF( MRKNVAIR .EQ. MRKPMRPK  ) GO TO 995                           286050
      IF( MRKNVAIR .NE. 0) GO TO 995                                    286055
      PRINT 992                                                         286060
  992 FORMAT( 1X, 60HNAVAL AIR CORRIDOR NOT DEFINED...BASE MUST BE CORRE 286070
     1CTED                    ,/,1X, 100(1H*), //)                      286090
  995 CONTINUE                                                          286100
  470 IF(UNIT,JJITP) 470,471                                            287000
  471 END FILE JJITP                                                    288000
      REWIND JJITP                                                      289000
      WRITE(44,7777)                                                    290000
  157 FORMAT(1H1,10X,10H      IVULN,5X,10H       VULN,//,(11X,I10,7X,A8))  291000
  232 FORMAT(30HITOO MANY ITEMS FOR COLOCATION,10X,3HNR(,I2,2H)=,I6)    292000
  276 FORMAT(I8,2X,18HCOLOCATION ISLANDS  //                            293000
     *      I8,2X,17HCOLOCATED TARGETS  //                             294000
     *      I8,2X,15HCOMPLEX TARGETS  //                               295000
     *      I8,2X,21HELEMENTS OF COMPLEXES  //)                        296000
 1010 FORMAT(10H1     INDNO,3X,3HNTA,3X,5HIDLAT,3X,6HIDLONG,12X,5HCOLAR/)  297000
 1150 FORMAT(1H1,15X,*PLANETYPE* ,8X,*TYPENAME*,4X,*INDREG*,//)         298000
 1161 FORMAT(8H1  CUMNO,8H  ATYPES,8H INDCLAS//)                        299000
 1152 FORMAT( 20X,I4,8X,A8,I10)                                         300000
 1163 FORMAT(3I8)                                                       301000
 6802 FORMAT( 1X, * BENCH PRINT 1 * ,2I8,2X, A8)                        302000
 7777 FORMAT(41H ***** PROCESSOR INDEXER  COMPLETED *****)              303000
```

```
      END
```

304000

IDENT INDEXER

PROGRAM LENGTH		04077
ENTRY POINTS	INDEXER	00330
BLOCK NAMES		
	DIRECTRY	11654
	AREADAT	00144
	IFTPRNT	00012
	ITP	00001
	KEY	00012
	KEYC	00004
	KEYS	00014
	MAX	00050
	MYIDENT	00001
	NAVALTB	00312
	NOPRINT	00001
	RADATA	00050
	PRNT	00017
	SETAPE	00004
	TRANS	00006
	TWORD	00001
	WRIT	00030
	1	37204
	2	00764
	3	10006
	4	11616
	5	02001
	7	01356
	9	00144
	10	00120
	COMMON	00003
	PROCESS	01173
	EDITERM	00001
	EDITAPE	00015
EXTERNAL SYMBOLS		
	QRQENTRY	
	Q3Q10040	
	THEND.	
	Q1Q02100	
	Q1Q03100	
	Q1Q10100	
	Q3Q00040	
	QRQDICT.	
	INITIND	
	READIN	
	KEYMAKE	
	ALOCDIR	
	INITAPE	
	READDIR	
	WRITEDR	
	INPITEM	
	CHANGE	
	OUTITEM	
	NEXTITM	
	WRSENT	
	VLRADI	
	SETWRIT	

```
WRARRAY
TERMTAP
COLOCAT
SETREAD
RDARRAY
PRNTORC
IPUT
ICPL
WRWORD
PRITEM
TDEFSTT
SKIPFILE
WRPHYT
AROVRFL
XMINOF
XMAXOF
QRQIFUNI
EFT.
HEW.
STH.
BFO.
QNSINGL.
```

C00312 ARRATE 03316 03316 03346 03346
C00334 ADRLI
C00340 ADRLN
C00414 ADEFCMP 02711 03145 03145 03750 03750
C00413 ADEFZON 02704 02713 02713 02720 02720 03141 03141 03204 03211 03216 03223
03761 03761
C00363 AGX
C00364 AGY
C00367 AHOM
C00000 AINT 03156 03156
C00300 ALERTDNI
C00302 ALERTDLY
X00014 ALOCOIN 00426
C00203 AREA 02537 02537
X00044 ARGVREL 03500
C07172 ASMT 02556 02557 02560 02561
C00241 ASMTYPE 02556
C00004 ATTNAME
C00321 ATTNCORP
C00320 ATTNLEG
C00325 ATTNSUPP
C00416 AZON1 03160 03160 03163 03163 03212
C00417 AZON2 03166 03166 03171 03171 03217
C00420 AZON3 03174 03174 03177 03177 03224
C00361 BCODE
C00161 BEND
X00053 BFD. 03472
C00210 BLEGAD
C05602 BOM 03313 03313 03315 03315 03317 03317 03321 03321 03323 03323 03325
03325
C00020 BTYPES 01027 01027 01052 01052 01241
C10031 CAPACTY 03135 03135
C00166 CATCODE
C00304 CCREL
P04032 CDIST 01536 01574 01624
C00267 CEP 02557 02560 02603 02604 03275 03276 03322 03322
X00021 CHANGE 00543 00652 00740 01467 01475 01527 02435 02467 02646 03237
C00175 CL
C00147 CLASS 00524 00524 02336 02336 02341 02341 02344 02344 02347 02347 02352
02352 02356 02356
C00377 CLASST
C00372 CLT
P04033 CM 01042 01050 01062
C00153 CNTRYLOC
C00152 CNTRYOWN
C00401 CNTYLOCT
C00400 CNTYOWNT
P04552 CNVRTI. 00514 00515 00517 01211 01213 01214 01240 01241 01242 01321 01323
01671 01673 02077 02100 02102 02104
C00360 CODE
C00000 COL
C00002 COLAR 03431
C00000 COLO 02627
X00031 COLOCAT 01720 02037

C00567	COMP	02641										
C00146	COMPLEX											
P04034	COUNT.	00471	00472	01141	01142	01162	01163	01273	01274	01343	01344	01421
		01422	01440	01441	02114	02115	02127	02130	02150	02151	02301	02302
C00567	CP											
C00421	CPACTY											
C00146	CRDIST	01303	01304	01535	01535							
P00011	CRFMT.	03514	03530	03550	03550	03550	03550	03550	03550	03550	03550	03550
		03550										
C00001	CUMNO	01044	01044	01064	01064	01164	01165	01237	01237	01432	01432	01502
		01503	02245	02245	03127	03130	03307	03337	03337	03337	03674	
C00312	CVULN	00706	00706	00712	00712	00731	00731	01275	01301	01322	01323	
C00213	DATEIN											
C00214	DATEOUT											
C00144	DBLASW	02405	02405									
C01133	DEF											
C02760	DEFAULT											
C00323	DEFRANGE											
C00343	DELAY											
C00244	DELTA	03301	03302	03324	03324	03350	03350					
C00171	DESIG	03050	03050									
C00365	DGX											
C00366	DGY											
C00370	DHOB											
P00001	DICT.	00332	00334	00337	00342	00345	00352	00357	00364	00371	00376	00403
		00410	00415	00422	00427	00436	00453	00461	00505	00511	00521	00544
		00653	00741	00746	00751	01176	01201	01206	01216	01224	01227	01234
		01244	01251	01300	01312	01331	01333	01372	01403	01411	01450	01470
		01476	01530	01601	01627	01632	01642	01650	01666	01675	01702	01714
		01717	01721	01741	01750	01757	01771	02024	02031	02040	02047	02074
		02106	02156	02163	02170	02175	02202	02207	02214	02221	02226	02233
		02240	02263	02271	02314	02321	02331	02376	02436	02470	02530	02570
		02622	02633	02647	02652	02656	02663	02670	02675	02702	02707	02726
		03000	03027	03034	03041	03046	03053	03060	03065	03072	03077	03203
		03210	03215	03222	03240	03355	03363	03366	03404	03414	03425	03430
		03434	03441	03446	03451	03462	03465	03473	03476	03501	03510	03513
		03524	03527	03532	03536	03541	03544	03547				
C00437	EFECNES1											
C00440	EFECNES2											
C00327	EFECTNES	03116	03116	03133	03133							
X00050	EFT.	03535										
P03770	ENDING.	03550										
C00350	EVENT											
C00351	EVENTN											
P00000	EXIT.	03770										
C00243	FFRAC											
C00432	FLAG											
C00160	FLTNO											
C01042	FMIS	03260	03261	03262	03263	03264	03265	03266	03267	03270	03271	03272
		03273	03276	03277	03300	03301	03302	03303				
P04035	FN	01302										
C03724	FN1											
C04710	FN2											
P00011	FORMAT.	00431	00450	00456	00554	00625	00637	00721	00773	01153	01365	01400

		01406	01645	01726	01745	02055	02256	02266	02326	02336	02341	02344
		02347	02352	02356	02362	02367	02407	02423	02455	02542	02562	02606
		02617	02750	03376	03420	03457						
C00154	FUNCTION	03303	03304	03326	03326	03352	03352					
C00245	FVALH1											
C00251	FVALT1											
C00252	FVALT2											
P00522	GG00000.	00507										
P01202	GG00001.	01174										
P01217	GG00002.	01204										
P01230	GG00003.	01222										
P01245	GG00004.	01232										
P01332	GG00005.	01310										
P01676	GG00006.	01664										
P01720	GG00007.	01712										
P02107	GG00010.	02072										
P03514	GG00012.	03506										
P03530	GG00013.	03522										
P03550	GG00014.	03542										
C05714	GLOB											
C00163	H1											
C00164	H2											
C00324	HILOATTR											
P04036	I	00465	00472	00603	00617	00655	00702	00705	00711	00715	00730	00732
		00734	00764	01026	01037	01043	01051	01123	01136	01142	01267	01274
		01315	01320	01322	01324	01337	01344	01357	01361	01415	01422	01537
		01542	01546	01551	01553	01556	01561	01655	01657	01670	01672	01677
		01705	01730	01775	01776	02001	02110	02115	02123	02130	02144	02151
		02275	02302	03401	03406	03605						
P04037	IA	00563	00577	00602	00623	00770	00773	01026	01033	01061		
C00344	IALERT											
C00354	IALT											
C00224	IARDEF											
P04040	IAREA	02717	02724	02730								
C00404	IATTACK	02672										
P04041	IB	00565	00601	00621	00772	01036	01121					
C05602	IBOM	03327	03327									
C00002	IBREAK											
C10175	ICHK	02116	02117	03121	03121	03137	03140	03247	03247	03252	03253	
C00000	ICHKFLG	00560	00560	00571	00572	00627	00627	00640	00640			
C00036	ICHKNUM	00631	00631	00632	00642	00642	00643					
C00000	ICKSW	00441	00442									
C00227	ICLASS	00513	00513	00522	00522	00525	00527	00527	00551	00551	00557	00557
		00566	00566	00626	00626	00630	00630	00634	00634	00661	00662	01452
		01452	01502	01507	01510	02333	02333	02770	02770	02773	02773	03004
		03004	03007	03007	03013	03013	03031	03031	03106	03106	03127	03253
		03254	03640	03640								
C00373	ICLASST											
P04042	ICMP	03147										
C01754	ICODE											
C00235	ICOMPLEX	02654										
C00422	ICORR											
X00036	ICPL	02651										
C00000	ICUR	02067	02067									

C00424	IDBL	02377	03662	03662								
C00311	IDBLMAX	02377	02400	02400								
C00000	IDEF	00467	00467	01417	01417	02277	02277					
C02740	IDEFALT											
C02740	IDEFAULT	00473	00473	01423	01423	02303	02303					
C00007	IDLAT											
C00010	IDLONG											
C00362	IDUD											
P00531	IF00001.											
P02063	IF00002.											
P02065	IF00003.											
C00770	IFORMAT											
C00000	IFTPRNT	03373	03374									
C00216	IGIN											
P04043	IGOTO.	00754	01557	01635	03147	03371						
C00234	IGROUP											
P04044	II	01753	02011									
C00423	IMIRV											
P03553	IN00004.	00606	00646	00671	03577	03610	03645					
P03554	IN00006.	01014	01075	03600	03612	03614	03624					
P03555	IN00011.	01460	03634	03646								
P03556	IN00015.	02402	03656	03667								
P03557	IN00017.	02500	02510	03677	03714							
P03560	IN00020.	02505	02514	02517	03701	03712						
P03561	IN00021.	02522	03700	03711								
P03562	IN00027.	03114	03724	03735								
P03563	IN00031.	03134	03734	03744								
P03564	IN00032.	03155	03755	03765								
C11457	INARDEC	02525	02525									
C27344	IND	00760	00760	01011	01011	01074	01074	01345	01346	01524	01525	01532
		01532	01617	02002	02002							
C00056	INDREG	01013	01013	01072	01072	01167	01167	01214	01442	01442	02247	02250
C00037	INDCLAS	01170	01242									
C05210	INDCUR	01443	01463	01464	01520	01520						
C11337	INDECYS	02523	02523									
P04045	INDEX	01465	01472	01516	01522							
P00330	INDEXER	00330										
C00174	INDEXNO	01473	01473	01533	01533	01566	01566	01615	01615	02613	02613	02623
		02625	02625	02634	02637	02637	02653	02657	02664	02671	02676	02703
		02710	02727	02735	02736	02755	02756	02761	03001	03043	03043	03100
		03205										
C00005	INDNO											
C00346	INDV											
X00015	INITAPE	00435										
C00003	INITEM											
X00011	INITIND	00336										
X00020	INPITEM	00504	01447	02320								
C00347	INTAR											
C00000	INTP	00503	00503	01445	01446	02316	02317					
C11173	INWHDS	02505	02506	02515	02515							
C00233	IOTHER											
C00120	IOVERLP	03205	03212	03217	03224							
C00402	IPENMODE											
C00212	IPOINT											

C00000	IPRNT	01172	01172	01306	01306	01710	01710	02061	02061	02063	02063	02065
		02065	02311	02311	03357	03357						
X00035	IPUT	02632	02655	02662	02667	02674	02701	02706	02725	02777	03076	03202
		03207	03214	03221								
C00403	IREFMODE											
C00232	IREFUEL											
C00231	IREG											
C00265	IREP	03273	03274									
P04046	ISIDE	00516	02413	02445	03705							
C00330	ISITE	00515	00531	00531	00547	00547	01455	01455	01523	01523		
C00001	ISTORE	02103	02103	02653	03444	03444						
C00000	ISWTERM	00753	00753	01634	01634	03370	03370					
C06662	ITANK	03353	03353									
C00061	ITERM	02132	02762									
C00236	ITGT											
C00426	ITIME	03652	03652									
C00310	ITMAX											
C00002	ITOUT	00445	00462	01377	01412	02254	02272					
C00000	ITP	01367	01370	01576	01577	01637	01640	01644	01737	01737	01744	01744
		01755	01755	01767	01767	02022	02022	02027	02027	02044	02045	02325
		02325	03022	03023	03375	03375	03411	03412	03422	03423	03437	03454
		03455										
C00000	ITWORD	03024	03025	03032	03032	03037	03037	03044	03044	03051	03051	03070
		03070	03377	03377								
C00230	ITYPE	01501	01501	03120	03120	03126	03126	03136	03137	03227	03227	03246
		03246	03251	03252	03260	03306	03306	03336	03336			
C00374	ITYPET											
P04047	IWSAVE	00735	00743									
C00331	IWULN	00744	00744	01534	01534	02677						
C11027	IWWOTYP	02520	02520									
C00000	IWR	01567	01567	01602	01760	01772	02000	02000				
C00326	IWTYP2											
P00551	.100	00530	00533	00540								
P00524	.100001											
P00527	.100002	00523										
P00574	.100003											
P00575	.100004	00573										
P00612	.100005											
P00613	.100006	00611										
P00616	.100007											
P00617	.100008	00615										
P00700	.100009											
P00701	.100010	00677	00677									
P01103	.100011											
P01104	.100012	01102										
P01112	.100013											
P01113	.100014	01111										
P01261	.100015	01260										
P01262	.100016	01260										
P01565	.100017											
P01566	.100018	01564	01564									
P01614	.100019											
P01615	.100020	01612	01613									
P01663	.100021	01662										

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P01664  .100022    01662
P02054  .100023    02053
P02055  .100024    02053
P02355  .100025
P02356  .100026    02354
P02361  .100027
P02362  .100028    02360
P02365  .100029
P02367  .100030    02364
P02372  .100031
P02374  .100032    02371
P02422  .100033    02420
P02423  .100034    02421
P02454  .100035    02452
P02455  .100036    02453
P02536  .100037
P02537  .100038    02534   02535
P02554  .100039
P02555  .100040    02552   02553
P02576  .100041
P02577  .100042    02574   02575
P02616  .100043    02615
P02617  .100044    02615
P02716  .100045    02714
P02720  .100046    02715
P02723  .100047    02721
P02725  .100048    02722
P02747  .100049    02745
P02750  .100050    02746
P02767  .100051
P02770  .100052    02766
P02772  .100053
P02773  .100054    02771
P02776  .100055
P02777  .100056    02774   02775
P03006  .100057
P03007  .100058    03005
P03012  .100059
P03013  .100060    03010   03011
P03021  .100061
P03022  .100062    03017   03020
P03144  .100063    03142
P03145  .100064    03143
P03333  .100065
P03335  .100066    03332   03332
P03505  .100067
P03506  .100068    03504
P03516  .100069
P03517  .100070    03515
P03521  .100071
P03522  .100072    03520
P01712  .1009      01711
P00554  .101       00552
P00557  .102
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P00566  .103        00556
P00602  .104        00565
P00617  .110
P00645  .111        00612
P00650  .112        00616
P00664  .113
P00671  .114        00663
P01174  .1149       01173
P00711  .115        00707
P01204  .1151
P00715  .116        00714
P01232  .1162
P01250  .1165       01173
P00727  .118        00710
P00734  .119        00714
P00745  .120        00553   00726
P00773  .121        01036
P01023  .122
P01025  .123        01105
P01037  .124        01024   01116
P01041  .125
P01043  .126        01040
P01051  .127        01042
P01067  .128        01022
P01117  .130        01112
P01113  .1337
P01104  .1338
P01106  .1339       01103
P01123  .14?        01066
P01147  .145        01145
P01152  .150        01144
P01171  .152
P01305  .155
P01310  .156        01307
P01332  .158        01307
P01452  .200        01636
P01455  .201        01453
P01460  .203        01456   01457
P01512  .204
P01516  .205        01511
P01522  .210        01657
P01534  .212        01521
P01620  .215        01454   01565   01606   01614
P01566  .2264
P01637  .230
P01654  .231
P01705  .233        01663
P01720  .235        01711
P01352  .240
P01362  .241
P01442  .250
P01546  .260        01544
P01553  .261        01544   01545
P01561  .264
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P01607  .266    01560
P01615  .267
P02067  .275    02062   02064
P02107  .278    02066
P02412  .301
P02444  .302    02411
P02475  .304    02427   02443   02461
P02116  .309
P02131  .310
P02152  .312
P02313  .314    02312
P02316  .315    02312
P02333  .320    03372
P02352  .321    02351
P02375  .322    02355
P02336  .325    02334   02335
P02341  .326    02340
P02344  .327    02343
P02527  .328    02346
P02547  .329    02343
P02567  .330    02340
P02347  .331    02346
P02407  .332    02351
P02507  .333    02476
P02477  .334
P02613  .335    02335
P02632  .336    02630
P02644  .337    02642
P02504  .338
P02513  .339    02503
P02516  .340    02506
P02502  .341    02512
P02655  .343    02631   02643
P03076  .3447   03021
P03403  .344R
P02777  .345    02767   02772
P03016  .347    03014   03015
P02111  .348    03107
P03114  .349    03110
P03123  .350
P03141  .351    03006
P03154  .352    03151   03152   03152
P03160  .353    03153
P03163  .354    03161
P03166  .355    03162
P03171  .356    03167
P03174  .357    03170
P03177  .358    03175
P03202  .359    03176
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P03246  .361    03234
P03251  .362
P03257  .365    03255
P03306  .370    03255
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                02776   03012   03122   03140   03144   03150   03157   03220   03231   03250   03305
                03335
P03373  .390
P03530  .470    03533
P03534  .471
P00736  .50     00550
P01766  .505    01764
P01775  .506    01764   01765
P02011  .510    01774
P02042  .520
P02055  .521
P02061  .523    02054
P02735  .530    02733   02734
P02742  .531    02734
P02765  .532    02741   02754
P01262  .5701
P01264  .5702   01261
P03232  .600    03230
P03235  .601    03233
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P01425  .7291
P02305  .7292
P03470  .7774
P03457  .7775
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P02625  .801    02616
P00562  .810
P00630  .811    00561
P00575  .812
P00641  .813    00574
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P01005  .820
P01011  .821    01004   01004
P02750  .830
P02755  .831    02747
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P00701  .836
P02542  .850    02536
P02537  .851
P02606  .860    02576
P02577  .861
P02562  .870    02554
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P02423  .906
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P00756  .91
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P00541  .95         00537
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P03530  .995        03516   03521
P03771  .ERASER.    01110   01111   01133   01135
P00011  ..100000    00431
P00012  ..100001    00450
P00013  ..100002    00456
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P00015  ..100004    00625
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P00022  ..100009    01365
P00023  ..100010    01400
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P00025  ..100012    01645
P00026  ..100013    01734
P00027  ..100014    01745
P00030  ..100015    02055
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P00032  ..100017    02266
P00033  ..100018    02326
P00034  ..100019    02337
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P00036  ..100021    02345
P00037  ..100022    02350
P00040  ..100023    02353
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P00042  ..100025    02363
P00043  ..100026    02370
P00044  ..100027    02410
P00045  ..100028    02423
P00046  ..100029    02455
P00047  ..100030    02542
P00050  ..100031    02562
P00051  ..100032    02606
P00052  ..100033    02617
P00053  ..100034    02750
P00054  ..100035    03376
P00055  ..100036    03420
P00056  ..100037    03457
P00222  ..1010      01715
P00244  ..1150      01177
P00274  ..1152      01207
P00263  ..1161      01225
P00303  ..1163      01235
P00124  ..157       01313
P00147  ..232       01667
P00165  ..276       02075
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P00057	..660	00511										
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P04050	J	00763	01023	01031	01065							
P04051	JJITP	03456	03466	03470	03530	03534	03537					
C00014	JOUT	00444	01376	02255								
P04052	JSITF	00536	00535	00546	00670							
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C00375	JTYPFT											
P04053	JX	02034	02035									
P04054	K	00774	00777	01101	01110	01117	03621					
C00006	KAPPEF	02224	02727									
C00004	KATTACK	02217	02671									
C00012	KDEFCHP	02243	02710									
C00011	KDEFZON	02236	02703									
C00000	KEY	00350	00350	00355	00362	00367						
C01000	KEYC1	00420	00420									
C00001	KEYC2	01425										
X00013	KEYMAKE	00344	00351	00356	00363	00370	00375	00402	00407	00414	00421	02155
		02162	02167	02174	02201	02206	02213	02220	02225	02232	02237	
C00060	KEYS											
C00000	KNARRAY	02432	02432	02464	02464	03242	03243					
C00322	KOMSTYLE											
P04055	KTAB	00374	03204									
C00007	KTERP	02231										
P04056	KTOP	01006	01025	01057	01105	01115						
P00003	KZOP	00401	00406	00413	03211	03216	03223					
P04057	L	00762	01010	01012	01070	01075	01077	01100	01127	01144	01150	01157
		01162	01203	01210	01212	01217	01231	01236	01245	01435	01440	01462
		01463	01500	01517	03310	03312	03340	03342				
C00001	LABTAP											
C00001	LASTLIST											
C00001	LASTLST											
C00204	LAT	01572	01572	01621	01622	03055	03055					
P04060	LC	03104	03112	03123	03124	03730						
C00206	LEGAD											
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P04061	LENGTH	01354	01604	01605	02012	02017	02021					
C01153	LGLOW	00477	01427	02307								
P04062	LIN	01724	01736	01754	02021	02033	02035					
C00201	LINK											
C05674	LISTCHEK											
C05674	LISTCHK											
C05734	LISTVALS											
C05734	LISTVLS											
C00000	LMAX	01130	01130	01154	01154	01220	01220	01433	01433	01435	01436	
C05674	LOG1											
C05714	LOG2											
C00205	LOWL	01541	01541	01570	01570	01617	01620	03062	03062			
P04063	LOUT	01725	01743	01766	02026	02034	02036					
P04064	LPASS	01726	01732	02014	02042							
P04065	LP	03131	03741									

C00567 LTERM 02740 02760
C00000 MAHMOFZ
C00047 MAHMSIT
C00147 MAJOR
C00001 MALERT
C00002 MASK1
C00003 MASK2
C00002 MASMTYP 02551 02552
C00256 MAXFACTV
C00255 MAXFMACV
C00004 MAXIND 02251 02251
C00254 MAXKILL
C00003 MANDRY
C00004 MCCREEN
C00005 MCLASS
C00006 MCNTMYS
C00357 MCODE
C00007 MCOMR
C00010 MCOMTYP
C00012 MDFMLG
C00011 MDPEN
C00013 MGROUP
C00253 MINKILL
C00170 MINOR
C10567 MINV 02500 02501 02511 02511
C01042 MIS 03274 03275 03304 03305
C00223 MISDEF
C00014 MPAYLOD 02417 02420 02451 02452
C00015 MRECOVR
C00016 MRECVLG
C00017 MREF
P00010 MRKNMRPX 03334 03515
P00006 MRKPUMY 02366 03503
P00007 MRKNVAIP 02373 03514 03517
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C00021 MRTRT
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C00023 MTAMKRS
C00024 MTARCLS 00567 00567 00635 00635 01125 01125 01133 01134 01157 01160 01246
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C00027 MTARERS
C00030 MTARGET
C00031 MTARIND 02146 02146 02614 02614
C00046 MTARPCL 00563 00564 00575 00575 00577 00600 00770 00771 01031 01032 01034
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C00034 MTARTYP 01003 01003 01007 01007 02112 02112
C00035 MTARVAL
C00036 MTELMCM
C00037 MTOTRAS
C00040 MTYPE

C00217	MVA											
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C00042	MWEAPGP											
C00407	MWHDS											
C00043	MWHOTPE	02573	02574									
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		02327	02327	03421	03421	03460	03460					
C00044	MZONEPT											
C00045	MZONES	02533	02534									
P04066	N	02071	02101									
C03724	N1											
C04710	N2											
C00332	NADBLI											
C00333	NADBLR											
P04067	NADR	00661	00667	00673	01507	01515	01517					
C00415	NAINT	03154	03154									
C00405	NAL											
C00301	NALRTDBL											
C00303	NALRTDLY											
C11577	NAMCLAS	00525	00526									
C00156	NAME	03067	03067									
C00335	NAREADEC	02524	02524									
C00262	NASMS											
C00001	NASMT	02134	02135	02547	02547	02550	02551	02564	02564			
C00003	NBLUPLD	02141	02415	02415	02416	02417	02425	02425	02430	02430	02440	02440
C00002	NC	00541	00542	00650	00651	00736	00737	01466	01466	01474	01526	01526
		02433	02434	02465	02466	02644	02645	03235	03236			
C00074	NCHKFLG	00722	00722	01006	01006	02056	02056	02424	02424	02456	02456	02543
		02543	02563	02563	02607	02607	02620	02620	02751	02751	03416	03416
C00120	NCHKNUM	00725	00725	01000	01001	01002	01002	01265	01265	02060	02060	02426
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		02753	02753									
C00263	NCN											
C00002	NCOL	01652	01653	02051	02051	02057	02057	02100	03431	03443	03443	
C00242	NDECOYS	02521	02521									
C00411	NDET											
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C00003	NDIMLIST											
C00003	NDIMLST											
P04070	NEWCON	01135	01140									
C01042	NEWIND											
X00023	NEXTITM	00750	01631	03365								
C00211	NEXTZONE											
C00000	NI											
C00000	NISL	01654	02076	02076								
C00003	NITEM	01355	01355	01607	01607	01610	01611	01616	01616	01703	01704	01704
		02015	02016	02017	02020							
C00074	NLRR	03164	03164	03165	03172	03172	03173	03200	03200	03201		
C00176	NMPSITE	00537	00666	01514								
C00001	NN											
C00177	NOALERT											
C00260	NOBOMB1	02475	02475	02507	02507							
C00261	NOBOMB2											

C00200	NOINCOR											
C00433	NOPERSO1											
C00434	NOPERSO2											
C00435	NOPERSO3											
C00175	NOPERSON	00536	00536	00664	00664	01512	01512					
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C00410	NPEN											
C00004	NR	01362	01363	01554	01554	01555	01562	01562	01660	01660	01672	01673
		01700	01700	02014	02015							
C00003	NRECLG											
C00005	NRECORD	02137	02140	02447	02447	02450	02451	02457	02457	02462	02462	02472
		02472										
C00006	NTA											
C00356	NTARG											
C00000	NTOFF	02121	02122	02742	02742	02743	02744	02752	02752	02761	02762	
P04071	NTISD	00570	00571	00636	00637	00641	01166	01166	02246	02247		
C00337	NTINT	02732	02732	02763	02763							
C01001	NTINTX	02131	02132	02764	02764							
P04072	NTN	00610	00613									
C00000	NULL	00756	00757									
C00436	NUMORL											
C00001	NV											
C00002	NVOLN	00675	00675	00723	00723	00724	00733	00733	01256	01256	01263	01263
		01264	01264	01271	01271	01326	01326					
C00000	NWMD	02134	02134	02571	02572	02572	02573	02610	02610			
C00336	NWMDS	02502	02502	02513	02513							
C00355	NWRS											
C00345	NWTYPE											
P04073	NZONERR	02324	03074	03075								
C00001	NZONES	02142	02142	02531	02532	02532	02533	02544	02544			
X00022	OUTITEM	00765	01626	03354								
P03577	P00000,U	03602										
P03614	P00001,U	03616										
C00014	PA											
C00412	PARRIVE											
C00264	PAYLOAD	02431	02431	02441	02441	02463	02463	02473	02473	03232	03232	03242
		03243	03244	03673	03673							
C00315	PDES	03263	03264									
C00266	PDUR	02577	02577									
C00277	PEN											
C00316	PEPF	03265	03266									
C00000	PG											
C00314	PINC	03257	03257									
C00317	PKMIS	03277	03300									
C00425	PKNAV	03330	03330									
C00311	PLART	02554	02555	03261	03262	03311	03311	03341	03341			
C00352	PLACE											
C00353	PLACEN											
C00215	POP											
C00173	POSTURE											
C00313	PRART	03320	03320									
C00372	PRIMETAR											
X00040	PRITEM	03362										

X00034 PRNTORC 02313
C00427 PSASW 02404 02404
X00004 Q1Q02100 01056 01071
X00005 Q1Q03100 01060
X00006 Q1Q10100 01063 01073
X00007 Q3000040 02626 02640
X00002 Q3Q10040 00476 01426 02306 02737 02757
X00010 QBQDICT. 00000 00331
X00001 QBQENTRY 00333
X00047 QBQIFUNI 03531
C00040 QA
C00030 QG
X00054 QNSINGL. 03551
C00220 RADIUS
C03270 RANGE
C00271 RANGEDEC
C00272 RANGEREF
X00033 RDARRAY 01756 03427
X00016 READDIR 00452 01402 02262
X00012 READIA 00341
C00276 REL
P03575 RELCON.. 00335 00340 00343 00430 00437 00455 00463 00506 00545 00654 00742
00747 00752 01253 01335 01373 01405 01413 01451 01471 01477 01531
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C00207 RESERVE
X00051 RF%. 03540
P04076 S 01255 01303
X00032 SETREAD 01740 03424 03461
X00026 SETWRIT 01371 01647 01747 02330
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C00155 SITENO
X00042 SKIPFILE 03464
C00275 SPDASW
C00274 SPDLO
C00273 SPEED
C00157 SOUND
C00004 STATUS 02152 02153 02639 02660 02665 02672 02677 02704 02711 02730 03002
03101
X00052 STM. 00510 01175 01205 01223 01233 01311 01665 01713 02073 03507 03523
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C00246 T1
C00247 T2
C00250 T3
C00406 TAIA
C05662 TAPE 03343 03343 03345 03345 03347 03347 03351 03351
C00225 TAPEFEHI 02665
C00224 TAPEFELO 02660
C00003 TAPEHI 02212 02664
C00002 TAPELO 02205 02657

C00172	TASK											
P04075	TB	01021	01067									
C00001	TCOL	02200	02634									
X00041	TDEFSTT	03446										
X00030	TEMPTAB	01647	02023	02030	02046	03413	03440					
C00431	TGTSTAT	02765	02765									
X00003	THEND.	00521	01200	01215	01226	01243	01330	01674	01710	02105	03512	03526
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C00341	TIMEN											
P04076	TLONG	01734	01763									
C00000	TMASK	02403	02403									
C00306	TMDEL	03314	03314	03344	03344							
C00430	TPASS	02401	02401									
C00310	TRETARG	03271	03272									
P00501	TS00001.	00470										
P00621	TS00002.	00605										
P00717	TS00003.	00704										
P01125	TS00004.	00766										
P01121	TS00005.	00776										
P01153	TS00006.	01141										
P01172	TS00007.	01161										
P01220	TS00010.	01203										
P01246	TS00011.	01231										
P01306	TS00012.	01272										
P01326	TS00013.	01317										
P01353	TS00014.	01342										
P01431	TS00016.	01420										
P01445	TS00017.	01437										
P02012	TS00023.	01753										
P02121	TS00024.	02113										
P02134	TS00025.	02126										
P02155	TS00026.	02147										
P02311	TS00027.	02360										
C00000	TSTAT	02173	03001									
C00305	TTOS											
C00307	TVHL	03267	03270									
C00005	TVHLN	02166	02676									
C00000	TWORD	03056	03056	03063	03063							
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		01340	01360	01416	01540	01547	01552	01656	01700	01731	01777	02111
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P03620	UP00001.	00775	01120	03614	03621	03622	03623	03625	03625			
P03627	UP00007.	00657	01505	03572	03631	03632	03633	03635	03635			
P03637	UP00012.	03573	03641	03642	03643	03647	03647					
P03651	UP00014.	03565	03653	03654	03655	03657	03657					

P03661	UP00015.	03566	03663	03664	03665	03667	03670					
P03672	UP00016.	02442	02474	03245	03571	03674	03675	03676	03702	03702		
P03706	UP00017.	02414	02446	03705	03706	03707	03714	03715				
P03717	UP00020.	03574	03721	03722	03723	03725	03725					
P03727	UP00025.	03105	03113	03125	03730	03731	03732	03736	03736			
P03740	UP00027.	03132	03741	03742	03743	03745	03745					
P03747	UP00030.	03567	03751	03752	03753	03755	03756					
P03760	UP00031.	03570	03762	03763	03764	03766	03766					
C00221	VAL											
C00441	VAL1											
C00442	VAL2											
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X00025	VLHADT	01277										
C00162	VULN	00713	00713	00727	00727							
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C00371	#HDTYPEA											
C00000	#R	01571	01571	01573	01573	01575	01575	01762	01762	02003	02003	02005
		02005	02007	02007								
X00027	#RARRAY	01600	01770									
X00017	#RITEDR	00460	01410	02270								
X00043	#PRINT	03475										
X00024	#RSTMT	01250	01332	03433	03450							
X00037	#RWORD	03026	03033	03040	03045	03052	03057	03064	03071	03403		
P00473	#S00001.	00500										
P00606	#S00002.	00622	00622									
P00705	#S00003.	00720	00720									
P00767	#S00004.	01126	01126									
P00777	#S00005.	01122	01122									
P01143	#S00006.	01152										
P01164	#S00007.	01171										
P01204	#S00010.	01221	01221									
P01232	#S00011.	01247	01247									
P01275	#S00012.	01305										
P01320	#S00013.	01327	01327									
P01345	#S00014.	01352										
P01362	#S00015.	01364										
P01423	#S00016.	01430										
P01442	#S00017.	01444										
P01541	#S00020.	01550										
P01657	#S00021.	01707										
P01727	#S00022.	02043										
P01754	#S00023.	02013	02013									
P02116	#S00024.	02120										
P02131	#S00025.	02133										
P02152	#S00026.	02154										
P02303	#S00027.	02310										
P03403	#S00030.	03410										
C00004	X	01347	01620	01621	02064	02004						
C00016	XLONG	01543	01543	01732	01733							
X00046	XMAXOF	02375	02527	02567	02621							
X00045	XMINOF	01701										

C07644 Y 01350 01622 01623 02006 02006
C00257 YIELD 02001 02602
C17504 Z 01351 01624 01625 02010 02010
C00010 ZOM 02161 02161 03100
C00202 ZONE 02531 02540 03016 03016 03101 03720 03720
C07470 ZONES 02540 02541 03115 03115 03117 03117
01520 SYMBOLS

```
      SUBROUTINE AMOVREL                                                1000
CSUBR      AMOVREL   04AUG71   ***************************************  29000
C                                                                       2000
CUSE       MAX       START     ***************************************  3000
C     COMMON BLOCK CONTAINING ALL MAXIMUM VALUES FOR QUICK OCT 71       1000
C     VALUES INITIALIZED WITH DATA STATEMENTS IN INITIND                2000
C                                                                       3000
      COMMON/MAX/MAB#OFZ, MALERT, MASMTYP, MBNDRY, MCCREGN,             4000
     1           MCLASS,   MCNTRYS,  MCORR,    MCORTYP,  MOPEN,       5000
     2           MDEPNLG,  MGROUP,   MPAYLOD,  MRECOVR,                6000
     3           MRECVLG,  MREF,     MRTLEG,   MRTPT,                  7000
     4           MSPERMT,  MTANKHS,  MTARCLS,  MTARCOL,  MTARCPX,      8000
     5           MTARERS,  MTARGET,  MTAPIND,  MTARSEC,  MTARTEI,      9000
     6           MTARTYP,  MTAHVAL,  MTELMCM,  MTGTBAS,                10000
     7           MTYPE,    MVULN,    MWEAPGP,  MWHDTPE,  MZONEPT,      11000
     8MZONES, MTARPCL, MABMSIT                                          12000
C                                                                       13000
CEND       MAX       ***************************************************  3000
CUSE       9         START     ***************************************  4000
      COMMON /9/ ICHKFLG(30),ICHKNUM(30),NCHKFLG(20),NCHKNUM(20)        1000
C                                                                       2000
CEND       9         ***************************************************  4000
CUSE       TWORD     START     ***************************************  4200
      COMMON/TWORD/ITWORD                                               1000
      EQUIVALENCE(TWORD,ITWORD)                                         2000
C                                                                       3000
CEND       TWORD     ***************************************************  4200
CUSE       ITP       START     ***************************************  4400
      COMMON/ITP/ITP                                                    1000
C                                                                       2000
CEND       ITP       ***************************************************  4400
CUSE       MYIDENT   START     ***************************************  4600
      COMMON/MYIDENT/MYIDENT                                            1000
C                                                                       2000
CEND       MYIDENT   ***************************************************  4600
      DIMENSION NEMP(8)                                                 4800
C     ENTRY AVROVFLO                                                    5000
      DO 100 I=1,30                                                     6000
      IF(ICHKFLG(I).EQ.0)100,200                                        7000
  200 IF (I.GT.MTARCLS) 110,120                                         8000
  120 J=I                                                               9000
      GO TO 130                                                         10000
  110 J=I-MTARCLS                                                       11000
  130 PRINT 140,ICHKNUM(I),ICHKFLG(I),J                                 12000
  100 CONTINUE                                                          13000
      DO 550 I=1,20                                                     14000
      IF(NCHKFLG(I) .EQ.0) GO TO 550                                    15000
  115 PRINT 300, NCHKNUM(I),NCHKFLG(I)                                  16000
  550 CONTINUE                                                          17000
      ITP = 10                                                          17020
      MYIDENT = 8HSCRATCH                                               17040
      CALL SETREAD                                                      17060
      ITP = 10                                                          17080
      CALL RDWORD                                                       17100
      IF( ITWORD .EQ. 8HENDZONER   ) GO TO 400                          17120
      PRINT 141                                                         17140
```

```
      PRINT 142                                                          17160
      NERP(1) = IT*ORD                                                   17180
      DO 2 I = 2, 8                                                      17200
      CALL RD*ORD                                                        17220
    2 NERP(I) = IT*ORD                                                   17240
      N = 1                                                              17260
  410 PRINT 143, N, NERP                                                 17280
      DO 3 I = 1, 8                                                      17300
      CALL RD*ORD                                                        17320
    3 NERP(I) = IT*ORD                                                   17340
      IF( NERP(1) .EQ. RMENDZONER   ) GO TO 420                          17360
      N= N + 1                                                           17380
      GO TO 410                                                          17400
  400 PRINT 145                                                          17420
  420 ITP = 10                                                           17440
      CALL TERMTAP                                                       17460
      IF( NCHKNUM(2) .GT. 63) PRINT 146                                  17461
  146 FORMAT( 1H1,////////////,1X,100(1H*),/,                            17462
     1 15(50H SIMTAPE UNUSABLE---TOO MANY VULNERABILITIES          ,/))  17463
  141 FORMAT( 1H1,* ---CAUTION ---*,/,                                   17480
     1 115X,* THE FOLLOWING ITEMS IN CLASS FOUR (INTERCEPTORS) OR CLASS *, 17500
     2/,14X,*FIVE (DEFENSIVE COMMAND AND CONTROL) ARE ASSIGNED TO ZONE*,  17520
     3/,15X,* ZERO. THIS WILL CAUSE ABORT IN THE SIMULATOR UNLESS CHANGE  17540
     4D, * )                                                             17560
  142 FORMAT( //,10X,4HSIDE,9X,  5HCLASS, 8X,  4HTYPE,9X,7HINDEXNO ,6X,  17580
     1 5HDESIG,8X,3HLAT,10X,4HLONG,9X,4HNAME,//)                         17600
  143 FORMAT( 1X,I8,1X,A8,5X,I4,5X,A4,5X,I8,5X,A8,5X, 2(F8.4,7X),A8)     17620
  145 FORMAT( //, * NO ZONES EQUAL TO ZERO IN THIS RUN*   )              17640
      RETURN                                                             18000
  140 FORMAT(19H0ARRAY OVERFLOW * *,I8,A8,I4HTYPES IN CLASS,I4)          19000
  300 FORMAT(19H0ARRAY OVERFLOW * *,I8,2X,A8)                            20000
      END                                                                21000
```

IDENT ANOVREL

PROGRAM LENGTH		00445
ENTRY POINTS	ANOVREL	00232
BLOCK NAMES		
	MAX	00050
	9	00144
	TWOK1	00001
	ITP	00001
	MYIDENT	00001
EXTERNAL SYMBOLS		
	THEN.	
	ORGOBJCT.	
	SETSCAN	
	RDWORD	
	TEMPTMP	
	STR.	
	SLO.	
	GOSTMGL.	

```
P00232  ANOVREL   00232
P00440  BEGIN.    00440
P00437  CNVRTI.   00263  00264  00266  00306  00307  00365
P00013  COMMT.    00435  00435  00435  00435  00435  00436  00430
P00001  DICT.     00234  00257  00270  00302  00311  00321  00325  00334  00337  00342  00345
                  00352  00362  00370  00373  00377  00414  00417  00423  00431  00434
P00441  ENDJOB.   00235  00435
P00000  EXIT.     00441
P00013  FORMAT.   00316  00326  00404
P00271  GG000000. 00255
P00312  GG000001. 00300
P00340  GG000002. 00332
P00346  GG000003. 00340
P00374  GG000004. 00360
P00420  GG000005. 00412
P00435  GG000006. 00427
P00442  I         00237  00240  00244  00250  00252  00261  00271  00273  00274  00304  00312
                  00350  00354  00355  00375  00401  00402
C00000  ICHKFLG   00241  00241  00264
C00036  ICHKNUM   00262  00262
P00440  INITIAL.  00235
C00000  ITP       00314  00315  00322  00323  00420  00421
C00000  ITWORD    00326  00326  00346  00346  00353  00353  00400  00400
P00271  .100      00243
P00277  .100001
P00300  .100002   00276
P00331  .100003
P00332  .100004   00330
P00406  .100005
P00407  .100006   00405
P00427  .100007
P00435  .100008   00425  00426
P00252  .110      00247
P00300  .115
P00250  .120      00244  00246
P00255  .130      00251
P00244  .200      00242
P00353  .2
P00400  .3
P00412  .400      00331
P00360  .410      00411
P00420  .420      00406
P00312  .550      00277
P00013  ..100000  00316
P00014  ..100001  00327
P00015  ..100002  00406
P00205  ..140     00260
P00044  ..141     00335
P00114  ..142     00343
P00150  ..143     00363
P00174  ..145     00415
P00016  ..146     00432
P00221  ..300     00303
P00443  J         00251  00254  00265
```

C00000	MARMOFZ							
C00047	MARMSIT							
C00001	MALERT							
C00002	MASKTYP							
C00003	MBNDRY							
C00004	MCCHBGN							
C00005	MCLASS							
C00006	MCNTRYS							
C00007	MCORP							
C00010	MCORTYP							
C00012	MDEPNLG							
C00011	MDPEN							
C00013	MGROUP							
C00014	MPAYLOD							
C00015	MRECOVR							
C00016	MRECVLG							
C00017	MREF							
C00020	MRTLEG							
C00021	MRTPT							
C00022	MSPERPT							
C00023	MTANKHS							
C00024	MTARCLS	00245	00245	00253	00253			
C00025	MTARCOL							
C00026	MTARCPX							
C00027	MTAREHS							
C00030	MTARGET							
C00031	MTARIND							
C00046	MTARPCL							
C00032	MTARSEC							
C00033	MTARTEI							
C00034	MTARTYP							
C00035	MTARVAL							
C00036	MTELMCM							
C00037	MTGTHAS							
C00040	MTYPE							
C00041	MVULN							
C00042	MWEAPGP							
C00043	MWHDTRE							
C00000	MYIDENT	00317	00317					
C00044	MZONEPT							
C00045	MZONES							
P00444	N	00357	00364	00407	00410			
C00074	NCHKFLG	00275	00275	00307				
C00120	NCHKNUM	00305	00305	00424	00424			
P00003	NERR	00347	00355	00371	00402	00406		
X00002	ORGDICT.	00000	00233					
X00010	QNSINGL.	00434						
X00004	RDWORD	00324	00351	00376				
X00003	SETREAD	00320						
X00007	SLO.	00367						
X00006	STH.	00256	00301	00333	00341	0036[illegible]	00413	00430
X00005	TERMTAP	00422						
X00001	THELD.	00267	00310	00336	00344	00372	00416	00433
C00000	TWORD							

```
P00240  *S00001.   00272
P00274  *S00002.   00313
P00351  *S00003.   00356
P00376  *S00004.   00403
   00156 SYMBOLS
```

```
      SUBROUTINE COLOCATE                                                1000
CSUBR      COLOCAT   04AUG71  ********************************************* 30000
C      ENTRY COLOCATE                                                     2000
CUSE       COMMON    START    ********************************************* 3000
      COMMON/COMMUN/NWHO,NZONES,IBREAK                                   1000
CEND       COMMON    ********************************************************* 3000
      COMMON/COMP/LCOMP(60)                                              4000
CUSE       IFTPRNT   START    ********************************************* 5000
      COMMON/IFTPRNT/IFTPRNT(10)                                         1000
C                                                                        2000
CEND       IFTPRNT   ********************************************************* 5000
CUSE       ITP       START    ********************************************* 6000
      COMMON/ITP/ITP                                                     1000
C                                                                        2000
CEND       ITP       ********************************************************* 6000
CUSE       KEY       START    ********************************************* 7000
      COMMON/KEY/KEY(10)                                                 1000
      EQUIVALENCE(INORO,KEY(6)),(NTA,KEY(7)),(IDLAT,KEY(8)),(IDLONG,KEY  2000
     1(9))                                                               3000
C                                                                        4000
CEND       KEY       ********************************************************* 7000
CUSE       KEYC      START    ********************************************* 8000
      COMMON/KEYC/KEYC1,KEYC2,MASK1,MASK2                                1000
C                                                                        2000
CEND       KEYC      ********************************************************* 8000
CUSE       KEYS      START    ********************************************* 9000
      COMMON/KEYS/KEYS(12)                                               1000
      TYPE INTEGER ISTAT,ICOL,IAMDLO,IAMDHI,ZON                          2000
      TYPE INTEGER IVULN                                                 3000
      EQUIVALENCE( ISTAT,KEYS(1)),                                       4000
     1            (ICOL, KEYS(2)),                                      5000
     2            (IAMDLO,KEYS(3)),                                     6000
     3            (IAMDHI, KEYS(4)),                                    7000
     4            (KATTACK, KEYS(5)),                                   8000
     5            (IVULN, KEYS(6)),                                     9000
     6            (KAMDEF, KEYS(7)),                                    10000
     7            (KTERM, KEYS(8)),                                     11000
     8            (ZON, KEYS(9)),                                       12000
     9            (KDEFZON, KEYS(10)),                                  13000
     1            (KDEFCMP, KEYS(11))                                   14000
C                                                                        15000
CEND       KEYS      ********************************************************* 9000
CUSE       MAX       START    ********************************************* 10000
C     COMMON BLOCK CONTAINING ALL MAXIMUM VALUES FOR QUICK GCT 71        1000
C     VALUES INITIALIZED WITH DATA STATEMENTS IN INITIND                 2000
C                                                                        3000
      COMMON/MAX/MAXHDFZ, MALENT, MASKTYP, MHANDBY, MCOREGN,             4000
     1           MCLASS,  MCNTRYS,  MCORR,   MCORTYP,  MSPEN,           5000
     2           MDEFNLG, MGRPNUP,  MREVLOD, MRECOVR,                   6000
     3           MRECVLG, MWEF,     MRTIFG,  MRTPT,                     7000
     4           MSPEWT,  MTANKS,   MTANCLS, MTANCOL,  MTARCPX,         8000
     5           MTARFNS, MTARGET,  MTARIND, MTARSEC,  MTARTEI,         9000
     6           MTARTYP, MTARVAL,  MTELMCM, MTOTRAS,                   10000
     7           MTYPE,   MVULN,    MWEAPGP, MWHBTPE,  MZONEPT,         11000
     8MZONES, MTARPCL, MARMSIT                                          12000
C                                                                        13000
```

```
      CEND      MAX       ********************************************** 10000
      CUSE      MYIDENT   START     ********************************************** 11000
           COMMON/MYIDENT/MYIDENT                                          1000
      C                                                                    2000
      CEND      MYIDENT   ********************************************** 11000
      CUSE      NOPRINT   START     ********************************************** 12000
           COMMON/NOPRINT/NOPRINT                                          1000
      C                                                                    2000
      CEND      NOPRINT   ********************************************** 12000
      CUSE      PRNT      START     ********************************************** 13000
           COMMON/PRNT/IPRNT(15)                                           1000
      C                                                                    2000
      CEND      PRNT      ********************************************** 13000
      CUSE      TRANS     START     ********************************************** 14000
           COMMON/TRANS/LMAX,NASMT,NVULN,NALLOCD,MAXIND,NREMPLD            1000
      C                                                                    2000
      C                                                                    3000
      CEND      TRANS     ********************************************** 14000
      CUSE      TWORD     START     ********************************************** 15000
           COMMON/TWORD/ITWORD                                             1000
           EQUIVALENCE(TWORD,ITWORD)                                       2000
      C                                                                    3000
      CEND      TWORD     ********************************************** 15000
      CUSE      1         START     ********************************************** 16000
           COMMON/1/NISL,NN,NCOL,NITEM,X(4000),Y(4000),Z(4000),IND(4000)   1000
           DIMENSION STATUS(12000)                                         2000
           EQUIVALENCE(STATUS,X)                                           3000
      C                                                                    4000
      C     NISL = NUMBER OF COLLOCATED ISLANDS                            5000
      C     NN = INDEX TO COLAR                                            6000
      C     NCOL = NUMBER OF COLLOCATED TARGETS                            7000
      C     NITEM = NUMBER OF ITEMS IN SEGMENT BEING PROCESSED.            8000
      C     X,Y,Z = LONGITUDE, LATITUDE, CRITICAL DISTANCE                 9000
      C     IND = INDEX NUMBER OF X,Y,Z                                    10000
      C     STATUS = PACKED DATA FOR TARGETS                               11000
      C                                                                    12000
      CEND      1         ********************************************** 16000
      CUSE      2         START     ********************************************** 17000
           COMMON/2/COL(4000), CL(4000),CLT(4000),CP(4000)                 1000
           TYPE LOGICAL COL,CL,CLT,CP                                      2000
      C                                                                    3000
      C                                                                    4000
      CEND      2         ********************************************** 17000
      CUSE      3         MAPR71    ********************************************** 18000
           COMMON/3/ICUR, ISTORE,COLAR(100), COMPLEX(4000)                 1000
           TYPE INTEGER COLAR, COMPLEX                                     2000
           DIMENSION CRDIST(100),CVULN(100)                                3000
           TYPE INTEGER CVULN                                              4000
           EQUIVALENCE(CRDIST,COMPLEX),(CVULN,COMPLEX(101))                5000
      C                                                                    6000
      CEND      3         ********************************************** 18000
      CUSE      4         11JAN71   ********************************************** 19000
           COMMON/4/NULL, CUMNO(15), NTYPES(15), INDCLAS (15),             1000
          1INDHED(250),TYPENAM(20,15),TYPETHL(20,15),                      2000
          2INDCUR(250),ROW(20,7),                                          3000
          3    TANK(40,5),ASMT(20,2),WHO(50,3),ZONES(75,3),                4000
```

```
     4CAPACTY(50,2),ICHK(2501, MIRV(50,2),                                5000
     5IWHNTYP(50,2),INKPDS(50,2),INPECYS(40,2),INANDEC(40,2)              6000
     6,NAMCLAS(15)                                                        7000
      DIMENSION EMIS(80,11),MIS(80,11)                                    8000
      DIMENSION NEWIND(4000)                                              9000
      EQUIVALENCE(NEWIND,MIS,EMIS,TYPENAM(251))                          10000
      TYPE INTEGER TYPENAM, TYPETBL, CUMNO, RTYPES                       11000
      DIMENSION IROW(80,7),ITANK(40,5)                                   12000
      EQUIVALENCE( IROW,ROW),(ITANK,TANK)                                13000
C                                                                        14000
C                                                                        15000
CEND      4          ***************************************************19000
CUSE      7          START      ***************************************20000
      COMMON/7/COLO(12000),COMP(12000)                                    1000
      DIMENSION LTERM(12000)                                              2000
      TYPE LOGICAL COLO,COMP,LTERM                                        3000
      EQUIVALENCE(COMP,LTERM)                                             4000
C                                                                         5000
CEND      7          ***************************************************20000
CUSE      9          START      ***************************************21000
      COMMON /9/ ICHKFLG(30),ICHKNUM(30),NCHKFLG(20),NCHKNUM(20)          1000
C                                                                         2000
CEND      9          ***************************************************21000
      ENTRY COLOCAT                                                      21100
      DO 2 I=1,NITEM                                                     22000
      COL(I)=0  $  CL(I)=0  $  CLT(I)=0                                  23000
      CP(I)=0                                                            24000
    2 CONTINUE                                                           25000
      NTYP = CUMNO(YTARCLS)                                              26000
  998 PRINT 999,NITEM                                                    27000
      CALL ORDER(Y,NEWIND,NITEM)                                         28000
      CALL REORDER(NEWIND,NITEM,4,IND,X,Y,Z,0,0,0)                       29000
      DO 9 I=1,4000                                                      30000
    9 NEWIND(I)=0                                                        31000
      DO 400 LASTCL=1,NITEM                                              32000
      IF(COL(LASTCL))400,399                                             33000
  399 I=LASTCL                                                           34000
      IA=LASTCL + 1                                                      35000
  397 LT=1   $   LT=2                                                    36000
      LCOMP(1)=I                                                         37000
  398 XI = X(I)  $  YI = Y(I)  $  ZI = Z(I)                              38000
      CY = COSF(YI*.0174532925)                                          39000
   99 DO 100 J=IA,NITEM                                                  40000
      LS=1                                                               41000
      IF(I.EQ.J)100,49                                                   42000
   49 IF((Y(J)-YI).GE. .35)102,50                                        43000
   50 IF (  (J).EQ.0)51,29                                               44000
   29 I  CP(J  100,30                                                    45000
   30 IF(CL    EQ.0)100,31                                               46000
   31 LS=2                                                               47000
   51 DX=ABSF(   X(J))                                                   48000
      IF(DX.L    0.)42,41                                               49000
   41 DX=360                                                            50000
   42 IF(D       .8)100,53                                              51000
   53 D=     J)                                                         52000
                                                                        53000
```

```
     56 DY = YI-Y(J)                                                    54000
        DX=DX*CY                                                        55000
        DXY=DX*DX+DY*DY                                                 56000
        GO TO (57,61)LSW                                                57000
     57 CONTINUE                                                        58000
        IF(DXY.LT.D2)60,100                                             59000
     60 COL(I)=1  $  COL(J)=1                                           60000
        CL(I)=1  $  CL(J)=1                                             61000
        CLT(J)=1                                                        62000
     61 DC2=.25*D2                                                      63000
        IF(DXY.LT.DC2)62,100                                            64000
     62 CP(I)=1  $  CP(J)=1                                             65000
        LCOMP(LT)=J                                                     66000
        LT=LT+1                                                         67000
        IF( LT .GT. MTELMCM) 990, 110                                   68000
    990 PRINT 991, MTELMCM,ICUR                                         69000
        LT = MTELMCM                                                    70000
    100 CONTINUE                                                        71000
    102 IF(CL(I))101,400                                                72000
    101 CLT(I)=0                                                        73000
        LI=LI+1                                                         74000
        IF (LI.GT.MTELMCM) 992,993                                      75000
    992 LI=MTELMCM                                                      76000
    993 CONTINUE                                                        77000
        IF(LT.EQ.LI)112,110                                             78000
    110 I=LCOMP(LT)                                                     79000
        GO TO 398                                                       80000
    112 IF(LI.EQ.2)118,114                                              81000
    114 KK=LT-1                                                         82000
        IF(IPRNT(8).EQ.0)115,1030                                       83000
   1030 CONTINUE                                                        84000
        PRINT 1031,ICUR                                                 85000
    115 CONTINUE                                                        86000
        DO 116 K=1,KK                                                   87000
        NTIND= LCOMP(K)                                                 88000
        JK= IND(NTIND)                                                  89000
        IF(IPRNT(8).EQ.0)1034,1032                                      90000
   1032 CONTINUE                                                        91000
        PRINT 1033,JK                                                   92000
   1034 CONTINUE                                                        93000
        COMP(JK)=1                                                      94000
        ISTORE=ISTORE+1                                                 95000
        IF( ISTORE .GT. MTARCPX) 420, 421                               96000
    420 NCHKFLG(11)=6HCPX TGTS                                          97000
        NCHKNUM(11)=ISTORE                                              98000
        GO TO 116                                                       99000
    421 CONTINUE                                                        100000
        CALL IPUT(KEYC1,ISTORE,JK,COMPLEX)                              101000
        CALL IPUT(KEYC2,ISTORE,ICUR,COMPLEX)                            102000
    116 CONTINUE                                                        103000
        ICUR=ICUR+1                                                     104000
    118 CONTINUE                                                        105000
        IB = LASTCL + 1                                                 106000
        JF=XMINOF(J,NITEM)                                              107000
        DO 200 I=IB,JF                                                  108000
        IF(CLT(I))397,200                                               109000
```

```
  200 CONTINUE                                                          110000
      NT=0                                                              111000
      NN=0                                                              112000
      DO 300 M=LASTCL,JF                                                113000
      IF(CL(M))250,300                                                  114000
  250 NT=NT+1   &  NN=NN+1                                              115000
      IF( NN .GT. 100) 410, 411                                         116000
  410 NCHKFLG(10)=6HIN ISLND                                            117000
      NCHKNUM(10)=NN                                                    118000
      GO TO 300                                                         119000
  411 CONTINUE                                                          120000
      CL(M) = 0                                                         121000
      IF(NT.EQ.1)251,252                                                122000
  251 MI=M   &  ML=M                                                    123000
      IF(IPRNT(7).EQ.0)300,253                                          124000
  253 CONTINUE                                                          125000
      PRINT 1005                                                        126000
      GO TO 300                                                         127000
  252 IDY = (Y(M)-Y(ML))*3000.                                          128000
      IDX=IDXF(ML,M)                                                    129000
      DO 1002 JXX=2,NTYP                                                130000
      IF(IND(M).LT.INDBEG(JXX))1004,1002                                131000
 1002 CONTINUE                                                          132000
      JXX = NTYP + 1                                                    133000
 1004 NAM = TYPENAM(JXX - 1)                                            134000
      IF(IPRNT(7).EQ.0)254,1006                                         135000
 1006 PRINT 1007,IND(M),NAM,IDY,IDX,NN                                  136000
  254 CONTINUE                                                          137000
      INDX=IND(M)                                                       138000
      COLAR(NN)=0                                                       139000
      CALL IPUT(INDNO,NN,INDX,COLAR)                                    140000
      CALL IPUT(IDLAT,NN,IDY,COLAR)                                     141000
      CALL IPUT(IDLONG,NN,IDX,COLAR)                                    142000
      NTIND = IND(M)                                                    143000
      COLO(NTIND) = 1                                                   144000
      ML=M                                                              145000
  300 CONTINUE                                                          146000
      IDY = (Y(MI)-Y(ML))*3000.                                         147000
      IDX=IDXF(ML,MI)                                                   148000
      NF=NN-NT+1                                                        149000
      DO 1065 JXX=2,NTYP                                                150000
      IF(IND(MI).LT.INDBEG(JXX))1066,1065                               151000
 1065 CONTINUE                                                          152000
 1066 NAM = TYPENAM(JXX - 1)                                            153000
      IF(IPRNT(7).EQ.0)305,1067                                         154000
 1067 PRINT 1007,IND(MI),NAM,IDY,IDX,NF                                 155000
      PRINT 1068                                                        156000
  305 CONTINUE                                                          157000
      INDX=IND(MI)                                                      158000
      COLAR(NF)=0                                                       159000
      CALL IPUT(INDNO,NF,INDX,COLAR)                                    160000
      CALL IPUT(NTA,NN,NT,COLAR)                                        161000
      CALL IPUT(IDLAT,NF,IDY,COLAR)                                     162000
      CALL IPUT(IDLONG,NF,IDX,COLAR)                                    163000
      NTIND = IND(MI)                                                   164000
      COLO(NTIND) = 1                                                   165000
```

```
      ITP=2                                                              166000
      CALL WKARRAY(COLAR,NN)                                             167000
      NCOL=NCOL+NN                                                       168000
      NISL=NISL+1                                                        169000
      IF(IPRNT(5))280,281                                                170000
  280 CONTINUE                                                           171000
 1014 DO 1020 I=1,NN                                                     172000
      L1=IGET(INDNO,I,COLAR)                                             173000
      L2=IGET(NTA,I,COLAR)                                               174000
      L3=IGET(IDLAT,I,COLAR)                                             175000
      L4=IGET(IDLONG,I,COLAR)                                            176000
      PRINT 1015,L1,L2,L3,L4,COLAR(I)                                    177000
 1020 CONTINUE                                                           178000
  281 CONTINUE                                                           179000
  400 CONTINUE                                                           180000
      RETURN                                                             181000
  991 FORMAT( 1H1, * MORE THAN*, I8, * TARGETS IN COMPLEX*,I8)           182000
  999 FORMAT(7H0NITEM=,I6)                                               183000
 1005 FORMAT(///15H0COLOCATION ISLAND/                                   184000
     1 10H    INDEXNO,10H       TYPE,                                   185000
     2 8H    IDLAT,8H  IDLONG/)                                         186000
 1007 FORMAT(I10,2A,4B,3I8)                                              187000
 1015 FORMAT(I11,I6,2I8,5X,016)                                          188000
 1031 FORMAT(///10H0TCOMPLEX=,I5)                                        189000
 1033 FORMAT(I10)                                                        190000
 1068 FORMAT(////)                                                       191000
      END                                                                192000
```

IDENT COLOCATE

PROGRAM LENGTH 01206
ENTRY POINTS COLOCAT 00111
COLOCATE 00104

BLOCK NAMES

COMMON	00003
COMP	00050
IBIPRNT	00012
ITP	00001
KEY	00012
KEYC	00004
KEYS	00014
MAX	00050
MYIDENT	00001
NOPRINT	00001
PRNT	00017
TWO	00006
TWOM	00001
1	37204
2	00764
3	10004
4	11614
7	01354
9	00144

EXTERNAL SYMBOLS

03010040	
THE..	
03000040	
01010100	
CONFICT.	
ORDER	
REQUSED	
IPUT	
IPAR	
KPARRAY	
IGET	
XMISSF	
COSF	
STM.	
UNSINGL.	

C07172	ASRT											
P01120	BEGIN.	01121										
C05602	BOM											
C00020	BTYPES											
C10031	CAPACTY											
C00175	CL	00130	00331	00334	00403	00550	00570					
C00372	CLT	00133	00253	00337	00410	00534						
P01117	CNVRTI.	00150	00367	00371	00443	00465	00652	00654	00655	00656	00660	00762
		00764	00765	00766	00767	01077	01100	01101	01102	01104		
C00000	CO	00125	00200	00242	00323	00326						
C00002	COLAB	00667	00670	00674	00700	00704	01004	01004	01010	01014	01020	01024
		01036	01052	01057	01064	01071	01103	01104				
C00000	COLO	00711	01031									
P00111	COLOCAT	00111										
P00104	COLOCATE	00104										
C00567	COMP	00473										
C00146	COMPLEX	00511	00515									
C00015	COSF	00222										
P01136	COUNT.	00121	00122									
C00567	CP	00134	00247	00347	00352							
C03146	CPDIST											
P00003	CPFMT.	01114	01116	01116	01116	01116	01116	01116	01116			
C00001	CUMSO	00141	00141									
C00312	CVOLR											
P01137	CY	00224	00306									
P01140	D	00300	00300									
P01141	D2	00301	00316	00341								
P01142	DC2	00341	00342									
P00001	DICT.	00106	00113	00145	00152	00154	00160	00223	00364	00373	00440	00445
		00462	00467	00507	00513	00526	00602	00605	00617	00646	00662	00672
		00674	00702	00726	00756	00771	00774	00777	01006	01012	01016	01022
		01035	01050	01055	01062	01067	01075	01106				
P01143	DX	00265	00265	00271	00271	00272	00305	00306	00307			
P01144	DXY	00311	00315	00342								
P01145	DY	00305	00310	00310								
P01122	ENDING.	00107	00114	01115	01120	01121						
P00000	EXIT.	01123										
C01042	FMIS											
P00003	FORMAT.	00501	00544									
P00153	GG00000.	00143										
P00374	GG00001.	00362										
P00446	GG00002.	00436										
P00470	GG00003.	00460										
P00606	GG00004.	00600										
P00663	GG00005.	00644										
P00772	GG00006.	00754										
P01000	GG00007.	00772										
P01107	GG00010.	01073										
P01146	I	00116	00121	00167	00167	00203	00207	00211	00230	00321	00345	00401
		00406	00424	00531	00532	00536	01046	01051	01056	01063	01070	01103
		01107										
P01147	IA	00204	00225									
P01150	IB	00524	00530									
C05602	IBOM											

```
C00002  IGREAT
C10175  ICHK
C00000  ICHKFLG
C00036  ICHKFUM
C00000  ICUR        00370   00370   00442   00442   00515   00521   00521   00524
C00007  IDLAT       00677   01017   01063
C00010  IDLONG      00703   01023   01070
P01151  IDX         00621   00656   00704   00730   00766   01024
X00011  IDXF        00616   00725
P01152  IDY         00615   00655   00700   00724   00765   01020
C00000  IFTPRT
X00013  IGET        01047   01054   01061   01066
P01153  IGOTO.      00312
C11457  INANDEC
C27344  IND         00162   00453   00454   00624   00624   00651   00651   00664   00664   00705   00705
                    00736   00736   00761   00761   01001   01001   01025   01025
C00056  INDNEG      00626   00626   00740   00740
C00037  INDCLAS
C05210  INDCUR
C11337  INDECYS
C00005  INDXO       00673   01007   01051
P01154  INDX        00665   00674   01002   01010
P01120  INITIAL.    00107   00114
C11173  INNMDS
C00000  IPRNT       00433   00433   00455   00456   00575   00576   00641   00641   00751   00751   01042
                    01043
X00010  IPUT        00506   00512   00671   00675   00701   01005   01011   01015   01021
C00001  ISTORE      00474   00474   00475   00476   00503   00503   00510   00514
C06662  ITANK
C00000  ITF         01032   01033
C00000  ITWORD
C11027  IWRITYP
P00376  .100        00232   00250   00255   00273   00274   00316   00317   00343   00343
P00631  .1002       00627   00627
P00636  .1004       00630
P00644  .1006       00642
P00405  .101        00404
P01045  .1014
P00401  .102        00236   00237
P01107  .1020
P00436  .1030       00434
P00460  .1032       00457
P00470  .1034       00457
P00743  .1045       00741   00741
P00746  .1046       00742
P00754  .1047       00752
P00422  .110        00360   00361   00420
P00426  .112        00421
P00431  .114        00427
P00446  .115        00435
P00516  .116        00505
P00523  .11P        00430
P00137  .2
P00536  .200
```

```
P00552  .250        00551
P00573  .251
P00407  .252        00572
P00600  .253        00577
P00663  .254        00643
P01045  .255        01043
P01112  .256        01044
P00245  .25         00243
P00251  .30
P00713  .300        00551   00564   00577   00606
P01000  .305        00753
P00256  .31         00254
P00205  .307        00535
P00211  .309        00425
P00202  .399
P01112  .400        00201   00404
P00270  .41         00267
P00569  .410
P00565  .411        00557   00557
P00272  .42         00266   00267
P00501  .420        00500
P00506  .421        00477   00509
P00233  .49         00231
P00240  .50         00237
P00260  .51         00244
P00275  .53         00274
P00302  .55
P00315  .57         00313
P00320  .60
P00340  .61         00314
P00344  .62
P00171  .9
P00225  .99
P00362  .990
P00415  .992
P00417  .993        00414   00414
P00423  .998
P01124  .ERASER.    00221   00263   00307   00311
P00003  ..100000    00501
P00004  ..100001    00560
P00027  ..1005      00603
P00052  ..1007      00447   00757
P00060  ..1015      01076
P00067  ..1031      00441
P00076  ..1033      00463
P00101  ..1065      00775
P00005  ..991       00365
P00022  ..999       00144
P01155  J           00226   00231   00233   00240   00245   00251   00261   00276   00303   00324   00350
                    00353   00374   00527
P01156  JF          00530   00537   00714
P01157  JF          00455   00464   00471   00511
P01160  JXX         00622   00625   00631   00635   00636   00730   00737   00743   00746
P01161  K           00447   00450   00516
```

```
C00006 KARDEF
C00004 KATTACK
C00012 KDEFCVP
C00011 KDEFZON
C00000 KEY
C00000 KEYC1      00510
C00001 KEYC2      00514
C00000 KEYS
P01162 KK         00432   00517
C00007 KTERM
P01163 L1         01053   01077
P01164 L2         01060   01100
P01165 L3         01065   01101
P01166 L4         01072   01102
P01167 LASTCL     00174   00176   00202   00203   00523   00544   01112
C00300 LCOMP      00210   00210   00354   00354   00423   00423   00451   00451
P01170 LI         00206   00411   00412   00412   00416   00420   00422   00426
C00000 LMAX
P01171 LSW        00230   00257   00312
P01172 LT         00207   00353   00355   00356   00357   00375   00417   00431
C00567 LTERM
P01173 M          00545   00546   00566   00573   00574   00607   00620   00623   00650   00663   00712
                  00713
C00600 MAHMDEZ
C00047 MAHMSIT
C00001 MALERT
C00002 MASK1
C00003 MASK2
C00002 MASMTYP
C00004 MAXIDD
C00003 MBNDRY
C00004 MCCHFGN
C00005 MCLASS
C00006 MCNTRYS
C00007 MCOMR
C00010 MCORTYP
C00012 MDFRNLG
C00011 MOPEN
C00013 MGROUP
P01174 MI         00574   00716   00727   00735   00760   01000
C10567 MIHV
C01042 MIS
P01175 ML         00575   00611   00620   00712   00720   00727
C00014 MPAYLOD
C00015 MRECOVR
C00016 MRECVLG
C00017 MREF
C00020 MRTLLG
C00021 MRTPT
C00022 MSPFRAT
C00023 MTANKHS
C00024 MTARCLS    00140   00140
C00025 MTARCOL
C00026 MTARCPX    00476   00477
```

C00027	%TAHERS										
C00030	%TARGET										
C00031	%TARIAP										
C00046	%TARPCL										
C00032	%TARSEC										
C00033	%TARTEI										
C00034	%TARTYP										
C00035	%TARVAL										
C00036	%TEL=CM	00357	00360	00365	00366	00374	00374	00413	00413	00415	00415
C01037	%TOTHAS										
C00040	%TYPE										
C00041	%VOLN										
C00042	%=EARGP										
C00043	%=WRITE										
C00000	%YIDENT										
C00044	%ZONEPT										
C01045	%ZONES										
P01176	&&=	00642	00653	00750	00763						
C11577	&ARCLAS										
C00001	&ASST										
C00003	&BLKPLD										
C00074	&CHKFLG	00502	00502	00561	00561						
C00126	&CHKOLD	00504	00504	00563	00563						
C00002	&COL	01037	01037	01040							
C01042	&ERTN	00155	00161	00171	00172						
P01177	&F	00733	00767	01003	01007	01017	01023				
C00000	&ISL	01041	01042								
C00003	&ITEM	00116	00117	00147	00147	00156	00161	00377	00377	00527	01113	01113
C00001	&N	00542	00543	00554	00554	00555	00556	00562	00562	00657	00657	00666
		00667	00673	00677	00703	00730	00731	01013	01036	01040	01110	01110
C00000	&OPSINT										
C00005	&REPPLD										
P01200	&T	00541	00552	00553	00571	00732	01014				
C00006	&TA	01013	01056								
P01201	&TIAD	00652	00653	00706	00707	01026	01027				
P01202	&TYP	00142	00632	00634	00744						
C00000	&ULL										
C00002	&VOLN										
C00000	&WHO										
C00001	&ZONES										
X00006	ORDER	00153									
X00004	=1010100	00014	00723								
X00003	=3000040	01177	00241	00248	00252	00402	00533	00547			
X00001	=3010040	00124	00127	00132	00135	00322	00325	00330	00333	00336	00346	00351
		00407	00472	00567	00710	01030					
X00005	&RODUCT.	00060	00105	00112							
X00017	&NSINGL.	01116									
X00007	REORDER	00157									
C00004	STATUS										
X00016	STR.	00144	00353	00437	00441	00501	00545	00755	00773	01074		
C00002	TAB										
C00003	TARGET										
C00002	TAPLD										
C00001	TCOL										

```
X00002  THEAD.      00151   00372   00444   00466   00604   00661   00770   00776   01105
P00140  TS00001.    00120
P01113  TS00003.    00175
P00377  TS00004.    00226
P00517  TS00005.    00447
P03537  TS00006.    00531
P00714  TS00007.    00565
P00632  TS00010.    00622
P00744  TS00011.    00734
P01110  TS00012.    01046
C00000  TSTAT
C00005  TVULN
C00000  TWORD
C00450  TYPENAM     00637   00637   00747   00747
C02730  TYPETBL
C07242  WHO
X00012  WRAPWAY     01034
P00123  WS00001.    00137
P00171  WS00002.    00173
P00176  WS00003.    01114   01114
P00227  WS00004.    00400   00400
P00450  WS00005.    00520   00520
P00532  WS00006.    00540   00540
P00546  WS00007.    00715   00715
P00623  WS00010.    00633   00633
P00735  WS00011.    00745   00745
P01047  WS00012.    01111   01111
C00004  X           00163   00212   00214   00261   00262
P01203  XI          00213   00260
X00014  XMINOF      00525
C07644  Y           00155   00163   00214   00214   00234   00234   00303   00304   00610   00610   00612
                    00612   00716   00717   00720   00721
P01204  YI          00215   00220   00235   00302
C17504  Z           00164   00216   00216   00276   00277
P01205  ZI          00217   00275
C00010  ZONE
C07470  ZONES
   00445 SYMBOLS
```

```
      SUBROUTINE FINDIT                                                  1000
CSUBR      FINDIT    START     ***************************************** 31000
      COMMON/MASK/MASK                                                   2000
      DATA(MASK1=777760000000000B)                                       3000
CUSE       3         APR71     ***************************************** 4000
      COMMON/3/ICUR, ISTORE,COLAR(100), COMPLEX(4000)                    1000
      TYPE INTEGER COLAR, COMPLEX                                        2000
      DIMENSION CRUIST(100),CVULN(100)                                   3000
      TYPE INTEGER CVULN                                                 4000
      EQUIVALENCE(CRUIST,COMPLEX),(CVULN,COMPLEX(101))                   5000
C                                                                        6000
CEND       3         ********************************************** 4000
      ICUR1=ICUR*2**34                                                   5000
      ICUR2=(ICUR1.AND.MASK1)                                            6000
      DO 50 I=1,ISTORE                                                   7000
      ITESTIT=COLAR(I).AND.MASK1                                         8000
      IF(ITESTIT.EQ.ICUR2) 60,50                                         9000
   50 CONTINUE                                                           10000
      CALL ABORT                                                         11000
   60 ICUR=I                                                             12000
      RETURN                                                             13000
      END                                                                14000
```

IDENT FINDIT

PROGRAM LENGTH		00052
ENTRY POINTS	FINDIT	00004
BLOCK NAMES		
	MASK	00001
	3	10006
EXTERNAL SYMBOLS		
	Q2W07000	
	QRGDICT.	
	ABORT	

```
X00003  ABORT       00034
P00041  BEGIN.      00041
C00002  COLAN       00024   00024
C00146  COMPLEX
C00146  CRDIST
C00312  CVOLN
P00001  DICT.       00006   00011   00035
P00042  ENDING.     00007   00040
P00000  EXIT.       00042
P00004  FINDIT      00004
P00046  I           00021   00023   00031   00036
C00000  ICUR        00015   00015   00037   00037
P00047  ICUR1       00017
P00050  ICUR2       00020   00027
P00041  INITIAL.    00007
C00001  ISTORE      00032   00032
P00051  ITESTIT     00026
P00031  .50         00027
P00036  .60         00030
P00043  .ERASER.    00014   00016
C00000  MASK
P00003  MASK1       00017   00025
X00001  ?ZOBJ000    00010
X00002  ?ZOPICT.    00000   00005
P00032  ?S00001.    00022
P00023  -S00001.    00033   00033
   00032 SYMBOLS
```

```
      FUNCTION ICPL(INDEX,N)                                              1000
CSUBR     ICPL      START     ***********************************************  32000
CUSE      3         MAP71     ***********************************************   2000
      COMMON/3/ICUR, ISTORE,COLAR(100), COMPLEX(4000)                     1000
      TYPE INTEGER COLAR, COMPLEX                                         2000
      DIMENSION CRDIST(100),CVOLA(100)                                    3000
      TYPE INTEGER CVOLA                                                  4000
      EQUIVALENCE(CRDIST,COMPLEX),(CVOLA,COMPLEX(101))                    5000
C                                                                         6000
CEND      3         ***********************************************************  2000
CUSE      KEYC      START     ***********************************************   3000
      COMMON/KEYC/KEYC1,KEYC2,MASK1,MASK2                                 1000
C                                                                         2000
CEND      KEYC      ***********************************************************  3000
      DATA(MASK3=777777B)                                                 4000
      M=INDEX.AND.MASK3                                                   5000
      DO 10 I=1,N                                                         6000
      IND=COMPLEX(I).AND.MASK3                                            7000
      IF(IND.EQ.M)20,10                                                   8000
   10 CONTINUE                                                            9000
      ICPL=0                                                             10000
      RETURN                                                             11000
   20 ICPL=IGET(KEYC2,I,COMPLEX)                                         12000
      RETURN                                                             13000
      END                                                                14000
```

```
                                        IDENT     ICPL
PROGRAM LENGTH                  00101
ENTRY POINTS      ICPL          00004
BLOCK NAMES
                  3             10004
                  KEYC          00004
EXTERNAL SYMBOLS
                  QPQDICT.
                  IGET
```

```
P00037  BEGIN.      00057   00066   00072
C00002  COLAR
C00146  COMPLEX     00016   00016   00033
C00146  CRDIST
C00312  CVULN
P00001  DICT.       00006   00031   00042   00043
P00060  ENDING.     00007   00027   00035   00037   00040   00040   00041   00041
P00000  EXIT.       00064
P00010  FP00001.    00051   00052
P00024  FP00002.    00055   00056
P00075  GETPL.      00044   00053
P00065  GETPU.      00047   00071
P00076  I           00013   00015   00023   00032
P00004  ICPL        00004
C00000  ICUR
X00002  IGET        00030
P00077  IND         00020
P00004  INDEX       00010
P00037  INITIAL.    00007
C00001  ISTORE
P00023  .10         00021
P00030  .20         00022
C00000  KEYC1
C00001  KEYC2       00032
P00100  M           00012   00021
C00002  MASK1
C00003  MASK2
P00003  MASK3       00011   00017
P00004  N           00024
P00053  PF00002.    00050
P00057  PF00003.    00054
X00001  QBGOICT.    00000   00005
P00024  TS00001.    00014
P00036  VALUE.      00027   00034   00063
P00015  WS00001.    00025   00025
   00043 SYMBOLS
```

```
      FUNCTION IDXF(J,K)                                                    1000
CSUBR      IDXF       START     ********************************************* 33000
CUSE       1          START     ********************************************* 2000
      COMMON/1/NISL,NN,NCOL,NTIEM,X(4000),Y(4000),Z(4000),IND(4000)         1000
      DIMENSION STATUS(12000)                                               2000
      EQUIVALENCE(STATUS,X)                                                 3000
C                                                                           4000
C     NISL = NUMBER OF COLLOCATED ISLANDS                                   5000
C     NN = INDEX TO COLAR                                                   6000
C     NCOL = NUMBER OF COLLOCATED TARGETS                                   7000
C     NTIEM = NUMBER OF ITEMS IN SEGMENT BEING PROCESSED.                   8000
C     X,Y,Z = LONGITUDE, LATITUDE, CRITICAL DISTANCE                        9000
C     IND = INDEX NUMBER OF X,Y,Z                                           10000
C     STATUS = PACKED DATA FOR TARGETS                                      11000
C                                                                           12000
CEND       1          ********************************************************* 2000
      DX=X(K)-X(J)                                                          3000
      IF(ABSF(DX).LE.180.)50,10                                             4000
   10 IF(DX)30,20,20                                                        5000
   20 DX=360.-DX                                                            6000
      GO TO 50                                                              7000
   30 DX=-360.-DX                                                           8000
   50 IDXF=DX*3000.*COSF(Y(J)*.017453)                                      9000
      RETURN                                                                10000
      END                                                                   11000
```

IDENT IDXF

PROGRAM LENGTH		00111
ENTRY POINTS	IDXF	00003
BLOCK NAMES		
	1	37204
EXTERNAL SYMBOLS		
	Q1Q10100	
	Q#Q#ICT.	
	COSF	

```
P00042  BEGIN.      00064   00073   00077
X00003  COSF        00033
P00001  DICT.       00005   00034   00045   00046
P00110  DX          00013   00020   00023   00023   00026   00026   00035
P00065  ENDING.     00006   00040   00042   00043   00043   00044   00044
P00000  EXIT.       00071
P00007  FP00001.    00062   00063
P00011  FP00002.    00054   00055
P00027  FP00003.    00056   00057
P00102  GETPL.      00047   00066
P00072  GETPU.      00052   00076
P00003  IDXF        00043
C27344  IND
P00042  INITIAL.    00006
P00020  .10         00016
P00022  .20         00021
P00025  .30         00021
P00027  .50         00016   00017   00024
P00103  .EPASFR.    00032
P00003  J           00011   00027
P00003  K           00007
C00002  NCOL
C00000  NISL
C00003  NITEM
C00001  NX
P00060  PF00002.    00053
P00064  PF00003.    00061
X00001  QUOTIENT    00036
X00002  REMAINDER.  00001   00004
C00004  STATUS
P00041  VALUE.      00031   00070
C00004  X           00010   00010   00014   00012
C07644  Y           00030   00030
C17504  Z
   00042 SYMBOLS
```

```
      SUBROUTINE INITIND                                                1000
CSUBR      INITIND   ASAUG71   ********************************************* 35000
CUSE       COMMON    START     ********************************************* 2000
      COMMON/COMMUN/SWHO,NZONES,INBREAK                                 1000
CEND       COMMON    ********************************************************* 2000
CUSE       AREADAT   START     ********************************************* 3000
      COMMON/AREADAT/ AINT(20,3),NLRR(20),IOVERLP(20)                   1000
      TYPE INTEGER AINT                                                 2000
C                                                                       3000
CEND       AREADAT   ********************************************************* 3000
CUSE       IFTPRNT   START     ********************************************* 4000
      COMMON/IFTPRNT/IFTPRNT(10)                                        1000
C                                                                       2000
CEND       IFTPRNT   ********************************************************* 4000
CUSE       ITP       START     ********************************************* 5000
      COMMON/ITP/ITP                                                    1000
C                                                                       2000
CEND       ITP       ********************************************************* 5000
CUSE       KEY       START     ********************************************* 6000
      COMMON/KEY/KEY(10)                                                1000
      EQUIVALENCE(IWHO,KEY(6)),(NTA,KEY(7)),(IDLAT,KEY(8)),(IDLONG,KEY  2000
     1(9))                                                              3000
C                                                                       4000
CEND       KEY       ********************************************************* 6000
CUSE       KEYC      START     ********************************************* 7000
      COMMON/KEYC/KEYC1,KEYC2,MASK1,MASK2                               1000
C                                                                       2000
CEND       KEYC      ********************************************************* 7000
CUSE       KEYS      START     ********************************************* 8000
      COMMON/KEYS/KEYS(12)                                              1000
      TYPE INTEGER TSTAT,TCOL,TAHDLO,TAHDHI,ZON                         2000
      TYPE INTEGER TVULN                                                3000
      EQUIVALENCE( TSTAT,KEYS(1)),                                      4000
     1           (TCOL, KEYS(2)),                                      5000
     2           (TAHDLO,KEYS(3)),                                     6000
     3           (TAHDHI, KEYS(4)),                                    7000
     4           (KATTACK, KEYS(5)),                                   8000
     5           (TVULN, KEYS(6)),                                     9000
     6           (KARDEF, KEYS(7)),                                   10000
     7           (KTERM, KEYS(8)),                                    11000
     8           (ZON, KEYS(9)),                                      12000
     9           (KDIFFZON, KEYS(10)),                                13000
     1           (KDIFFCMP, KEYS(11))                                 14000
C                                                                      15000
CEND       KEYS      ********************************************************* 8000
CUSE       MAX       START     ********************************************* 9000
C     COMMON BLOCK CONTAINING ALL MAXIMUM VALUES FOR QUICK OCT 71       1000
C     VALUES INITIALIZED WITH DATA STATEMENTS IN INITIND                2000
C                                                                       3000
      COMMON/MAX/MABMOFZ, MALERT, MASMTYP, MBNDRY, MCCREGN,             4000
     1           MCLASS,   MCNTRYS,  MCOPR,    MCORTYP,  MOPEN,       5000
     2           MDEPNLG,  MGROUP,   MPAYLOD,  MRECOVR,                6000
     3           MRECVLG,  MWFF,     MRTLEG,   MRTPT,                  7000
     4           MSPERMT,  MTANKRS,  MTARCLS,  MTARCOL,  MTARCPX,      8000
     5           MTARERS,  MTARGET,  MTARIND,  MTARSEC,  MTARTEI,      9000
     6           MTARTYP,  MTARVAL,  MTELMCM,  MTOTRAS,                10000
```

```
     7              MTYPE,    MVULN,    MWEAPGP,  MWHDTPE,  MZONEPT,      11000
     8MZONES, MTARPCL, MARMSIT                                            12000
C                                                                         13000
CEND      MAX      ************************************************       9000
C                                                                         50000
C                                                                         51000
      DATA (MARMDFZ = 20)                                                 52000
      DATA (   MALERT   =2          )                                     53000
      DATA (   MASMTYP =20          )                                     54000
      DATA (   MBNDRY   =200        )                                     55000
      DATA (MARMSIT = 3)                                                  56000
      DATA (   MCCREGN  =20         )                                     57000
      DATA (   MCLASS   =2          )                                     58000
      DATA (    MCNTRYS   = 250       )                                 59000
      DATA (    MCORR    = 30      )                                     60000
      DATA (   MCORTYP  =5          )                                     61000
      DATA (   MOPEN    =50         )                                     62000
      DATA (   MDEPNLG =50          )                                     63000
      DATA (   MGROUP   =200        )                                     64000
      DATA (   MPAYLOD =40          )                                     65000
      DATA (   MRECOVR =200         )                                     66000
      DATA (   MRECVLG  =60         )                                     67000
      DATA (   MREF     =20         )                                     68000
      DATA (   MRTLEG   =200        )                                     69000
      DATA (   MRTPT    =200        )                                     70000
      DATA (   MSPERMT  =5          )                                     71000
      DATA (   MTANKHS =50          )                                     72000
      DATA (   MTARCLS =15          )                                     73000
      DATA (   MTARCOL  =4000       )                                     74000
      DATA (   MTARCPX =4000        )                                     75000
      DATA(    MTAREHS =100         )                                     76000
      DATA(    MTARGET =5000        )                                     77000
      DATA(    MTARIND  =12000      )                                     78000
      DATA (   MTARPCL  =40         )                                     79000
      DATA(    MTARSEC  =4000       )                                     80000
      DATA(    MTARTEI =500         )                                     81000
      DATA(    MTARTYP =250         )                                     82000
      DATA(    MTARVAL  =2500       )                                     83000
      DATA(    MTELMCM =40          )                                     84000
      DATA(    MTOTRAS =150         )                                     85000
      DATA(    MTYPE    =80         )                                     86000
      DATA(   MVULN = 100)                                                87000
      DATA(    MWEAPGP  =1000       )                                     88000
      DATA(    MWHDTPE =50          )                                     89000
      DATA(    MZONEPT =200         )                                     90000
      DATA(MZONES = 63)                                                   91000
C                                                                         92000
C                                                                         93000
C        MARMSIT   3            ARM MISSILE SITES PER ZONE              94000
C        MARMDFZ   20           AREA BALLISTIC MISSILE DEFENSE ZONES    95000
C        MALERT    2            ALERT CONDITIONS                        96000
C        MASMTYP   20           ASM TYPES(10)                           97000
C        MBNDRY    200       BOUNDRY LEGS(BLEGNO)                       98000
C        MCCREGN   20           COMMAND/CONTROL  (20)                   99000
C        MCORTYP   5            CORRIDOR TYPES                         100000
C        MCNTRYS   250          COUNTRY CODES                          101000
```

```
C       MDPEN     50        DEPENTRATION CORRIDORS(POINTS)                102000
C       MDPENLG   50        DEPENTRATION LEGS                             103000
C       MPAYLOD   40            PAYLOAD TYPES (PER SIDE) (40)             104000
C       MCORR     30        PENETRATION CORRIDORS                         105000
C       MRECVLG   60        RECOVERY  EGS                                 106000
C       MRECOVR   200       RECOVERY BASES(POINTS)                        107000
C       MDEF      20            REFUEL POINTS(DIRECTED) (20)              108000
C       MRTLEG    200       ROUTE LEGS                                    109000
C       MRTPT     200       ROUTE POINTS                                  110000
C       MSPERMT   5             SITES PER MULTIPLE TARGET(S)              111000
C       MTANKRS   50            TANKER BASES                              112000
C       MTARGET   5000      TARGETS (ALLOCATOR)                           113000
C       MTARCLS   15        TARGET CLASSES(13)                            114000
C       MTARCOL   4000      TARGETS COLLOCATED                            115000
C       MTARVAL   2500      TARGET COMPLEX WITH VAL GTO                   116000
C       MTARCPX   4000      TARGET COMPLEXES (TOTAL)                      117000
C       MTELMCM   40        TARGET ELEMINS PER COMPLEX                    118000
C       MTARIND   12000     TARGET INDEX NUMBERS                          119000
C       MTARERS   100       TARGETS PER COLLOCATION ISLAND                120000
C       MTARSEC   4000      TARGET PER EARTH SECTOR                       121000
C       MTARTYP   250       TARGET TYPES-TOTAL                            122000
C       MTARPCL   (40=MSL OR BMBR)=20 OTHERS) TGT TYPES PER CLASS         123000
C       MTARTEI   500       TGTS WITH TERMINAL INTRCPTRS(BRM)             124000
C       MVULN     100           MAXIMUM NUMBER OF DISTINCT                125000
C                               VULNERABILITY NUMBERS                     125100
C     SIMTAPE UNUSABLE IF MORE RUN 63 VULNERABILITES IDENTIFIED           125110
C       MWRHDTPE  50        WARHEAD TYPES                                 126000
C       MTOTBAS   150           WEAPON BASES PER GROUP (150)              127000
C       MCLASS    7             WEAPON CLASSES                            128000
C       MGROUP    200       WEAPON GROUPS                                 129000
C       MWEAPGT   1000      WEAPONS PER GROUP                             130000
C       MTYPE     80            WEAPON TYPES (MSLS + BMBRS / SIDE)        131000
C       MZONEPT   200       ZONE POINTS                                   132000
C       MZONES    63        ZONES                                         133000
C                                                                         134000
CUSE      MYIDENT   START     ********************************************* 135000
      COMMON/MYIDENT/MYIDENT                                                1000
C                                                                           2000
CEND      MYIDENT   ********************************************************* 135000
CUSE      NAVALTB   START     ********************************************* 136000
      COMMON/NAVALTB/ TMASW(10,10),OBLASW(10,10), ITMAX,IOBLMAX             1000
C                                                                           2000
CEND      NAVALTB   ********************************************************* 136000
CUSE      NOPRINT   START     ********************************************* 137000
      COMMON/NOPRINT/NOPRINT                                                1000
C                                                                           2000
CEND      NOPRINT   ********************************************************* 137000
CUSE      RADATA    START     ********************************************* 138000
      COMMON/RADATA/PG(12),PA(12),OG(8),OA(8)                               1000
C                                                                           2000
CEND      RADATA    ********************************************************* 138000
CUSE      PRNT      START     ********************************************* 139000
      COMMON/PRNT/IPRNT(15)                                                 1000
C                                                                           2000
CEND      PRNT      ********************************************************* 139000
CUSE      TRANS     START     ********************************************* 140000
```

```
      COMMON/TRANS/LMAX,NASMT,NVULN,NRLUPLD,MAXIND,NREDPLD                  1000
C                                                                           2000
C                                                                           3000
CEND      TRANS     ************************************************      140000
CUSE      TWORD     START     ************************************************ 141000
      COMMON/TWORD/ITWORD                                                   1000
      EQUIVALENCE(TWORD,ITWORD)                                             2000
C                                                                           3000
CEND      TWORD     ************************************************      141000
CUSE      WRIT      START     ************************************************ 142000
      COMMON/WRIT/WR(4),NR(10),XLONG(10)                                    1000
      DIMENSION IWR(4)                                                      2000
      EQUIVALENCE(WR,IWR)                                                   3000
      DIMENSION KZON(3)                                                     4000
C                                                                           5000
CEND      WRIT      ************************************************      142000
CUSE      EDITAPE   START     ************************************************ 143000
      COMMON/EDITAPE/INTP,NOUT, IOUT(10),JOUT                               1000
CEND      EDITAPE   ************************************************      143000
CUSE      EDITERM   START     ************************************************ 144000
      COMMON/EDITERM/ISWTERM                                                1000
CEND      EDITERM   ************************************************      144000
CUSE      PROCESS   START     ************************************************ 145000
      COMMON/PROCESS/NI,NV,NC,INITEM(100),VALUE(500),                       1000
     1      DEF(500), LGLOB(500)                                           2000
      TYPE LOGICAL DEF, LGLOB                                               3000
      TYPE INTEGER VALUE                                                    4000
      TYPE INTEGER PAYLOAD                                                  5000
      TYPE INTEGER T4,TR                                                    6000
C      EQUIVALENCE( ICOMPLEX,ICOMPLX)                                       7000
C      EQUIVALENCE( ADEFCOMP, ADEFCMP)                                      8000
      TYPE INTEGER ADEFZON, ADEFCMP,AZON1, AZON2,AZON3,ASMTYPE,WHDTYPE,     9000
     1 ZONE                                                                 10000
C      EQUIVALENCE(NOPERSON,NOPERSON)                                       11000
CEND      PROCESS   ************************************************      145000
CUSE      1         START     ************************************************ 146000
      COMMON/1/NISL,NA,NCOL,NITEM,X(4000),Y(4000),Z(4000),IND(4000)         1000
      DIMENSION STATUS(12000)                                               2000
      EQUIVALENCE(STATUS,X)                                                 3000
C                                                                           4000
C     NISL = NUMBER OF COLLOCATED ISLANDS                                   5000
C     NA = INDEX TO COLAR                                                   6000
C     NCOL = NUMBER OF COLLOCATED TARGETS                                   7000
C     NITEM = NUMBER OF ITEMS IN SEGMENT BEING PROCESSED.                   8000
C     X,Y,Z = LONGITUDE, LATITUDE, CRITICAL DISTANCE                        9000
C     IND = INDEX NUMBER OF X,Y,Z                                           10000
C     STATUS = PACKED DATA FOR TARGETS                                      11000
C                                                                           12000
CEND      1         ************************************************      146000
CUSE      2         START     ************************************************ 147000
      COMMON/2/COL(4000), CL(4000),CLT(4000),CP(4000)                       1000
      TYPE LOGICAL COL,CL,CLT,CP                                            2000
C                                                                           3000
C                                                                           4000
CEND      2         ************************************************      147000
CUSE      3         MAPR71    ************************************************ 148000
```

```
      COMMON/3/ICUR, ISTOPE,COLAR(100), COMPLEX(4000)                          1000
      TYPE INTEGER COLAR, COMPLEX                                              2000
      DIMENSION CMDIST(100),CVULN(100)                                         3000
      TYPE INTEGER CVULN                                                       4000
      EQUIVALENCE(CMDIST,COMPLEX),(CVULN,COMPLEX(101))                         5000
C                                                                              6000
CEND      3          ************************************************** 148000
CUSE      4          11JAN71    ************************************************ 149000
      COMMON/4/NULL, CUMLO(15), NTYPES(15), INDCLAS (15),                      1000
     1INDREG(250),TYPENAM(40,15),TYPETBL(40,15),                               2000
     2INDCOM(250),HOM(80,7),                                                   3000
     3    TANK(40,5),NSMT(20,2),NHD(50,3),ZONES(75,3),                        4000
     4CAPACITY(50,2),ICHK(250), NIRV(80,2),                                    5000
     5IVHDTYP(50,2),(NWHDS(50,2),INDECYS(40,2),INAMOFC(40,2)                   6000
     6,NAMCLAS(15)                                                             7000
      DIMENSION EMIS(80,11),NIS(80,11)                                         8000
      DIMENSION NEWIND(4000)                                                   9000
      EQUIVALENCE(NEWIND,MIS,EMIS,TYPENAM(25))                                 10000
      TYPE INTEGER TYPENAM, TYPETBL, CUMLO, NTYPES                             11000
      DIMENSION IHOM(80,7),ITANK(40,5)                                         12000
      EQUIVALENCE( IHOM,HOM),(ITANK,TANK)                                      13000
C                                                                              14000
C                                                                              15000
CEND      4          ************************************************** 149000
CUSE      5          START      ************************************************ 150000
      COMMON/5/ NTOFF, ITERM(512), NTIMTX(512)                                 1000
C                                                                              2000
CEND      5          ************************************************** 150000
CUSE      7          START      ************************************************ 151000
      COMMON/7/COLO(12000),COMP(12000)                                         1000
      DIMENSION LTERM(12000)                                                   2000
      TYPE LOGICAL COLO,COMP,LTERM                                             3000
      EQUIVALENCE(COMP,LTERM)                                                  4000
C                                                                              5000
CEND      7          ************************************************** 151000
CUSE      9          START      ************************************************ 152000
      COMMON /9/ ICHKFLG(30),ICHKNUM(30),NCHKFLG(20),NCHKNUM(20)               1000
C                                                                              2000
CEND      9          ************************************************** 152000
CUSE      10         START      ************************************************ 153000
      COMMON/10/KNAMARAY(80)                                                   1000
C                                                                              2000
CEND      10         ************************************************** 153000
C                                                                              154000
C                              CLEAR COMMON /COMMON/                           155000
      DATA (NSHD=0), (NZONES=0), (INHEAR=0)                                    156000
C                              CLEAR COMMONS /ITP/, /KEYC/, /MYIDENT/,         157500
C                                            /NOPRINT/, /TWOHD/                158000
      DATA (ITP=0), (KEYC1=0),(KEYC2=0), (MASK1=7777B)                         159000
      DATA (MASK2=77770000B), (MYIDENT=8H        ), (NOPRINT=0)                160000
      DATA (TTWOHD=0)                                                          161000
C                              CLEAR COMMON /PRNT/                             162000
      DATA (IPRNT=15(0))                                                       163000
C                              CLEAR COMMON /TRANS/                            164000
      DATA (LMAX=0), (NASMT=0), (NVULN=0), (NRELUPLD=0), (MAXIMD=0)            165000
      DATA (NPERPLD=0)                                                         166000
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```
      C                               CLEAR XLONG OF /WRIT/                    167000
            DATA (XLONG = 15,, 95,, 110,, 170,, 250,, 320,, 0,, 0,, 0,, 0,)    168000
      C                               CLEAR COMMON /AREADAT/                   169000
            DO 10 I=1,20                                                       170000
            AINP(I) = 0                                                        171000
            NLOW(I) = 0                                                        172000
            IOVERLP(I) = 0                                                     173000
         10 CONTINUE                                                           174000
            DO 20 I=21,60                                                      175000
            AINP(I) = 0                                                        176000
         20 CONTINUE                                                           177000
      C                               CLEAR COMMONS /IFTPRNT/ - /KEY/          178000
            DO 30 I=1,10                                                       179000
            IFTPRNT(I) = 0                                                     180000
            KEY(I) = 0                                                         181000
         30 CONTINUE                                                           182000
      C                               CLEAR COMMON /KEYS/                      183000
            DO 40 I=1,12                                                       184000
            KEY(I) = 0                                                         185000
         40 CONTINUE                                                           186000
      C                               CLEAR COMMON /NAVALTR/                   187000
            ITMAX = 10                                                         188000
            IDHLMAX = 0                                                        189000
            DO 50 I = 1,100                                                    190000
            TMASK(I) = 0.                                                      191000
            DRLASK(I) = 0.                                                     192000
         50 CONTINUE                                                           193000
      C                               CLEAR COMMON /RADATA/                    194000
            DO 60 I=1,8                                                        195000
            PG(I) = 0.                                                         196000
            PA(I) = 0.                                                         197000
            QG(I) = 0.                                                         198000
            QA(I) = 0.                                                         199000
         60 CONTINUE                                                           200000
            DO 70 I = 9,12                                                     201000
            PG(I) = 0.                                                         202000
            PA(I) = 0.                                                         203000
         70 CONTINUE                                                           204000
      C                               CLEAR COMMON /WRIT/ (EXCEPT XLONG)       205000
            DO 90 I = 1,4                                                      206000
            WR(I) = 0                                                          207000
         90 CONTINUE                                                           208000
            DO 100 I = 1,10                                                    209000
            NR(I) = 0                                                          210000
        100 CONTINUE                                                           211000
      C                               CLEAR COMMONS /EDITAPE, /EDITERM/        212000
            INTP = 0                                                           213000
            NOUT = 0                                                           214000
            JOUT = 0                                                           215000
            DO 110 I=1,10                                                      216000
            ITOUT(I) = 0                                                       217000
        110 CONTINUE                                                           218000
            ISWTERM = 0                                                        219000
      C                               CLEAR COMMON /PROCESS/                   220000
            NI = 0                                                             221000
            NV = 0                                                             222000
```

```
      NC = 0                                                          223000
      DO 120 I=1,100                                                  224000
      INITEM(I) = 0                                                   225000
  120 CONTINUE                                                        226000
      DO 130 I=1,500                                                  227000
      VALUE(I) = 0                                                    228000
      DEF(I) = 0                                                      229000
      LGLOB(I) = 0                                                    230000
  130 CONTINUE                                                        231000
C                             CLEAR COMMONS /1/, /2/                232000
      NISL = 0                                                        233000
      NN = 0                                                          234000
      NCOL = 0                                                        235000
      NITEM = 0                                                       236000
      DO 150 I=1,MTARCOL                                              237000
      X(I) = 0.                                                       238000
      Y(I) = 0.                                                       239000
      Z(I) = 0.                                                       240000
      IND(I) = 0                                                      241000
      COL(I) = 0                                                      242000
      CL(I) = 0                                                       243000
      CLT(I) = 0                                                      244000
      CP(I) = 0                                                       245000
  150 CONTINUE                                                        246000
C                             CLEAR COMMON /3/                      247000
      ICUR = 1                                                        248000
      ISTORE = 0                                                      249000
      DO 160 I=1,MTARERS                                              250000
      COLAR(I) = 0                                                    251000
  160 CONTINUE                                                        252000
      DO 170 I=1,MTARCPX                                              253000
      COMPLEX(I) = 0                                                  254000
  170 CONTINUE                                                        255000
C                             CLEAR COMMON /4/                      256000
      NULL = 0                                                        257000
      DO 180 I=1,MTARCLS                                              258000
      CUMNO = 0                                                       259000
      BTYPES = 0                                                      260000
      INDCLAS = 0                                                     261000
  180 CONTINUE                                                        262000
      DO 190 I=1,MTARTYP                                              263000
      INDBEG(I) = 0                                                   264000
      INDCUR(I) = 0                                                   265000
      ICHK(I) = 0                                                     266000
  190 CONTINUE                                                        267000
      JMAX = MTYPE * 15                                               268000
      DO 200 I=1,JMAX                                                 269000
      TYPENAM(I) = 0                                                  270000
      TYPETRL(I) = 0                                                  271000
  200 CONTINUE                                                        272000
      JMAX = MTYPE * 7                                                273000
      DO 210 I=1,JMAX                                                 274000
      IBOM(I) = 0                                                     275000
  210 CONTINUE                                                        276000
      DO 220 I=1,200                                                  277000
      ITANK(I) = 0                                                    278000
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  220 CONTINUE                                                          279000
      JMAX = MASMTYP * 7                                                280000
      DO 230 I=1,JMAX                                                   281000
      ASMT(I) = 0.                                                      282000
  230 CONTINUE                                                          283000
      JMAX = 3 * MWHDTPE                                                284000
      DO 240 I=1,JMAX                                                   285000
      WHD(I) = 0.                                                       286000
  240 CONTINUE                                                          287000
      JMAX = 2 * MWHDTPE                                                288000
      DO 250 I=1,JMAX                                                   289000
      CAPACTY(I) = 0.                                                   290000
      IWHDTYP(I) = 0                                                    291000
      INWHDS(I) = 0                                                     292000
  250 CONTINUE                                                          293000
      JMAX = MZONES * 3                                                 294000
      DO 260 I=1,JMAX                                                   295000
      ZONES(I) = 0.                                                     296000
  260 CONTINUE                                                          297000
      DO 270 I=1,160                                                    298000
      MIRV(I) = 0                                                       299000
  270 CONTINUE                                                          300000
      DO 280 I=1,80                                                     301000
      INDECYS(I) = 0                                                    302000
      INARDEC(I) = 0                                                    303000
  280 CONTINUE                                                          304000
C                           CLEAR COMMON /5/                            305000
      NTDEF = 0                                                         306000
      JMAX = MTARTE1 * 12                                               307000
      DO 290 I = 1,JMAX                                                 308000
      ITERM(I) = 0                                                      309000
      NTINTX(I) = 0                                                     310000
  290 CONTINUE                                                          311000
C                           CLEAR COMMON /7/                            312000
C                           COLO(MTARCOL),COMP(MTARCPX)                 313000
C                                HERE MTARCOL = MTARCPX                 314000
      JMAX = 3 * MTARCOL                                                315000
      DO 300 I=1,JMAX                                                   316000
      COLO(I) = 0                                                       317000
      COMP(I) = 0                                                       318000
  300 CONTINUE                                                          319000
C                           CLEAR COMMON /10/                           320000
      DO 310 I=1,80                                                     321000
      KNARRAY(I) = 0                                                    322000
  310 CONTINUE                                                          323000
C     CHANGE  OF XLONG(6) FOR RH=7R ***************************         324000
C                           CLEAR COMMON /9/                            325000
      JMAX = 2 * MTARCLS                                                326000
      DO 818 I=1,JMAX                                                   327000
      ICHKFLG(I)=0                                                      328000
  818 ICHKNUM(I)=20                                                     329000
      DO 890 I=1,20                                                     330000
      NCHKNUM(I)=0                                                      331000
      NCHKFLG(I) = 0                                                    332000
  890 CONTINUE                                                          333000
      RETURN                                                            334000
```

```
      END
```

335000

IDENT INITIND

PROGRAM LENGTH		00500
ENTRY POINTS	INITIND	00004
BLOCK NAMES		
	COMMON	00003
	AREADAT	00144
	IFIPRNT.	00012
	ITP	00001
	KEY	00012
	KEYC	00004
	KEYS	00014
	MAX	00050
	MYIDENT	00001
	NAVALTH	00312
	NOPRINT	00001
	RADATA	00050
	PRNT	00017
	TRACS	00004
	TWORD	00001
	WPIT	00030
	EDITAPE	00015
	EDITERM	00001
	PROCESS	01173
	1	37204
	2	00754
	3	10004
	4	11614
	5	02001
	7	01354
	9	00144
	10	00120
EXTERNAL SYMBOLS		
	Q3U10040	
	OPNDICT.	

C00000	AINT	00015	00016	00025	00026							
C07172	ASMT	00321	00322									
P00465	BEGIN.	00066										
C05602	BOM											
C00020	BTYPES	00241										
C10031	CAPACTY	00345	00346									
C00175	CL	00174										
C00372	CLT	00177										
C00000	COL	00171										
C00002	COLAR	00214	00215									
C00000	COLO	00424										
C00567	COMP	00431										
C00146	COMPLEX	00225	00226									
P00475	COUNT.	00161	00162	00212	00213	00223	00224	00235	00236	00250	00251	00264
		00265	00277	00300	00317	00320	00331	00342	00343	00346	00357	00360
		00407	00410	00422	00423	00446	00447					
C00567	CP	00202										
C00146	CPOIST											
C00001	CUMNO	00237	00240									
C00312	CVULN											
C00144	DBLASW	00054										
C01133	DEF	00144										
P00001	DICT.	00010										
P00467	ENDING.	00011	00464	00465								
P00000	EXIT.	00470										
C01042	FMIS											
P00476	I	00013	00013	00023	00023	00031	00031	00040	00040	00050	00051	00057
		00057	00070	00070	00077	00077	00105	00105	00116	00117	00131	00131
		00137	00137	00156	00162	00207	00213	00220	00223	00232	00245	00250
		00262	00264	00275	00277	00305	00305	00315	00317	00327	00331	00341
		00343	00355	00357	00365	00365	00373	00373	00405	00410	00420	00422
		00434	00434	00444	00446	00456	00456					
C05602	IBOM	00301	00302									
C00002	IBPEAK	C00002										
C10175	ICHK	00255										
C00000	ICHKFLG	00450	00451									
C00036	ICHKNUM	00452	00453									
C00000	ICUR	00204	00205									
C00311	IDRLMAX	00047										
C00007	IDLAT											
C00010	IDLONG											
C00000	IFTPRNT	00033	00034									
C11457	INARDEC	00377										
C27344	IND	00167										
C00056	INDREG	00252	00253									
C00037	INDCLAS	00242										
C05210	INDCUR	00254										
C11337	INDECYS	00375	00376									
C00005	INDNO											
C00003	INITEM	00133	00134									
P00465	INITIAL.	00011										
P00006	INITIND	00006										
C00000	INTP	00112	00113									
C11173	INWMDS	00350										

```
C00120  IOVERLP     00020
C00000  IPRNT       00006
C00001  ISTOPE      00204
C00000  ISWTERM     00123   00124
C06662  ITANK       00307   00310
C00001  ITERM       00411   00412
C00310  ITMAX       00045   00046
C00002  ITOUT       00120   00121
C00000  ITP         00006
C00000  ITWORD      00006
C11027  IWHDTYP     00347
C00000  IWR
P00021  .10
P00111  .100
P00122  .110
P00135  .120
P00150  .130
P00203  .150
P00216  .160
P00227  .170
P00243  .180
P00256  .190
P00027  .20
P00271  .200
P00303  .210
P00311  .220
P00323  .230
P00335  .240
P00351  .250
P00363  .260
P00371  .270
P00400  .280
P00414  .290
P00036  .30
P00432  .300
P00440  .310
P00044  .40
P00055  .50
P00066  .60
P00075  .70
P00452  .810
P00463  .820
P00103  .90
P00477  JMAX        00261   00262   00274   00275   00314   00315   00326   00327   00340   00341   00354
                    00355   00404   00406   00417   00420   00443   00444
C00014  JOUT        00115
C00006  KARDEF
C00004  KATTACK
C00012  KDEFCMP
C00011  KDEFZON
C00000  KEY         00035   00035   00042   00043
C00000  KEYC1       C00001
C00001  KEYC2       C00001
C00000  KEYS
```

C00000	KNARRAY	00436	00437			
C00007	KTERM					
P00003	KZON					
C01153	LGLOB	00147				
C00000	LMAX	00006				
C00567	LTERM					
C00000	MABMDFZ	00006				
C00047	MARMSIT	00006				
C00001	MALERT	00006				
C00002	MASK1	C00002				
C00003	MASK2	00006				
C00002	MASMTYP	00006	00312	00312		
C00004	MAXIND	C00004				
C00003	MBNDRY	00006				
C00004	MCCHEGN	00006				
C00005	MCLASS	00006				
C00006	MCNTRYS	00006				
C00007	MCOMB	00006				
C00010	MCORTYP	00006				
C00012	MDEPNLG	00006				
C00011	MOPEN	00006				
C00013	MGROUP	00006				
C10567	MIRV	00367	00370			
C01042	MIS					
C00014	MPAYLOD	00006				
C00015	MRECOVR	00006				
C00016	MRECVLG	00006				
C00017	MREF	00006				
C00020	MRTLEG	00006				
C00021	MRTPT	00006				
C00022	MSPERMT	00006				
C00023	MTANKBS	00006				
C00024	MTARCLS	00006	00233	00233	00441	00442
C00025	MTARCOL	00006	00157	00157	00415	00416
C00026	MTARCPX	00006	00220	00221		
C00027	MTARERS	00006	00210	00210		
C00030	MTARGET	00006				
C00031	MTARIND	00006				
C00046	MTARPCL	00006				
C00032	MTARSEC	00006				
C00033	MTARTEI	00006	00402	00403		
C00034	MTARTYP	00006	00245	00246		
C00035	MTARVAL	00006				
C00036	MTELMCM	00006				
C00037	MTOTBAS	00006				
C00040	MTYPE	00006	00257	00257	00272	00272
C00041	MVULN	00006				
C00042	MWEAPGP	00006				
C00043	MWHOTPE	00006	00324	00325	00336	00337
C00000	MYIDENT	C00004				
C00044	MZONEPT	00006				
C00045	MZONES	00006	00352	00352		
C11577	NAMCLAS					
C00001	NASMT	C00001				

C00003	NBLOPLD	C00003							
C00002	NC	00127							
C00074	NCHKFLG	00462							
C00120	NCHKNUM	00460	00461						
C00002	NCOL	00154							
C01042	NEWIND								
C00000	NI	00125	00125						
C00000	NISL	00151	00152						
C00003	NITEM	00155							
C00074	NLRR	00017							
C00001	NN	00153							
C00000	NOPRINT	C00001							
C00001	NOUT	00114							
C00004	NR	00107	00110						
C00005	NREDPLD	00006							
C00006	NTA								
C00000	NTDEF	00401	00402						
C01001	NTINTX	00413							
C00000	NULL	00230	00231						
C00001	NV	00126							
C00002	NVULN	C00002							
C00000	NWHO	00006							
C00001	NZONES	C00001							
C00014	PA	00063	00074						
C00000	PG	00061	00062	00072	00073				
X00001	Q3Q10040	00143	00146	00170	00173	00176	00201	00425	00430
X00002	Q8QOICT.	00000	00007						
C00040	QA	00065							
C00030	QG	00064							
C00004	STATUS								
C06662	TANK								
C00003	TARGHI								
C00002	TARGLO								
C00001	TCOL								
C00000	TMASW	00052	00053						
P00204	TS00015.	00160							
P00217	TS00016.	00211							
P00230	TS00017.	00222							
P00244	TS00020.	00234							
P00257	TS00021.	00247							
P00272	TS00022.	00260							
P00304	TS00023.	00276							
P00324	TS00025.	00316							
P00336	TS00026.	00330							
P00352	TS00027.	00342							
P00364	TS00030.	00356							
P00415	TS00033.	00407							
P00433	TS00034.	00421							
P00455	TS00036.	00445							
C00000	TSTAT								
C00005	TVULN								
C00000	TWORD								
C00450	TYPENAM	00266	00267						
C02730	TYPETBL	00270							

```
C00147  VALUE       00141   00142
C07242  WHO         00333   00334
C00000  WR          00101   00102
P00015  WS00001.    00021
P00025  WS00002.    00027
P00033  WS00003.    00036
P00042  WS00004.    00044
P00052  WS00005.    00055
P00061  WS00006.    00066
P00072  WS00007.    00075
P00101  WS00010.    00103
P00107  WS00011.    00111
P00120  WS00012.    00122
P00133  WS00013.    00135
P00141  WS00014.    00150
P00163  WS00015.    00203
P00214  WS00016.    00216
P00225  WS00017.    00227
P00237  WS00020.    00243
P00252  WS00021.    00256
P00268  WS00022.    00271
P00301  WS00023.    00303
P00307  WS00024.    00311
P00321  WS00025.    00323
P00333  WS00026.    00335
P00345  WS00027.    00351
P00361  WS00030.    00363
P00367  WS00031.    00371
P00375  WS00032.    00400
P00411  WS00033.    00414
P00424  WS00034.    00432
P00436  WS00035.    00440
P00450  WS00036.    00454
P00460  WS00037.    00463
C00004  X           00163   00164
C00016  XLONG       00006
C07644  Y           00165
C17504  Z           00166
C00010  ZON
C07470  ZONES       00361   00362
   00370 SYMBOLS
```

```
      SUBROUTINE READIN                                                 1000
CSUBR      READIN    START     ************************************** 39000
CUSE       COMMUN    START     ************************************** 2000
      COMMON/COMMUN/P,MD,NZONES,IBREAK                                  1000
CEND       COMMUN    ********************************************** 2000
C                                                                       3000
CUSE       RADATA    START     ************************************** 4000
      COMMON/RADATA/PG(12),PA(12),QG(8),QA(8)                           1000
C                                                                       2000
CEND       RADATA    ********************************************** 4000
CUSE       PRNT      START     ************************************** 5000
      COMMON/PRNT/IPRNT(15)                                             1000
C                                                                       2000
CEND       PRNT      ********************************************** 5000
C                                                                       6000
CUSE       3         RAPR71    ************************************** 7000
      COMMON/3/ICUR, ISTORE,COLAR(100), COMPLEX(4000)                   1000
      TYPE INTEGER COLAR, COMPLEX                                       2000
      DIMENSION CROIST(100),CVULN(100)                                  3000
      TYPE INTEGER CVULN                                                4000
      EQUIVALENCE(CROIST,COMPLEX),(CVULN,COMPLEX(101))                  5000
C                                                                       6000
CEND       3         ********************************************** 7000
      DIMENSION INP(8)                                                  8000
    3 READ 5,(INP(I),I=1,8)                                             9000
    5 FORMAT(8I10)                                                     10000
      IF(INP(1).EQ.0)12,6                                              11000
    6 DO 10 I=1,8                                                      12000
      IF((INP(I).GT.0).AND.(INP(I).LE.15))7,10                         13000
    7 NTIND = INP(I)                                                   14000
      IPRNT (NTIND) = 1                                                15000
   10 CONTINUE                                                         16000
      GO TO 3                                                          17000
   12 CONTINUE                                                         18000
      READ 99,(PG(I),I=1,8)                                            19000
      READ 99,(PG(I), I = 9, 12)                                       20000
      READ 99,(PA(I),I=1,8)                                            21000
      READ 99, (PA(I), I = 9, 12)                                      22000
      READ 99,(QG(I),I=1,8)                                            23000
      READ 99,(QA(I),I=1,8)                                            24000
      READ 6534,CVULN(1),IBREAK                                        25000
   99 FORMAT(8F10.5)                                                   26000
 6534 FORMAT(A6,2X,A8)                                                 27000
      END                                                              28000
```

IDENT READIN

PROGRAM LENGTH		00231
ENTRY POINTS	READIN	00026
BLOCK NAMES		
	COMMUN	00003
	RADATA	00050
	PRNT	00017
	3	10006
EXTERNAL SYMBOLS		
	THEND.	
	QRQDICT.	
	TSH.	
	QNSINGL.	

P00223	BEGIN.	00224									
P00222	CNVRTI.	00040	00076	00113	00130	00145	00162	00177	00212	00214	
C00002	COLAB										
C00146	COMPLEX										
C00146	CROIST										
P00013	CRFMT.	00046	00220	00220							
C00312	CVULN	00213	00213								
P00001	DICT.	00030	00034	00045	00072	00104	00107	00121	00124	00136	00141	00153
		00156	00170	00173	00205	00210	00217				
P00225	ENDING.	00031	00220	00223	00224						
P00000	EXIT.	00226									
P00013	FORMAT.										
P00046	GG00000.	00032									
P00105	GG00001.	00070									
P00122	GG00002.	00105									
P00137	GG00003.	00122									
P00154	GG00004.	00137									
P00171	GG00005.	00154									
P00206	GG00006.	00171									
P00220	GG00007.	00206									
P00227	I	00037	00041	00042	00052	00052	00075	00077	00101	00112	00114	00115
		00127	00131	00133	00144	00146	00150	00161	00163	00165	00176	00200
		00202										
C00002	IBREAK	00215	00215									
C00000	ICOM											
P00057	IF00001.											
P00223	INITIAL.	00031										
P00003	INP	00042	00046	00054	00057	00062						
C00000	IPRNT	00064	00065									
C00001	ISTORE											
P00066	.10	00055	00056	00061								
P00070	.12	00050										
P00032	.3	00067										
P00051	.6	00047										
P00062	.7	00060										
P00013	..5	00035										
P00021	..6534	00211										
P00016	..95	00073	00110	00125	00142	00157	00174					
P00230	NTIND	00063	00064									
C00000	NWHD											
C00001	NZONES											
C00014	PA	00132	00132	00147	00147							
C00000	PG	00100	00100	00115	00115							
X00002	QRODICT.	00000	00027									
C00040	QA	00201	00201									
C00030	QG	00164	00164									
X00004	QNSINGL.	00221										
P00026	READIN	00026										
X00001	THEND.	00044	00103	00120	00135	00152	00167	00204	00216			
X00003	TSM.	00033	00071	00106	00123	00140	00155	00172	00207			
P00040	WS00001.	00043										
P00054	WS00002.	00066										
P00076	WS00003.	00102										
P00113	WS00004.	00117										

```
P00130  WS00005.   00134
P00145  WS00006.   00151
P00162  WS00007.   00166
P00177  WS00010.   00203
   00067 SYMBOLS
```

```
      SUBROUTINE TDEFSTAT                                                1000
CSUBR      TDEFSTT   ORANG71   ***************************************** 40000
C     ENTRY TDEFSTAT                                                     2000
CUSE       KEY       START   ***************************************** 3000
      COMMON/KEY/KEY(10)                                                 1000
      EQUIVALENCE(INRNO,KEY(6)),(NTA,KEY(7)),(IDLAT,KEY(8)),(IDLONG,KEY  2000
     1(9))                                                               3000
C                                                                        4000
CEND       KEY       ***************************************************** 3000
C                                                                        4000
CUSE       KEYS      START   ***************************************** 5000
      COMMON/KEYS/KEYS(12)                                               1000
      TYPE INTEGER TSTAT,TCOL,TABULO,TARGET,ZON                          2000
      TYPE INTEGER TVULN                                                 3000
      EQUIVALENCE( TSTAT,KEYS(1)),                                       4000
     1            (TCOL, KEYS(2)),                                       5000
     2            (TABULO,KEYS(3)),                                      6000
     3            (TARGET, KEYS(4)),                                     7000
     4            (KATTACK, KEYS(5)),                                    8000
     5            (TVULN, KEYS(6)),                                      9000
     6            (KARDEF, KEYS(7)),                                     10000
     7            (KTERM, KEYS(8)),                                      11000
     8            (ZON, KEYS(9)),                                        12000
     9            (KDEFZON, KEYS(10)),                                   13000
     1            (KDEFCMP, KEYS(11))                                    14000
C                                                                        15000
CEND       KEYS      ***************************************************** 5000
C                                                                        6000
C                                                                        7000
CUSE       1         START   ***************************************** 8000
      COMMON/1/NISL,NN,NCOL,NITEM,X(4000),Y(4000),Z(4000),IND(4000)      1000
      DIMENSION STATUS(12000)                                            2000
      EQUIVALENCE(STATUS,X)                                              3000
C                                                                        4000
C     NISL = NUMBER OF COLLOCATED ISLANDS                                5000
C     NN = INDEX TO COLAR                                                6000
C     NCOL = NUMBER OF COLLOCATED TARGETS                                7000
C     NITEM = NUMBER OF ITEMS IN SEGMENT BEING PROCESSED.                8000
C     X,Y,Z = LONGITUDE, LATITUDE, CRITICAL DISTANCE                     9000
C     IND = INDEX NUMBER OF X,Y,Z                                        10000
C     STATUS = PACKED DATA FOR TARGETS                                   11000
C                                                                        12000
CEND       1         ***************************************************** 8000
CUSE       3         ORAP71    ***************************************** 9000
      COMMON/3/ICOM, ISTORE,COLAR(100), COMPLEX(4000)                    1000
      TYPE INTEGER COLAR, COMPLEX                                        2000
      DIMENSION CRUTST(100),CVULN(100)                                   3000
      TYPE INTEGER CVULN                                                 4000
      EQUIVALENCE(CRUTST,COMPLEX),(CVULN,COMPLEX(101))                   5000
C                                                                        6000
CEND       3         ***************************************************** 9000
C                                                                        10000
CUSE       5         START   ***************************************** 11000
      COMMON /5/ NTDEF, TTERM(512), NTINTX(512)                          1000
C                                                                        2000
CEND       5         ***************************************************** 11000
```

```
      CUSE .     7          START     ********************************************  12000
           COMMON/7/COLO(12000),COMP(12000)                                        1000
           DIMENSION LTERM(12000)                                                  2000
           TYPE LOGICAL COLO,COMP,LTERM                                            3000
           EQUIVALENCE(COMP,LTERM)                                                 4000
      C                                                                            5000
      CEND       7          ********************************************************  12000
           ENTRY TDEFSIT                                                          12100
           MAXDEF = 512                                                           13000
           DO100 I=1,MAXDEF                                                       14000
           IF(ITERM(I).LE.0)200,9                                                 15000
         9 IF(NTINTX(I).LE.0)96,10                                                16000
        10 NTIND = ITERM(I)                                                       17000
           IF(COLO(NTIND))11,95                                                   18000
        11 ICUR=ITERM(I)                                                          19000
           CALL FINDIT                                                            20000
        12 NT=IGET(DATA,ICUR,COLAR)                                               21000
           IF(NT.EQ.0) 14,13                                                      22000
        13 ICUR=ICUR+NT                                                           23000
        14 ICUR=ICUR+1                                                            24000
           INDEX=IGET(INDEX,ICUR,COLAR)                                           25000
           IF (INDEX.EQ.ITERM(I)) 95,15                                           26000
        15 IF(LTERM(INDEX).EQ.0) 30,16                                            27000
        16 DO 20 J=I,MAXDEF                                                       28000
           IF(INDEX.EQ.ITERM(J)) 22,20                                            29000
        20 CONTINUE                                                               30000
           PRINT 21, INDEX, LTERM(INDEX)                                          31000
        21 FORMAT(///* UNABLE TO FIND ENTRY IN ITERM AND NTINTX ARRAYS FOR TA     32000
          1RGET *,I5,*,  LTERM = *,L1///)                                         33000
           GO TO 30                                                               34000
        22 NTINTX(I) = NTINTX(I) + NTINTX(J)                                      35000
           MM = MAXDEF-1                                                          36000
           DO 25 K = J, MM                                                        37000
           ITERM(K) = ITERM(K+1)                                                  38000
        25 NTINTX(K) = NTINTX(K+1)                                                39000
           NTINTX(MAXDEF) = 0                                                     40000
           ITERM(MAXDEF) = 0                                                      41000
        30 CALL IPUT(KTERM, INDEX,I,STATUS)                                       42000
           GO TO 12                                                               43000
        95 CONTINUE                                                               44000
           ITM=I                                                                  45000
           IF(NTINTX(I)) 96,200,97                                                46000
        96 ITM=-NTINTX(I)                                                         47000
        97 CONTINUE                                                               48000
           INDEX=ITERM(I)                                                         49000
           CALL IPUT(KTERM,INDEX,ITM,STATUS)                                      50000
       100 CONTINUE                                                               51000
       200 CONTINUE                                                               52000
           END                                                                    53000
```

IDENT TDEFSTAT

PROGRAM LENGTH		00242
ENTRY POINTS	TDEFSTAT	00025
	TDEFSTT	00032
BLOCK NAMES		
	KEY	00012
	KEYS	00014
	1	37204
	3	10006
	5	02001
	7	01356
EXTERNAL SYMBOLS		
	Q3000040	
	Q9UEVALL	
	THEN.	
	QBQOTCT.	
	FIMBIT	
	IGET	
	IPUT	
	STH.	
	QBQOUTA	
	UNSINGL.	

```
P00224 BEGIN.     00225
P00223 CONVRT.    00133
C00002 COLAR      00070   00104
C00000 COLO       00056
C00567 COMP
C00146 COMPLEX
P00230 COUNT.     00157   00160
C00146 CRDIST
P00003 CREAT.     00145
C00312 CVULN
P00001 DICT.      00027   00034   00064   00066   00102   00131   00141   00144   00173   00213
P00226 ENDING.    00030   00035   00221   00224
P00000 EXIT.      00227
X00005 FINDIT     00063
P00003 FORMAT.
P00145 GG00000.   00127
P00231 I          00040   00041   00045   00051   00060   00106   00116   00146   00175   00177   00200
                  00204   00207   00216
C00000 ICUR       00062   00062   00067   00074   00074   00076   00076   00077   00077   00100   00103
C00007 IDLAT
C00010 IDLONG
X00006 IGET       00065   00101
C2T344 IND
P00232 INDEX      00105   00111   00120   00133   00134   00174   00211   00214
C00005 INDNO      00103
P00224 INITIAL.   00030   00035
X00007 IPUT       00172   00212
C00001 ISTORE
C00001 ITERM      00042   00042   00052   00052   00061   00061   00106   00107   00121   00122   00161
                  00161   00162   00171   00210   00210
P00233 ITM        00200   00206   00215
P00051 .10        00050
P00216 .100
P00060 .11        00057
P00065 .12        00176
P00074 .13        00072
P00077 .14        00073
P00111 .15        00107
P00116 .16        00114
P00124 .20        00122
P00221 .200       00043   00044   00202
P00146 .22        00123
P00163 .25
P00172 .30        00115   00145
P00045 .9         00044
P00177 .95        00057   00110
P00204 .96        00047   00050   00202
P00207 .97        00203
P00003 ..21       00132
P00142 .Z00001.   00137
P00234 J          00117   00121   00124   00150   00154   00156
P00235 K          00155   00157
C00006 KARDEF
C00004 KATTACK
```

```
C00012  KDEFCMP
C00011  KDEFZON
C03000  KEY
C05000  KEYS
C00007  KTERM       00174   00214
C00567  LTERM       00113   00136
P00236  MAXDEF      00037   00125   00153   00167   00217
P00237  MM          00154   00155
C00002  NCOL
C00000  NISL
C00003  NITEM
C00001  NN
P00240  NT          00071   00075
C00006  NTA         00067
C00000  NTDEF
P00241  NTIND       00053   00054
C01001  NTIATX      00046   00046   00147   00147   00151   00151   00152   00153   00163   00164   00167
                    00170   00201   00201   00205   00205
X00001  Q3000040    00055   00112
X00004  QPRODICT.   00000   00026   00033
X00011  QPRODUCT    00140
X00002  QQDFVALL    00135
X00012  QRSINGL.    00222
C00004  STATUS      00175   00215
X00010  STM.        00130
C00003  TAROMT
C00002  TAHOLD
C00001  TCOL
P00025  TDEFSTAT    00025
P00032  TDEFSTT     00032
X00003  THEAD.      00143
P00217  TS00001.    00040
P00125  TS00002.    00117
P00166  TS00003.    00154
C00000  TSTAT
C00005  TYPLEN
P00041  *S00001.    00220   00220
P00120  *S00002.    00126   00126
P00161  *S00003.    00165
C00004  X
C07644  Y
C17504  Z
C00010  ZON
   00134 SYMBOLS
```

```
      FUNCTION VLRALI(YIELD,PVN,HOR,EN )                                1000
CSUBR      VLRALI     RADATA     ********************************      41000
CUSE       RADATA     START      ********************************      2000
      COMMON/RADATA/PG(12),PA(12),UG(8),UA(8)                           1000
C                                                                       2000
CEND       RADATA     ********************************************      2000
      DECODE (4,100,PVN) VN,LETTER,XK                                   3000
  100 FORMAT (F2.0,A1,F1.0)                                             4000
      CRY=YIELD**.33333                                                 5000
      IF(XK) 1,1,2                                                      6000
    1 DELTA=0.                                                          7000
      IF (LETTER .EQ. 4HG  ) 19,9                                       8000
    2 A=.027144 * XK/CRY                                                9000
      H=1.-.1*XK                                                        10000
      IF (LETTER .EQ. 4HH  ) 15,5                                       11000
C     H CASE                                                            12000
    5 X=2.                                                              13000
    6 Z=(X*X+H)/(2.*X-A)                                                14000
      IF(ABSF(X-Z) .LT. .0005) 8,7                                      15000
    7 X=Z   $GO TO 6                                                    16000
    8 RZ=(Z-1.)/(Z+1.)                                                  17000
      DELTA=(2).7991 + 9.1979*RZ*RZ)*RZ                                 18000
    9 AVN=DELTA*VN                                                      19000
      IS=1    $EN=0.    $GO TO 23                                       20000
C     G CASE                                                            21000
   15 X=1.                                                              22000
   16 Z=(2.*X*X*X+H)/(3.*X*X-A)                                         23000
      IF(ABSF(X-Z) .LT. .0003) 18,17                                    24000
   17 X=Z   $GO TO 16                                                   25000
   18 RZ=(Z-1.)/(Z+1.)                                                  26000
      DELTA=(16.3493+6.*RZ*RZ/5*RZ)*RZ                                  27000
   19 AVN=DELTA+VN                                                      28000
      IS=2    $EN=3.                                                    29000
   23 IF(HOR) 24,24,25                                                  30000
   24 JS=1    $GO TO 26                                                 31000
   25 JS=2                                                              32000
   26 DO 27 I=2,12                                                      33000
      IF(AVN .LE. 5.*(I-1)) 28,27                                       34000
   27 CONTINUE                                                          35000
      I=12                                                              36000
   28 IUP=I   $IL=I-1                                                   37000
      DV=AVN-5.*(IL-1)                                                  38000
      GO TO (29,32),IS                                                  39000
   29 GO TO (30,31),JS                                                  40000
   30 Y=PG(IL)    $Z=PG(IUP)    $GO TO 35                              41000
   31 Y=PA(IL)    $Z=PA(IUP)    $GO TO 35                              42000
   32 GO TO (33,34),JS                                                  43000
   33 Y=UG(IL)    $Z=UG(IUP)    $GO TO 35                              44000
   34 Y=UA(IL)    $Z=UA(IUP)                                           45000
   35 S=(Y-Z)*.2                                                        46000
      Y=Y-S*DV                                                          47000
      VLRALI = EXPF(Y) * CRY                                            48000
      END                                                               49000
```

IDENT VLRADI

PROGRAM LENGTH		00374
ENTRY POINTS	VLRADI	00012
BLOCK NAMES		
	RADATA	00050

EXTERNAL SYMBOLS

THEND.
@2@@7111
@RUDICT.
EXPF
DEC.
UNSIGL.

P00350	A	00046	00060	00110				
P00351	AVN	00103	00140	00162	00174			
P00352	B	00050	00056	00113				
P00254	BEGIN.	00305	00314	00320				
P00253	CNVRTI.	00022	00024	00025				
P00003	CRFMT.	00031						
P00353	CRY	00035	00045	00247				
X00005	DEC.	00017						
P00354	DELTA	00041	00101	00102	00136	00137		
P00001	DICT.	00014	00020	00030	00032	00246	00257	00260
P00355	DV	00177	00243					
P00306	ENDING.	00015	00250	00254	00255	00255	00256	00256
P00000	EXIT.	00312						
X00004	EXPF	00245						
P00003	FN	00106	00143					
P00003	FORMAT.	00042	00051					
P00021	FP00001.	00272						
P00033	FP00002.	00266	00267					
P00105	FP00003.	00301	00302					
P00142	FP00004.	00303	00304					
P00144	FP00005.	00275	00276					
P00323	GETPL.	00261	00270	00277				
P00313	GETPU.	00264	00273	00317				
P00031	GG00000.	00016						
P00003	HOH	00144						
P00356	I	00154	00155	00164	00166	00167	00170	
P00357	IGOTO.	00200	00203	00222				
P00360	IL	00171	00205	00213	00224	00232		
P00254	INITIAL.	00015						
P00361	ISW	00104	00141	00177				
P00362	IUP	00170	00210	00216	00227	00235		
P00040	.1	00036	00037					
P00107	.15	00052						
P00111	.16	00126						
P00125	.17	00123	00124					
P00127	.18	00124						
P00137	.19	00043						
P00044	.2	00037						
P00144	.23	00106						
P00147	.24	00145	00145					
P00151	.25	00146						
P00153	.26	00150						
P00164	.27	00163						
P00167	.28	00162	00163					
P00202	.29	00201						
P00205	.30	00204						
P00213	.31	00204						
P00221	.32	00201						
P00224	.33	00223						
P00232	.34	00223						
P00240	.35	00217	00220	00231				
P00053	.5	00052						
P00055	.6	00071						
P00070	.7	00066	00067					

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P00072  .8          00067
P00102  .9          00043
P00324  .ER&SER.    00057   00061   00061   00062   00064   00073   00075   00075   00076   00114   00116
                    00117   00117   00121   00130   00132   00132   00133   00161   00175
P00003  ..100       00021
P00010  ..100000    00042
P00011  ..100001    00051
P00363  JSW         00150   00152   00202   00221
P00364  LETTER      00025   00042   00051
P00003  NVN         00021
C00014  PA          00214   00214   00216   00217
P00270  PF00002.    00265
P00273  PF00003.    00271
P00277  PF00004.    00274
P00305  PF00005.    00300
C00000  PG          00206   00206   00210   00211
X00002  Q2007111    00031
X00003  QRADICT.    00000   00013
C00040  QA          00233   00233   00235   00236
C00030  QG          00225   00225   00227   00230
X00006  QNSINGL.    00252
P00365  RZ          00076   00077   00100   00101   00133   00134   00135   00136
P00366  S           00242   00242
X00001  THEN0.      00027
P00251  VALUE.      00247   00311
P00012  VLRAPI      00012
P00367  VN          00023   00103   00140
P00155  WS00001.    00165
P00370  X           00054   00055   00056   00060   00063   00071   00110   00112   00112   00113   00115
                    00115   00120   00126
P00371  XK          00026   00038   00045   00047
P00372  Y           00207   00215   00226   00234   00240   00243   00244
P00003  YIELD       00033
P00373  ?           00062   00063   00070   00072   00074   00120   00121   00125   00127   00131   00212
                    00220   00231   00237   00241
   00126 SYMBOLS
```

```
      SUBROUTINE WRPRNT                                                 1000
CSUBR      WRPRNT    15JAN71   ********************************************* 42000
CUSE       KEYS      START     ********************************************* 1100
      COMMON/KEYS/KEYS(12)                                              1000
      TYPE INTEGER ISTAT,TCOL,TARDLO,TARDHI,ZON                         2000
      TYPE INTEGER TVULN                                                3000
      EQUIVALENCE( ISTAT,KEYS(1)),                                      4000
     1            (TCOL, KEYS(2)),                                      5000
     2            (TARDLO,KEYS(3)),                                     6000
     3            (TARDHI, KEYS(4)),                                    7000
     4            (KATTACK, KEYS(5)),                                   8000
     5            (TVULN, KEYS(6)),                                     9000
     6            (KARDEF, KEYS(7)),                                    10000
     7            (KTERM, KEYS(8)),                                     11000
     8            (ZON, KEYS(9)),                                       12000
     9            (KDEFZON, KEYS(10)),                                  13000
     1            (KDEFCMP, KEYS(11))                                   14000
C                                                                       15000
CEND       KEYS      ********************************************************* 1100
CUSE       COMMUN    START     ********************************************* 2000
      COMMON/COMMUN/WRHD,NZONES,IBREAK                                  1000
CEND       COMMUN    ********************************************************* 2000
CUSE       AREADAT   START     ********************************************* 3000
      COMMON/AREADAT/ AINT(20,3),NLRR(20),IOVERLP(20)                   1000
      TYPE INTEGER AINT                                                 2000
C                                                                       3000
CEND       AREADAT   ********************************************************* 3000
CUSE       IFTPRNT   START     ********************************************* 4000
      COMMON/IFTPRNT/IFTPRNT(10)                                        1000
C                                                                       2000
CEND       IFTPRNT   ********************************************************* 4000
CUSE       ITP       START     ********************************************* 5000
      COMMON/ITP/ITP                                                    1000
C                                                                       2000
CEND       ITP       ********************************************************* 5000
CUSE       MAX       START     ********************************************* 6000
C     COMMON BLOCK CONTAINING ALL MAXIMUM VALUES FOR QUICK OCT 71       1000
C     VALUES INITIALIZED WITH DATA STATEMENTS IN INITIND                2000
C                                                                       3000
      COMMON/MAX/MAXNOFZ, MALERT, MASMTYP, MRNDEV, MCOREQN,             4000
     1           MCLASS,  MCNTRYS,  MCORR,   MCOMTYP,  MOPEN,          5000
     2           MDEFNLG, MGROUP,   MPAYLOD, MRECOVR,                  6000
     3           MRECVLG, MREF,     MRTLEG,  MRTPT,                    7000
     4           MSPEAT,  MTAPKHS,  MTAPCLS, MTAPCOL, MTAPCPX,         8000
     5           MTAPERS, MTARGET,  MTARIND, MTAPSEC, MTAPTEI,         9000
     6           MTAPTYP, MTAPVAL,  MTELMCM, MTOTHAS,                  10000
     7           MTYPE,   MVULN,    MWFAPGP, MWHDTPZ,  MZONEPT,        11000
     MZONES, MTAPPOL, MAPWSIT                                         12000
C                                                                       13000
CEND       MAX       ********************************************************* 6000
CUSE       MYIDENT   START     ********************************************* 7000
      COMMON/MYIDENT/MYIDENT                                            1000
C                                                                       2000
CEND       MYIDENT   ********************************************************* 7000
CUSE       VALTH     START     ********************************************* 8000
      COMMON/VALTH/ IBAS,(10,10),IBLAS,(10,10), ITMAX,ITBLMAX           1000
```

```
C                                                                       2000
CEND      NAVALTH   ********************************************************  8000
CUSE      *OVPINT   START     ********************************************  9000
      COMMON/*OVPRINT/AOPRINT                                           1000
C                                                                       2000
CEND      *OPRINT   ********************************************************  9000
CUSE      PRNT      START     ********************************************  10000
      COMMON/PRNT/IPRNT(15)                                             1000
C                                                                       2000
CEND      PRNT      ********************************************************  10000
CUSE      TRANS     START     ********************************************  11000
      COMMON/TRANS/LMAX,NASMT,AVULN,NRLUPLM,MAXIND,NREDPLD              1000
C                                                                       2000
C                                                                       3000
CEND      TRANS     ********************************************************  11000
CUSE      TWORD     START     ********************************************  12000
      COMMON/TWORD/ITWORD                                               1000
      EQUIVALENCE(TWORD,ITWORD)                                         2000
C                                                                       3000
CEND      TWORD     ********************************************************  12000
CUSE      1         START     ********************************************  13000
      COMMON/TANISL,NMCOL,NITEM,X(4000),Y(4000),Z(4000),IND(4000)       1000
      DIMENSION STATUS(,2000)                                           2000
      EQUIVALENCE(STATUS,X)                                             3000
C                                                                       4000
C     NISL = NUMBER OF COLLOCATED ISLANDS                               5000
C     N = INDEX TO COLAR                                                6000
C     NCOL = NUMBER OF COLLOCATED TARGETS                               7000
C     NITEM = NUMBER OF ITEMS IN SEGMENT BEING PROCESSED.               8000
C     X,Y,Z = LONGITUDE, LATITUDE, CRITICAL DISTANCE                    9000
C     IND = INDEX NUMBER OF X,Y,Z                                       10000
C     STATUS = PACKED DATA FOR TARGETS                                  11000
C                                                                       12000
CEND      1         ********************************************************  13000
CUSE      3         MAPP71    ********************************************  14000
      COMMON/3/ICOM, ISIGRE,COLAR(100), COMPLEX(4000)                   1000
      TYPE INTEGER COLAR, COMPLEX                                       2000
      DIMENSION CDUIST(100),CVULN(100)                                  3000
      TYPE INTEGER CVULN                                                4000
      EQUIVALENCE(CDUIST,COMPLEX),(CVULN,COMPLEX(101))                  5000
C                                                                       6000
CEND      3         ********************************************************  14000
CUSE      4         ILJAN71   ********************************************  15000
      COMMON/4/NULL, CUNKO(15), PTYPES(15), INDCLAS (15),               1000
     1INAME(250),TYPENAM(20,15),TYPETHL(20,15),                         2000
     2INICOM(250),ECC (20,7),                                           3000
     3   ITANK(40,5),ASMT(20,2),AMO(50,3),ZONES(75,3),                  4000
     4CAPACTY(50,2),ICHR(25),  IRV(80,2),                               5000
     5I=STYP(50,2),IRANGES(50,2),INDECYS(40,2),INAMDEC(40,2)            6000
     6,NAMCLAS(15)                                                      7000
      DIMENSION ENIS(80,11),ITS(80,11)                                  8000
      DIMENSION NEWIND(4000)                                            9000
      EQUIVALENCE(NEWIND,NIS,ENIS,TYPENAM(25))                          10000
      TYPE INTEGER TYPENAM, TYPETHL, CUNKO, PTYPES                      11000
      DIMENSION IND(20,7),ITANK(40,5)                                   12000
      EQUIVALENCE( I=OM,NOM),(ITANK,TANK)                               13000
```

```
      C                                                                 14000
      C                                                                 15000
      CEND      4          **********************************************15000
      CUSE      5          START     ***********************************16000
            COMMON/5/ NTOFF, ITERM(512), NTITEM(512)                     1000
      C                                                                 2000
      CEND      5          **********************************************16000
      CDECLARE                                                          17000
            COMMON/PROCESS/NI,NV,NC,NITEM(100),VALUE(500),DEF(500),LGLOB(500)
            TYPE INTEGER VALUE
            TYPE LOGICAL DEF,LGLOB
            COMMON/EDITERM/ISYTERM
            COMMON/EDITAPE/INTP,NOUT,ITOUT(10),JOUT
            EQUIVALENCE(CLASS    ,VALUE(    1))
            TYPE INTEGER CLASS
            EQUIVALENCE(TYPE     ,VALUE(    2))
            TYPE INTEGER TYPE
            EQUIVALENCE(SIDE     ,VALUE(    3))
            TYPE INTEGER SIDE
            EQUIVALENCE(CNTRYOWN,VALUE(    4))
            TYPE INTEGER CNTRYOWN
            EQUIVALENCE(CNTRYLOC,VALUE(    5))
            TYPE INTEGER CNTRYLOC
            EQUIVALENCE(FUNCTION,VALUE(    6))
            TYPE INTEGER FUNCTION
            EQUIVALENCE(SITENO   ,VALUE(    7))
            TYPE INTEGER SITENO
            EQUIVALENCE(NAME     ,VALUE(    8))
            TYPE INTEGER NAME
            EQUIVALENCE(SUBNO    ,VALUE(    9))
            TYPE INTEGER SUBNO
            EQUIVALENCE(FLTNO    ,VALUE(   10))
            TYPE INTEGER FLTNO
            EQUIVALENCE(HEND     ,VALUE(   11))
            TYPE INTEGER HEND
            EQUIVALENCE(VOLN     ,VALUE(   12))
            TYPE INTEGER VOLN
            EQUIVALENCE(H1       ,VALUE(   13))
            TYPE INTEGER H1
            EQUIVALENCE(H2       ,VALUE(   14))
            TYPE INTEGER H2
            EQUIVALENCE(WACNO    ,VALUE(   15))
            TYPE INTEGER WACNO
            EQUIVALENCE(CATCODE ,VALUE(   16))
            TYPE INTEGER CATCODE
            EQUIVALENCE(MAJOR    ,VALUE(   17))
            TYPE INTEGER MAJOR
            EQUIVALENCE(MINOR    ,VALUE(   18))
            TYPE INTEGER MINOR
            EQUIVALENCE(DESIG    ,VALUE(   19))
            TYPE INTEGER DESIG
            EQUIVALENCE(TASK     ,VALUE(   20))
            TYPE INTEGER TASK
            EQUIVALENCE(POSTURE ,VALUE(   21))
            TYPE INTEGER POSTURE
            EQUIVALENCE(INDEXNO ,VALUE(   22))
```

```
      TYPE INTEGER INDEXNO
      EQUIVALENCE(NOPERSON,VALUE( 23))
      TYPE INTEGER NOPERSON
      EQUIVALENCE(NMPSITE ,VALUE( 24))
      TYPE INTEGER NMPSITE
      EQUIVALENCE(NOALERT ,VALUE( 25))
      TYPE INTEGER NOALERT
      EQUIVALENCE(NOINCOM ,VALUE( 26))
      TYPE INTEGER NOINCOM
      EQUIVALENCE(LINK    ,VALUE( 27))
      TYPE INTEGER LINK
      EQUIVALENCE(ZONE    ,VALUE( 28))
      TYPE INTEGER ZONE
      EQUIVALENCE(AREA    ,VALUE( 29))
      TYPE REAL    AREA
      EQUIVALENCE(LAT     ,VALUE( 30))
      TYPE REAL    LAT
      EQUIVALENCE(LONG    ,VALUE( 31))
      TYPE REAL    LONG
      EQUIVALENCE(LEGNO   ,VALUE( 32))
      TYPE INTEGER LEGNO
      EQUIVALENCE(RESERVE ,VALUE( 33))
      TYPE INTEGER RESERVE
      EQUIVALENCE(BLEGNO  ,VALUE( 34))
      TYPE INTEGER BLEGNO
      EQUIVALENCE(NEXTZONE,VALUE( 35))
      TYPE INTEGER NEXTZONE
      EQUIVALENCE(IPOINT  ,VALUE( 36))
      TYPE INTEGER IPOINT
      EQUIVALENCE(DATEIN  ,VALUE( 37))
      TYPE REAL    DATEIN
      EQUIVALENCE(DATEOUT ,VALUE( 38))
      TYPE REAL    DATEOUT
      EQUIVALENCE(POP     ,VALUE( 39))
      TYPE REAL    POP
      EQUIVALENCE(IGIN    ,VALUE( 40))
      TYPE INTEGER IGIN
      EQUIVALENCE(MVA     ,VALUE( 41))
      TYPE INTEGER MVA
      EQUIVALENCE(RADIUS  ,VALUE( 42))
      TYPE REAL    RADIUS
      EQUIVALENCE(VAL     ,VALUE( 43))
      TYPE REAL    VAL
      EQUIVALENCE(VALU    ,VALUE( 44))
      TYPE REAL    VALU
      EQUIVALENCE(MISDEF  ,VALUE( 45))
      TYPE INTEGER MISDEF
      EQUIVALENCE(IARDEF  ,VALUE( 46))
      TYPE INTEGER IARDEF
      EQUIVALENCE(TARDEFHI,VALUE( 47))
      TYPE INTEGER TARDEFHI
      EQUIVALENCE(TARDEFLO,VALUE( 48))
      TYPE INTEGER TARDEFLO
      EQUIVALENCE(ICLASS  ,VALUE( 49))
      TYPE INTEGER ICLASS
      EQUIVALENCE(ITYPE   ,VALUE( 50))
```

```
      TYPE INTEGER ITYPE
      EQUIVALENCE(IREG     ,VALUE(  51))
      TYPE INTEGER IREG
      EQUIVALENCE(IREFUEL ,VALUE(  52))
      TYPE INTEGER IREFUEL
      EQUIVALENCE(IOTHER   ,VALUE(  53))
      TYPE INTEGER IOTHER
      EQUIVALENCE(IGROUP   ,VALUE(  54))
      TYPE INTEGER IGROUP
      EQUIVALENCE(ICOMPLEX,VALUE(  55))
      TYPE INTEGER ICOMPLEX
      EQUIVALENCE(ITGT     ,VALUE(  56))
      TYPE INTEGER ITGT
      EQUIVALENCE(JTYPE    ,VALUE(  57))
      TYPE INTEGER JTYPE
      EQUIVALENCE(WHDTYPE ,VALUE(  58))
      TYPE INTEGER WHDTYPE
      EQUIVALENCE(ASKTYPE ,VALUE(  59))
      TYPE INTEGER ASKTYPE
      EQUIVALENCE(NDECOYS ,VALUE(  60))
      TYPE INTEGER NDECOYS
      EQUIVALENCE(FFRAC    ,VALUE(  61))
      TYPE REAL    FFRAC
      EQUIVALENCE(DELTA    ,VALUE(  62))
      TYPE REAL    DELTA
      EQUIVALENCE(FVALH1   ,VALUE(  63))
      TYPE REAL    FVALH1
      EQUIVALENCE(T1       ,VALUE(  64))
      TYPE REAL    T1
      EQUIVALENCE(T2       ,VALUE(  65))
      TYPE REAL    T2
      EQUIVALENCE(T3       ,VALUE(  66))
      TYPE REAL    T3
      EQUIVALENCE(FVALT1   ,VALUE(  67))
      TYPE REAL    FVALT1
      EQUIVALENCE(FVALT2   ,VALUE(  68))
      TYPE REAL    FVALT2
      EQUIVALENCE(MINKILL ,VALUE(  69))
      TYPE REAL    MINKILL
      EQUIVALENCE(MAXKILL ,VALUE(  70))
      TYPE REAL    MAXKILL
      EQUIVALENCE(MAXFRACV,VALUE(  71))
      TYPE REAL    MAXFRACV
      EQUIVALENCE(MAXFACTV,VALUE(  72))
      TYPE REAL    MAXFACTV
      EQUIVALENCE(YIELD    ,VALUE(  73))
      TYPE REAL    YIELD
      EQUIVALENCE(NOBOMB1 ,VALUE(  74))
      TYPE INTEGER NOBOMB1
      EQUIVALENCE(NOBOMB2 ,VALUE(  75))
      TYPE INTEGER NOBOMB2
      EQUIVALENCE(NASMS    ,VALUE(  76))
      TYPE INTEGER NASMS
      EQUIVALENCE(NCM      ,VALUE(  77))
      TYPE INTEGER NCM
      EQUIVALENCE(PAYLOAD ,VALUE(  78))
```

```
      TYPE INTEGER PAYLOAD
      EQUIVALENCE(IREP     ,VALUE(  79))
      TYPE INTEGER IREP
      EQUIVALENCE(PDUD     ,VALUE(  80))
      TYPE REAL    PDUD
      EQUIVALENCE(CEP      ,VALUE(  81))
      TYPE REAL    CEP
      EQUIVALENCE(RANGE    ,VALUE(  82))
      TYPE REAL    RANGE
      EQUIVALENCE(RANGEDEC,VALUE(  83))
      TYPE REAL    RANGEDEC
      EQUIVALENCE(RANGEREF,VALUE(  84))
      TYPE REAL    RANGEREF
      EQUIVALENCE(SPEED    ,VALUE(  85))
      TYPE REAL    SPEED
      EQUIVALENCE(SPDLO    ,VALUE(  86))
      TYPE REAL    SPDLO
      EQUIVALENCE(SPDASH   ,VALUE(  87))
      TYPE REAL    SPDASH
      EQUIVALENCE(REL      ,VALUE(  88))
      TYPE REAL    REL
      EQUIVALENCE(PEN      ,VALUE(  89))
      TYPE REAL    PEN
      EQUIVALENCE(ALERTDBL,VALUE(  90))
      TYPE REAL    ALERTDBL
      EQUIVALENCE(NALRTDBL,VALUE(  91))
      TYPE REAL    NALRTDBL
      EQUIVALENCE(ALERTDLY,VALUE(  92))
      TYPE REAL    ALERTDLY
      EQUIVALENCE(NALRTDLY,VALUE(  93))
      TYPE REAL    NALRTDLY
      EQUIVALENCE(CCREL    ,VALUE(  94))
      TYPE REAL    CCREL
      EQUIVALENCE(TTOS     ,VALUE(  95))
      TYPE REAL    TTOS
      EQUIVALENCE(THDEL    ,VALUE(  96))
      TYPE REAL    THDEL
      EQUIVALENCE(TVUL     ,VALUE(  97))
      TYPE REAL    TVUL
      EQUIVALENCE(THETARG  ,VALUE(  98))
      TYPE REAL    THETARG
      EQUIVALENCE(PLART    ,VALUE(  99))
      TYPE REAL    PLART
      EQUIVALENCE(ARRATE   ,VALUE( 100))
      TYPE REAL    ARRATE
      EQUIVALENCE(PRART    ,VALUE( 101))
      TYPE REAL    PRART
      EQUIVALENCE(PINC     ,VALUE( 102))
      TYPE REAL    PINC
      EQUIVALENCE(PDES     ,VALUE( 103))
      TYPE REAL    PDES
      EQUIVALENCE(PFPF     ,VALUE( 104))
      TYPE REAL    PFPF
      EQUIVALENCE(PKMIS    ,VALUE( 105))
      TYPE REAL    PKMIS
      EQUIVALENCE(ATTHLEG  ,VALUE( 106))
```

```
      TYPE REAL     ATTWLFG
      EQUIVALENCE(ATTNCORR,VALUE( 107))
      TYPE REAL     ATTRCORR
      EQUIVALENCE(KOESTYLE,VALUE( 108))
      TYPE INTEGER KOESTYLE
      EQUIVALENCE(DEPRANGE,VALUE( 109))
      TYPE REAL     DEPRANGE
      EQUIVALENCE(MILOATTR,VALUE( 110))
      TYPE REAL     MILOATTR
      EQUIVALENCE(ATTRSUPF,VALUE( 111))
      TYPE REAL     ATTWSUPF
      EQUIVALENCE(I*TYP2  ,VALUE( 112))
      TYPE INTEGER I*TYP2
      EQUIVALENCE(EFFECTWFS,VALUE( 113))
      TYPE REAL     EFFECTWFS
      EQUIVALENCE(ISITE   ,VALUE( 114))
      TYPE INTEGER ISITE
      EQUIVALENCE(IVULN   ,VALUE( 115))
      TYPE INTEGER IVULN
      EQUIVALENCE(RADBLT  ,VALUE( 116))
      TYPE REAL     RADBLT
      EQUIVALENCE(RADBLR  ,VALUE( 117))
      TYPE REAL     RADBLR
      EQUIVALENCE(ABRLT   ,VALUE( 118))
      TYPE REAL     ABRLT
      EQUIVALENCE(NAREADEC,VALUE( 119))
      TYPE INTEGER NAREADEC
      EQUIVALENCE(NKHDS   ,VALUE( 120))
      TYPE INTEGER NKHDS
      EQUIVALENCE(NTINT   ,VALUE( 121))
      TYPE INTEGER NTINT
      EQUIVALENCE(ABHLR   ,VALUE( 122))
      TYPE REAL     ABHLR
      EQUIVALENCE(TIMEN   ,VALUE( 123))
      TYPE REAL     TIMEN
      EQUIVALENCE(TIME    ,VALUE( 124))
      TYPE REAL     TIME
      EQUIVALENCE(DELAY   ,VALUE( 125))
      TYPE REAL     DELAY
      EQUIVALENCE(IFLGHT  ,VALUE( 126))
      TYPE INTEGER IFLGHT
      EQUIVALENCE(NWTYPE  ,VALUE( 127))
      TYPE INTEGER I*TYPE
      EQUIVALENCE(INDV    ,VALUE( 128))
      TYPE INTEGER INDV
      EQUIVALENCE(IFTAR   ,VALUE( 129))
      TYPE INTEGER I*TAR
      EQUIVALENCE(EVENT   ,VALUE( 130))
      TYPE INTEGER EVENT
      EQUIVALENCE(EVENTN  ,VALUE( 131))
      TYPE INTEGER EVENTN
      EQUIVALENCE(PLACE   ,VALUE( 132))
      TYPE INTEGER PLACE
      EQUIVALENCE(PLACEN  ,VALUE( 133))
      TYPE INTEGER PLACEN
      EQUIVALENCE(IALT    ,VALUE( 134))
```

```
      TYPE INTEGER IALT
      EQUIVALENCE(NWPNS    ,VALUE( 135))
      TYPE INTEGER NWPNS
      EQUIVALENCE(NTARG    ,VALUE( 136))
      TYPE INTEGER NTARG
      EQUIVALENCE(MCODE    ,VALUE( 137))
      TYPE INTEGER MCODE
      EQUIVALENCE(CODE     ,VALUE( 138))
      TYPE INTEGER CODE
      EQUIVALENCE(RCODE    ,VALUE( 139))
      TYPE INTEGER RCODE
      EQUIVALENCE(IDUD     ,VALUE( 140))
      TYPE INTEGER IDUD
      EQUIVALENCE(AGX      ,VALUE( 141))
      TYPE INTEGER AGX
      EQUIVALENCE(AGY      ,VALUE( 142))
      TYPE INTEGER AGY
      EQUIVALENCE(DGX      ,VALUE( 143))
      TYPE INTEGER DGX
      EQUIVALENCE(DGY      ,VALUE( 144))
      TYPE INTEGER DGY
      EQUIVALENCE(AHOB     ,VALUE( 145))
      TYPE INTEGER AHOB
      EQUIVALENCE(DHOB     ,VALUE( 146))
      TYPE INTEGER DHOB
      EQUIVALENCE(WHOTYPEN,VALUE( 147))
      TYPE INTEGER WHOTYPEN
      EQUIVALENCE(PRIMETAR,VALUE( 148))
      TYPE INTEGER PRIMETAR
      EQUIVALENCE(ICLASST ,VALUE( 149))
      TYPE INTEGER ICLASST
      EQUIVALENCE(ITYPET   ,VALUE( 150))
      TYPE INTEGER ITYPET
      EQUIVALENCE(JTYPET   ,VALUE( 151))
      TYPE INTEGER JTYPET
      EQUIVALENCE(TYPET    ,VALUE( 152))
      TYPE INTEGER TYPET
      EQUIVALENCE(CLASST   ,VALUE( 153))
      TYPE INTEGER CLASST
      EQUIVALENCE(CNTYOWNT,VALUE( 154))
      TYPE INTEGER CNTYOWNT
      EQUIVALENCE(CNTYLOCT,VALUE( 155))
      TYPE INTEGER CNTYLOCT
      EQUIVALENCE(IPENMODE,VALUE( 156))
      TYPE INTEGER IPENMODE
      EQUIVALENCE(IRECMODE,VALUE( 157))
      TYPE INTEGER IRECMODE
      EQUIVALENCE(IATTACK ,VALUE( 158))
      TYPE INTEGER IATTACK
      EQUIVALENCE(NAL      ,VALUE( 159))
      TYPE INTEGER NAL
      EQUIVALENCE(TATM     ,VALUE( 160))
      TYPE INTEGER TATM
      EQUIVALENCE(MWHOS    ,VALUE( 161))
      TYPE INTEGER MWHOS
      EQUIVALENCE(NPEN     ,VALUE( 162))
```

```
      TYPE INTEGER NPEN
      EQUIVALENCE(NDET     ,VALUE( 163))
      TYPE INTEGER NDET
      EQUIVALENCE(PARRIVE  ,VALUE( 164))
      TYPE REAL    PARRIVE
      EQUIVALENCE(ADEFZON  ,VALUE( 165))
      TYPE INTEGER ADEFZON
      EQUIVALENCE(ADEFCMP  ,VALUE( 166))
      TYPE INTEGER ADEFCMP
      EQUIVALENCE(NAINT    ,VALUE( 167))
      TYPE INTEGER NAINT
      EQUIVALENCE(AZON1    ,VALUE( 168))
      TYPE INTEGER AZON1
      EQUIVALENCE(AZON2    ,VALUE( 169))
      TYPE INTEGER AZON2
      EQUIVALENCE(AZON3    ,VALUE( 170))
      TYPE INTEGER AZON3
      EQUIVALENCE(CPACTY   ,VALUE( 171))
      TYPE INTEGER CPACTY
      EQUIVALENCE(ICORR    ,VALUE( 172))
      TYPE INTEGER ICORR
      EQUIVALENCE(IMIRV    ,VALUE( 173))
      TYPE INTEGER IMIRV
      EQUIVALENCE(IDRL     ,VALUE( 174))
      TYPE INTEGER IDRL
      EQUIVALENCE(PKNAV    ,VALUE( 175))
      TYPE REAL    PKNAV
      EQUIVALENCE(ITIME    ,VALUE( 176))
      TYPE INTEGER ITIME
      EQUIVALENCE(PSASW    ,VALUE( 177))
      TYPE REAL    PSASW
      EQUIVALENCE(TPASW    ,VALUE( 178))
      TYPE REAL    TPASW
      EQUIVALENCE(TGTSTAT  ,VALUE( 179))
      TYPE INTEGER TGTSTAT
      EQUIVALENCE(FLAG     ,VALUE( 180))
      TYPE INTEGER FLAG
      EQUIVALENCE(NOPERSQ1 ,VALUE( 181))
      TYPE INTEGER NOPERSQ1
      EQUIVALENCE(NOPERSQ2 ,VALUE( 182))
      TYPE INTEGER NOPERSQ2
      EQUIVALENCE(NOPERSQ3 ,VALUE( 183))
      TYPE INTEGER NOPERSQ3
      EQUIVALENCE(NUMDBL   ,VALUE( 184))
      TYPE INTEGER NUMDRL
      EQUIVALENCE(EFECNES1 ,VALUE( 185))
      TYPE REAL    EFECNES1
      EQUIVALENCE(EFECNES2 ,VALUE( 186))
      TYPE REAL    EFECNES2
      EQUIVALENCE(VAL1     ,VALUE( 187))
      TYPE REAL    VAL1
      EQUIVALENCE(VAL2     ,VALUE( 188))
      TYPE REAL    VAL2
      EQUIVALENCE(TYPE1    ,VALUE( 189))
      TYPE INTEGER TYPE1
      EQUIVALENCE(TYPE2    ,VALUE( 190))
```

```
      TYPE INTEGER TYPE2                                                    18000
      IF (IPRNT(4)) 406, 489                                                19000
  408 CONTINUE                                                              20000
      IF(IPRNT(10))2005,405                                                 21000
 2005 CONTINUE                                                              22000
      PRINT 401                                                             23000
  401 FORMAT(10H1    ITERM,10H     NTINT//)                                 24000
      DO 404 I = 1, 512                                                     25000
      IF (ITERM(I)) 404, 404, 402                                           26000
  402 PRINT 403, I, ITERM(I), NTINTX(I)                                     27000
  403 FORMAT(1X,I3,I6,I10)                                                  28000
  404 CONTINUE                                                              29000
  405 CONTINUE                                                              30000
      PRINT 410                                                             31000
  410 FORMAT(18H1MISSILE TYPE DATA//                                        32000
     110H      TYPE,10H      PINC,10H     PLABT,                           33000
     210H      PDES,10H      PFPF,10H      TVUL,                           34000
     310H   TRETARG,10H      IREP,                                         35000
     410H       CEP,10H     PKMIS,10H     DELTA, 10H  FUNCTION//)          36000
      M=CUMNO(1)                                                            37000
      PRINT 412,(TYPENAM(I),(PMIS(I,J), J=1,11), I = 1, M)                  38000
  412 FORMAT(2X,AR, 6F10.5, I10.3F10.5,2X,AR)                               39000
      PRINT 414                                                             40000
  414 FORMAT(17H1BOMBER TYPE DATA//10H      TYPE,                           41000
     110H     PLABT,10H     TMDEL,                                         42000
     210H    ABRATE,10H     PRART,                                         43000
     410H       CEP,10H     DELTA,10H  FUNCTION //)                        44000
      N=CUMNO(2)-M                                                          45000
      DO 420 I=1,N                                                          46000
      L=I+M                                                                 47000
      PRINT 419, TYPENAM(L), (BOM(I,J), J = 1, 7)                           48000
  419 FORMAT(2X,AR,6F10.6, 2X,AR)                                           49000
  420 CONTINUE                                                              50000
      PRINT 422                                                             51000
  422 FORMAT(17H1TANKER TYPE DATA// 10H      TYPE, 10H     PLABT,           52000
     *10H     TMDEL,10H    ABRATE,10H     DELTA//)                         53000
      M=CUMNO(3)-CUMNO(2)                                                   54000
      DO 425 I=1,M                                                          55000
      L=I+CUMNO(2)                                                          56000
      PRINT 424, TYPENAM(L), (TANK(I,J), J = 1, 5)                          57000
  424 FORMAT( 2X, AR, 4F10.6,AB)                                            58000
  425 CONTINUE                                                              59000
      PRINT 430                                                             60000
  430 FORMAT(14H1ASM TYPE DATA//10H   ASMTYPE,10H     PLABT,                61000
     110H       CEP//)                                                     62000
      PRINT 432,(I,ASMT(I,1),ASMT(I,2),I=1,NASMT)                           63000
  432 FORMAT((I10,2F10.6//))                                                64000
      PRINT 435                                                             65000
  435 FORMAT(18H1WARHEAD TYPE DATA//10H   WHDTYPE,10H      PDUD,            66000
     110H     YIELD,10H       CEP//)                                       67000
      PRINT 437,((I,WHD(I,1),WHD(I,2),WHD(I,3),I=1,NWHD)                    68000
  437 FORMAT((I10,F10.6,F10.3,F10.4//))                                     69000
      LT=LT+1                                                               70000
      PRINT 440                                                             71000
  440 FORMAT(10H1ZONE DATA//10H      ZONE,10H      AREA,10H     CCPOT,      72000
     110H  INCPTPOT//)
```

```
      PRINT 441,((I,(ZONES(I,J),J=1,3),I=1,NZONES)                          73000
  441 FORMAT((I10,3F10.4))                                                  74000
      PRINT 445                                                             75000
  445 FORMAT(9H1CAPACITY////10X,5HDEFCC//10H       TYPE,10H  EFFECTNES//)   76000
      J=1                                                                   77000
  446 MI=CUMNO(J+2)                                                         78000
      M=CUMNO(J+3)-MI                                                       79000
      DO 450 I=1,M                                                          80000
      L=I+MI                                                                81000
      PRINT 447,TYPENAM(L),CAPACTY(I,J)                                     82000
  447 FORMAT(2X,A8,F10.4)                                                   83000
  450 CONTINUE                                                              84000
      IF(J.EQ.2)455,451                                                     85000
  451 PRINT 452                                                             86000
  452 FORMAT(///10X,7HINCPTOR//10H       TYPE,10H  EFFECTNES//)             87000
      J=2                                                                   88000
      GO TO 446                                                             89000
  455 CONTINUE                                                              90000
 2006 CONTINUE                                                              91000
      PRINT 453                                                             92000
  453 FORMAT(13H1PAYLOAD DATA//10X,10H   NORDMBI,10H   WHDTYPE,             93000
     1)10H     N=MDS,10H   NDECOYS,10H  NAREADEC,10H      SIDE//)          94000
      N=NBLUPLD                                                             95000
      ISIDE=1                                                               96000
      MSIDE=4HBLUE                                                          97000
  480 PRINT 481,(I,MIRV(I,ISIDE),IWHDTYP(I,ISIDE),IN=MDS(I,ISIDE),         98000
     1INDECYS(I,ISIDE),INARDEC(I,ISIDE),MSIDE,I=1,N)                        99000
  481 FORMAT(6I10,2X,A4)                                                    100000
      GO TO (482,483) ISIDE                                                 101000
  482 N=NREDPLD                                                             102000
      ISIDE=2                                                               103000
      MSIDE=3HRED                                                           104000
      GO TO 480                                                             105000
  483 CONTINUE                                                              106000
      PRINT 484                                                             107000
  484 FORMAT(31H1TIME DEPENDENT DBL DATA TABLES///30H IDBL TTIME    TPAS    108000
     1W     PSASW)                                                         109000
      DO 485  I = 1, IDBLMAX                                                110000
  485 PRINT 486, I, (J, TMAS#(J,I), DBLAS#(J,I), J = 1, ITMAX)              111000
  486 FORMAT(2H0 ,2(I2,3X),F10.5,2X,F7.5/(7X,I2,3X,F10.5,2X,F7.5))          112000
  489 IF (IPRNT(6))  460, 465                                               113000
  460 CONTINUE                                                              113100
      PRINT 490                                                             113200
  490 FORMAT(24H1RADAR AND ABM TYPE DATA///)                                113300
      PRINT 491,(I,IOVERLP(I),I=1,20)                                       113400
  491 FORMAT(3H Z=,I10,2X,13H IOVERLAP(Z)=,I16)                             113500
      PRINT 492,(I,MLRR(I),I=1,20)                                          113600
  492 FORMAT(3H Z=,I10,2X,9H MLRR(Z)=,I10)                                  113700
      PRINT 493,(((I,J,AINT(I,J),J=1,3),I=1,20)                             113800
  493 FORMAT(3H Z=,I10,2X,3H C=,I10,2X,11H AINT(Z,C)=,I10)                  113900
      PRINT 461                                                             114000
  461 FORMAT (1H1)                                                          115000
 1461 FORMAT (8H INDEXNO,3X,14H     STATUS     ,6H  ZONE,                  116000
     18H ADEFCMP, 8H ADEFZON, 8H   ITERM,8H  IANDEF,                        117000
     28H   IVULA, 8H IATTACK, 9H IARDEFMI, 9H TARDEFLO,                     118000
     35H TCOL, 6H IKEEP , 6H TSTAT, //)                                     119000
```

```
1462 FORMAT(IR,3X, 'ID', I6,   'IR',  2I4, I5, 2I6)                    120000
     M = 0                                                            121000
     PRINT 1461                                                       122000
     DO 1463 N = 1, MAX[N]                                            123000
     NUMBR(1) = IGET( ZON, N, STATUS)                                 124000
     NUMBR(2) = IGET( ANEFCMP,N,STATUS)                               125000
     NUMBR(3) = IGET(KOFFZON,N,STATUS)                                125100
     NUMBR(4) = IGET(KTERR,N , STATUS)                                125200
     NUMBR(5) = IGET(KAMOFF,N,STATUS)                                 125300
     NUMBR(6) = IGET(TWILN,N, STATUS)                                 125400
     NUMBR(7) = IGET(KATTACK,N,STATUS)                                125500
     NUMBR(8)       = IGET(TARGMIS,N,STATUS)                          125600
     NUMBR(9) =IGET(TARGLG,N,STATUS)                                  125700
     NUMBR(10) = IGET(TCOL,N,STATUS)                                  125800
     NUMBR(11) = IGET(TSTAT,N,STATUS)                                 125900
     IF(NUMBR(11) .NE. 0) GO TO 1466                                  126000
     NUMBR(11) = 1                                                    127000
     NUMBR(12) = I                                                    128000
     GO TO 1467                                                       129000
1466 NUMBR(11) = 0                                                    130000
     NUMBR(12) = 0                                                    131000
1467 PRINT 1462,N,STATUS(N),(NUMBR(I),I=1,12)                         132000
     M = M +1                                                         133000
     IF(M .NE. 50) GO TO 1463                                         134000
     M = 0                                                            135000
     PRINT 441                                                        136000
     PRINT 1461                                                       137000
1463 CONTINUE                                                         138000
 465 CONTINUE                                                         147000
     END                                                              148000
```

IDENT WRPRNT

PROGRAM LENGTH		02006
ENTRY POINTS	WRPRNT	00630
BLOCK NAMES		
	KEYS	00014
	COMBUF	00003
	AREADAT	00144
	IFTPRNT	00012
	ITP	00001
	MAX	00050
	MYIDENT	00001
	NAVALTH	00312
	NOPRINT	00001
	PRNT	00017
	TRANS	00006
	TWORD	00001
	1	37204
	3	10006
	4	11416
	5	02001
	PROCESS	01173
	EDITERM	00001
	EDITAPE	00015
EXTERNAL SYMBOLS		
	THEND.	
	QBQBICT.	
	IGET	
	STM.	
	UNSINGL.	

C00312	ARRAIE											
C00334	ADHLI											
C00340	ADHLR											
C00414	ADEFCMP											
C00413	ADEFZON											
C00363	AGX											
C00364	AGY											
C00367	AHOB											
C00000	AINT	01453	01454									
C00300	ALERTOBL											
C00302	ALERTOLY											
C00203	ARSA											
C07172	ASMT	01062	01063	01064								
C00241	ASMTYPE											
C00321	ATTRCORR											
C00320	ATTRLEG											
C00325	ATTRSUPF											
C00416	AZON1											
C00417	AZON2											
C00420	AZON3											
C00361	BCODE											
P01762	BEGIN.	01763										
C05161	BEND											
C00210	BLEGNO											
C05602	BOM	00763	00763									
C00020	BTYPES											
C10031	CAPACTY	01220	01220									
C00166	CATCODE											
C00304	CCREL											
C00267	CEP											
C00147	CLASS											
C00377	CLASST											
C00153	CNTRYLOC											
C00152	CNTRYOWN											
C00401	CNTYLOCT											
C00400	CNTYOWNT											
P01656	CNVRTI.	00661	00663	00694	00713	00721	00756	00764	01022	01030	01061	01063
		01064	01112	01114	01115	01116	01146	01153	01216	01221	01270	01272
		01275	01276	01301	01302	01304	01343	01350	01352	01353	01406	01410
		01426	01430	01451	01452	01454	01611	01613	01621			
C00360	CODE											
C00002	COLAR											
C00146	COMPLEX											
C07421	CPACTY											
C00146	CRDIST											
P00003	CREMT.	00644	00657	00700	00733	00741	00772	01004	01036	01050	01073	01101
		01125	01135	01165	01173	01224	01240	01252	01313	01332	01366	01376
		01416	01436	01465	01473	01473	01473					
C00001	CUMNO	00700	00700	00741	00741	01004	01004	01005	01013	01013	01177	01177
		01201	01201									
C00312	CVULN											
C00213	DATEIN											
C00214	DATEOUT											
C00144	DBLASW	01353										

C01133 DEF
C00323 DEFRANGE
C00343 DELAY
C00244 DELTA
C00171 DESIG
C00365 DGX
C00366 DGY
C00370 DHOH
P00001 DICT. 00632 00642 00645 00656 00666 00674 00677 00704 00732 00735 00740
00753 00771 01000 01003 01017 01035 01044 01047 01052 01072 01075
01100 01103 01124 01131 01134 01137 01164 01167 01172 01213 01233
01234 01237 01246 01251 01261 01312 01326 01331 01340 01361 01372
01375 01400 01415 01420 01435 01440 01464 01467 01472 01477 01502
01506 01513 01520 01525 01532 01537 01544 01551 01556 01563 01570
01606 01626 01637 01642 01645 01650
C00437 EFFCNFS1
C00440 EFFCNFS2
C00327 EFFCTNFS
P01744 ENDING. 00633 01654 01762 01763
C00350 EVENT
C00351 EVENTN
P00000 EXIT. 01765
C00243 FFRAC
C00432 FLAG
C00160 FLTNO
C01042 FMIS 00720 00720
P00003 FORMAT. 01256 01322
C00154 FUNCTION
C00245 FVALM1
C00251 FVALT1
C00252 FVALT2
P00666 GG00000. 00640
P00667 GG00001. 00654
P00700 GG00002. 00672
P00733 GG00003. 00702
P00741 GG00004. 00733
P00772 GG00005. 00751
P01004 GG00006. 00776
P01036 GG00007. 01015
P01050 GG00010. 01042
P01073 GG00011. 01050
P01101 GG00012. 01073
P01125 GG00013. 01101
P01135 GG00014. 01127
P01165 GG00015. 01135
P01173 GG00016. 01165
P01224 GG00017. 01211
P01240 GG00020. 01232
P01252 GG00021. 01244
P01313 GG00022. 01257
P01332 GG00023. 01324
P01362 GG00024. 01336
P01376 GG00025. 01370
P01416 GG00026. 01376

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P01436  GG00027.  01416
P01465  GG00030.  01438
P01473  GG00031.  01465
P01503  GG00032.  01475
P01527  GG00033.  01604
P01543  GG00034.  01635
P01651  GG00035.  01643
C00163  H1
C00164  H2
C00324  HILOATTR
P01774  I         00647  00651  00660  00662  00667  00706  00[illegible]  00744  00747  00772
                  01007  01012  01036  01055  01060  01[illegible]  01111  01113  01117
                  01142  01145  01157  01204  01207  01224  01264  01267  01305  01333  01342
                  01362  01403  01405  01407  01411  01423  01425  01427  01431  01443  01450
                  01460  01615  01617  01622  01702
C00344  IALERT
C00354  IALT
C00224  IAMDEF
C00404  IATTACK
C05602  IBOM
C00002  IBREAK
C10175  ICHK
C00227  ICLASS
C00373  ICLASST
C00235  ICOMPLEX
C00422  ICOPR
C00000  ICUR
C00424  IDHL
C00311  IDHLMAX   01364  01364
C00362  IDUP
C00000  IETPRNT
X00003  IGET      01505  01512  01517  01524  01531  01536  01543  01550  01555  01562  01567
C00236  IGI.
P01775  IGOTO.    01314
C00234  IGROUP
C00423  IMIRV
P01657  IN00002.  00717  00762  01670  01706  01725  01745
P01660  IN00004.  01026  01671  01710  01722  01740
P01661  IN00005.  01151  01672  01712  01724  01743
P01662  IN00007.  01217  01673  01714  01723  01742
P01663  IN00010.  01271  01670  01705  01760
P01664  IN00011.  01273  01671  01707  01756
P01665  IN00012.  01277  01672  01711  01755
P01666  IN00013.  01351  01674  01716  01720  01735
P01667  IN00014.  01453  01673  01713  01721  01737
C11457  INARDEC   01302
C27344  IND
C00056  INDSEG
C00037  INDCLAS
C05210  INDCUR
C11337  INDEXYS   01300  01300
C00174  INDEXNO
C00345  INDV
C00093  INITEM
```

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P01762  INITIAL.    00633
C00347  INTAR
C00000  INTP
C11173  INNBOS      01276
C00233  IOTHER
C00120  IOVERLP     01407   01413
C00402  IPENCODE
C00212  IPOINT
C00000  IPRNT       00634   00634   00630   00636   01366   01344
C00403  IRECMODE
C00232  IREFUEL
C00231  IREG
C00265  IREP
P01776  ISTOF       01254   01313   01320   01751
C00330  ISITE
C00001  ISTOGE
C00000  ISWTERM
C00662  ITANK
C00001  ITERM       00652   00652   00662   00663
C00236  ITGT
C00426  ITIME
C00310  ITMAX       01356   01356
C00002  ITOUT
C00000  ITP
C00000  ITWOJR
C00230  ITYPE
C00374  ITYPET
C00331  IVULN
C11027  IWPNTYP     01274   01274
C00326  I=TYP2
P01575  .100001
P01576  .100002     01574
P01432  .100003
P01633  .100004     01631
P01651  .1443       01632
P01601  .1466       01575
P01604  .1467       01606
P00640  .2004       00637
P01244  .2006
P00654  .402
P00667  .404        00653   00653
P00672  .405        00637
P00636  .408        00635
P00772  .420
P01036  .425
P01174  .446        01243
P01224  .450
P01232  .451        01231
P01244  .455        01231
P01370  .460        01367
P01654  .465        01367
P01257  .480        01323
P01316  .482        01315
P01324  .483        01315
```

```
P01336  .485
P01366  .489        00635
P00426  ..100000    01256
P00434  ..100001    01322
P00553  ..1461      01500   01446
P00616  ..1462      01607
P00003  ..401       00643
P00014  ..403       00657
P00022  ..410       00675
P00076  ..412       00705
P00107  ..414       00736
P00147  ..419       00754
P00156  ..422       01001
P00205  ..424       01020
P00213  ..430       01045
P00233  ..432       01053
P00242  ..435       01076
P00266  ..437       01104
P00277  ..440       01132
P00322  ..441       01140
P00330  ..445       01170
P00351  ..447       01216
P00356  ..452       01235
P00374  ..453       01247
P00547  ..461       01470   01640
P00427  ..481       01262
P00435  ..484       01327
P00452  ..486       01341
P00476  ..490       01373
P00505  ..491       01401
P00517  ..492       01421
P00531  ..493       01441
P01777  J           00715   00722   00760   00765   01024   01031   01147   01154   01174   01176   01230
                    01241   01344   01347   01354   01446   01452   01455   01732
C00014  JOUT
C00237  JTYPE
C00375  JTYPET
C00006  KARDEF      01533
C00004  KATTACK     01545
C00012  KDEFCHP     01514
C00011  KDEFZON     01521
C00000  KEYS
C00322  KORSTYLE
C00007  KTERM       01526
P02000  L           00750   00755   01014   01021   01210   01215
C00204  LAT
C00206  LEGNO
C01153  LGLOB
C00201  LINK
C00000  LMAX
C00205  LONG
P02001  LT          01125   01126
P02002  M           00701   00727   00742   00750   01006   01040   01203   01226   01474   01627   01630
                    01634
```

```
C00000  MARMOFZ
C00047  MARMSIT
C00167  MAJOR
C00001  MALERT
C00002  MASMTYP
C00256  MAXFACTV
C00255  MAXFRACV
C00004  MAXIND      01652   01652
C00254  MAXKILL
C00003  MBNDRY
C00004  MCCREGN
C00005  MCLASS
C00006  MCNTRYS
C00357  MCODE
C00007  MCORR
C00010  MCORTYP
C00012  MDEPNLG
C00011  MDPEN
C00013  MGROUP
P02003  MI          01200   01202   01210
C00253  MINKILL
C00170  MINOR
C10567  MIRV        01271   01272
C01042  MIS
C00223  MISDEF
C00014  MPAYLOD
C00015  MRECOVR
C00016  MRECVLG
C00017  MREF
C00020  MRTLEG
C00021  MRTPT
P02004  MSIDE       01256   01303   01322
C00022  MSPERMT
C00023  MTAMKRS
C00024  MTARCLS
C00025  MTARCOL
C00026  MTARCPX
C00027  MTARENS
C00030  MTARGET
C00031  MTARIND
C00046  MTARPCL
C00032  MTARSFC
C00033  MTARTEI
C00034  MTARTYP
C00035  MTARVAL
C00036  MTELMCM
C00037  MTOTMAS
C00040  MTYPE
C00217  MVE
C00041  MVULN
C00042  MWEAPGP
C00407  MWMDS
C00043  MWMDTPE
C00000  MYIDENT
```

```
C00044  MZONEPT
C00045  MZONES
P02005  N       00743  00774  01253  01307  01317  01504  01507  01514  01521  01526  01533
                01540  01545  01552  01557  01564  01571  01610  01612  01651
C00332  NADPLT
C00333  NADBLE
C00415  NAINT
C00405  NAL
C00301  NALPTRHL
C00303  NALRTDLY
C11577  NAMCLAS
C00156  NAME
C00335  NAMEADEC
C00262  NASMS
C00001  NASNT     01067  01067
C00003  NBLKPLD   01252  01252
C00002  NC
C00263  NCM
C00002  NCOL
C00242  NDECOYS
C00411  NDET
C01042  NEWIND
C00211  NEXTZONE
C00000  NF
C00000  NFISL
C00003  NFITEM
C00074  NLRR      01427  01430  01511  01511  01516  01523  01530  01535  01542  01547  01554
                01561  01566  01573  01576  01577  01600  01601  01602  01603  01620  01620
C00176  NMPSITE
C00001  NN
C00177  NOALERT
C00260  NOBOMB1
C00261  NOBOMB2
C00200  NOINCOM
C00433  NOPERSO1
C00434  NOPERSO2
C00435  NOPERSO3
C00175  NOPERSOA
C00000  NORMINT
C00001  NOUT
C00410  NPEN
C00005  NREQPLD   01316  01316
C00356  NTARG
C00000  NTOEF
C00337  NTINT
C01001  NTIMTX    00664
C00000  NULL
C00436  NUMDBL
C00001  NV
C00002  NVULN
C00000  NWHP      01121  01121
C00336  NWHOS
C00355  NWPNS
C00345  NWTYPF
```

C00001	NZONES	01161	01161									
P01670	P00000.U	01677										
P01720	P00001.U	01727										
C00412	PARRIVE											
C00266	PAYLOAD											
C00315	PDES											
C00266	PDUD											
C00277	PEN											
C00316	PERF											
C00314	PINC											
C00317	PKMIS											
C00425	PKNAV											
C00311	PLANT											
C00352	PLACE											
C00353	PLACEN											
C00215	POP											
C00173	POSTURE											
C00313	PRART											
C00372	PRIMETAR											
C00427	PSASW											
X00002	QRDDICT.	00000	00631									
X00005	QNSINGL.	01655										
C00220	RADIUS											
C00270	RANGE											
C00271	RANGEREC											
C00272	RANGEREF											
C00276	REL											
C00207	RESERVE											
C00151	SIDE											
C00155	SITENO											
C00275	SPOASH											
C00274	SPOLO											
C00273	SPEED											
C00157	SQNAO											
C00004	STATUS	01510	01515	01522	01527	01534	01541	01546	01553	01560	01565	01572
		01612	01613									
X00004	STH.	00647	00655	00673	00703	00734	00752	00777	01016	01043	01051	01074
		01102	01130	01136	01166	01212	01233	01245	01260	01325	01337	01371
		01377	01417	01437	01466	01476	01505	01536	01544			
C00246	T1											
C00247	T2											
C00250	T3											
C00406	TAIM											
C06662	TACK	01027	01027									
C00225	TARDEFHI											
C00226	TARDEFLO											
C00003	TARGHI	01552										
C00002	TARGLO	01557										
C00172	TASK											
C00001	TCOL	01564										
C00431	TGTSTAT											
X00001	THENO.	00644	00665	00676	00731	00737	00770	01002	01034	01046	01071	01077
		01123	01133	01153	01171	01222	01236	01250	01311	01330	01360	01374
		01414	01434	01463	01471	01501	01525	01641	01647			

```
C00342  TIME
C00341  TIMEN
C00000  TMASW       01351   01352
C00306  TMDEL
C00430  TPASW
C00310  TRETARG
P00727  TS00003.    00710
P00774  TS00004.    00746
P01040  TS00006.    01011
P01067  TS00010.    01057
P01121  TS00011.    01110
P01161  TS00013.    01144
P01226  TS00014.    01206
P01307  TS00015.    01266
P01364  TS00016.    01335
P01356  TS00017.    01346
P01452  TS00024.    01504
C00000  TSTAT       01571
C00305  TTOS
C00307  TVSE
C00005  TVSLS       01540
C00000  TWORD
C00150  TYPE
C00443  TYPE1
C00444  TYPE2
C00450  TYPEWAM     00712   00712   00755   00756   01021   01022   01215   01216
C00376  TYPET
C02730  TYPET-L
P01701  UP00000.    00650   00670   00707   00726   00745   00773   01010   01037   01056   01066   01107
                    01120   01143   01160   01205   01225   01265   01300   01334   01363   01404   01412
                    01424   01432   01444   01461   01516   01523   01575   01702   01703   01704   01716
                    01717
P01731  UP00001.    00716   00723   00761   00766   01025   01032   01150   01155   01175   01242   01365
                    01355   01447   01456   01725   01732   01733   01734   01745   01746
P01750  UP00003.    01255   01321   01751   01752   01753   01760   01761
C00221  VAL
C00441  VAL1
C00442  VAL2
C00222  VALU
C00147  VALUE
C00162  VULN
C00165  *ACSW
C07242  *HD        01113   01114   01115   01116
C00240  *HDTYPE
C00371  *HDTYPER
P00630  *RPRNT     00630
P00651  *S00001.   00671
P00717  *S00002.   00724
P00711  *S00003.   00730   00730
P00747  *S00004.   00775   00775
P00762  *S00005.   00767
P01012  *S00006.   01041   01041
P01024  *S00007.   01033
P01060  *S00010.   01070   01070
```

```
P01111  #S00011.   01122   01122
P01151  #S00012.   01156
P01145  #S00013.   01162   01162
P01207  #S00014.   01227   01227
P01267  #S00015.   01310   01310
P01336  #S00016.   01365   01365
P01347  #S00017.   01357   01357
P01405  #S00020.   01413
P01425  #S00021.   01433
P01450  #S00022.   01457
P01445  #S00023.   01462
P01505  #S00024.   01653   01653
P01617  #S00025.   01624
C00004  X
C07644  Y
C00257  YIELD
C17504  Z
C00010  ZONE       01507
C00202  ZONE
C07470  ZONES      01152   01152
   00735 SYMBOLS
```

```
      SUBROUTINE MRSIMT(NOP)                                                1000
CSUBR      MRSIMT    2JUL 71    ********************************************* 43000
CUSE       COMMON    START      ********************************************* 2000
      COMMON/COMMUN/NMHD,NZONES,IBREAK                                      1000
CEND       COMMON    ********************************************************* 2000
CUSE       AREADAT   START      ********************************************* 3000
      COMMON/AREADAT/ AINT(20,3),NLAR(20),IOVERLP(20)                       1000
      TYPE INTEGER AINT                                                     2000
C                                                                           3000
CEND       AREADAT   ********************************************************* 3000
CUSE       IFTPRNT   START      ********************************************* 4000
      COMMON/IFTPRNT/IFTPRNT(10)                                            1000
C                                                                           2000
CEND       IFTPRNT   ********************************************************* 4000
CUSE       ITP       START      ********************************************* 5000
      COMMON/ITP/ITP                                                        1000
C                                                                           2000
CEND       ITP       ********************************************************* 5000
CUSE       MAX       START      ********************************************* 6000
C     COMMON BLOCK CONTAINING ALL MAXIMUM VALUES FOR QUICK OCT 71           1000
C     VALUES INITIALIZED WITH DATA STATEMENTS IN INITIND                    2000
C                                                                           3000
      COMMON/MAX/MAXMOFZ, MALERT, MASMTYP, MBNDRY, MCCREGN,                 4000
     1           MCLASS,  MCNTRYS,  MCORR,   MCONTYP,  MOPEN,              5000
     2           MOEPNLG, MGROUP,   MPAYLOD, MRECOVR,                      6000
     3           MRECVLG, MREF,     MRTLEG,  MRTPT,                        7000
     4           MSPERMT, MTANKRS,  MTARCLS, MTARCOL,  MTARCPX,            8000
     5           MTAPERS, MTARGET,  MTARIND, MTARSEC,  MTARTEI,            9000
     6           MTARTYP, MTARVAL,  MTELMCM, MTOTRAS,                      10000
     7           MTYPE,   MVULN,    MWEAPGP, MWHDTPE,  MZONEPT,            11000
     8MZONES, MTARPCL, MARMSIT                                              12000
C                                                                           13000
CEND       MAX       ********************************************************* 6000
CUSE       MYIDENT   START      ********************************************* 7000
      COMMON/MYIDENT/MYIDENT                                                1000
C                                                                           2000
CEND       MYIDENT   ********************************************************* 7000
CUSE       NAVALTB   START      ********************************************* 8000
      COMMON/NAVALTB/ TMASW(10,10),DBLASW(10,10), ITMAX,IDBLMAX             1000
C                                                                           2000
CEND       NAVALTB   ********************************************************* 8000
CUSE       NOPRINT   START      ********************************************* 9000
      COMMON/NOPRINT/NOPRINT                                                1000
C                                                                           2000
CEND       NOPRINT   ********************************************************* 9000
CUSE       PRNT      START      ********************************************* 10000
      COMMON/PRNT/IPRNT(15)                                                 1000
C                                                                           2000
CEND       PRNT      ********************************************************* 10000
CUSE       TRANS     START      ********************************************* 11000
      COMMON/TRANS/LMAX,NASMT,NVULN,NRLUPLD,MAXIND,AREDPLD                  1000
C                                                                           2000
C                                                                           3000
CEND       TRANS     ********************************************************* 11000
CUSE       TWORD     START      ********************************************* 12000
      COMMON/TWORD/ITWORD                                                   1000
```

```
      EQUIVALENCE(I%ORD,IT%ORD)                                          2000
C                                                                        3000
CEND      I%ORD     ********************************************************  12000
CUSE      1         START     ************************************************  13000
      COMMON/1/NISL,NN,NCOL,NITEM,X(4000),Y(4000),Z(4000),IND(4000)      1000
      DIMENSION STATUS(12000)                                            2000
      EQUIVALENCE(STATUS,X)                                              3000
C                                                                        4000
C     NISL = NUMBER OF COLLOCATED ISLANDS                                5000
C     NN = INDEX TO COLAR                                                6000
C     NCOL = NUMBER OF COLLOCATED TARGETS                                7000
C     NITEM = NUMBER OF ITEMS IN SEGMENT BEING PROCESSED.                8000
C     X,Y,Z = LONGITUDE, LATITUDE, CRITICAL DISTANCE                     9000
C     IND = INDEX NUMBER OF X,Y,Z                                       10000
C     STATUS = PACKED DATA FOR TARGETS                                  11000
C                                                                       12000
CEND      1         ********************************************************  13000
CUSE      3         MAP71     ***************************************>******  14000
      COMMON/3/ICUR, ISTORE,COLAR(100), COMPLEX(4000)                    1000
      TYPE INTEGER COLAR, COMPLEX                                        2000
      DIMENSION CRDIST(100),CVULN(100)                                   3000
      TYPE INTEGER CVULN                                                 4000
      EQUIVALENCE(CRDIST,COMPLEX),(CVULN,COMPLEX(101))                   5000
C                                                                        6000
CEND      3         ********************************************************  14000
CUSE      4         11JAN71   ************************************************  15000
      COMMON/4/NULL, CUMNO(15), HTYPES(15), INDCLAS (15),                1000
     1INDREC(250),TYPENAM(80,15),TYPETBL(80,15),                         2000
     2INDCUR(250),BO1(80,7),                                             3000
     3    TANK(40,5),ASMT(20,2),WHO(50,3),ZONES(75,3),                   4000
     4CAPACTY(50,2),ICHK(250), MIRV(80,2),                               5000
     5IWHOTYP(50,2),INWHOS(50,2),INDECYS(40,2),INARDEC(40,2)             6000
     6,NAMCLAS(15)                                                       7000
      DIMENSION FMIS(80,11),MIS(80,11)                                   8000
      DIMENSION NEWIND(4000)                                             9000
      EQUIVALENCE(NEWIND,MIS,FMIS,TYPENAM(251))                         10000
      TYPE INTEGER TYPENAM, TYPETBL, CUMNO, HTYPES                      11000
      DIMENSION IHUM(80,7),ITANK(40,5)                                  12000
      EQUIVALENCE( IHUM,HUM),(ITANK,TANK)                               13000
C                                                                       14000
C                                                                       15000
CEND      4         ********************************************************  15000
CUSE      5         START     ************************************************  16000
      COMMON/5/ NTDEF, ITERM(512), NTINTX(512)                           1000
C                                                                        2000
CEND      5         ********************************************************  16000
      COMMON /MYLABEL/ MYFORM,MYSECR,MYLENGTH,MYCOMM(5)                  17000
CDECLAREX                                                                18000
      COMMON/PROCESS/NI,NV,NC,INITEM(100),VALUE(500),DEF(500),LGLOB(500)
      TYPE INTEGER VALUE
      TYPE LOGICAL DEF,LGLOB
      COMMON/EDITERM/ISKTERM
      COMMON/EDITAPE/INTP,NOUT,ITOUT(10),JOUT
      EQUIVALENCE(CLASS    ,VALUE(   1))
      TYPE INTEGER CLASS
      EQUIVALENCE(TYPE     ,VALUE(   2))
```

```
      TYPE INTEGER TYPE
      EQUIVALENCE(SIDE     ,VALUE(   3))
      TYPE INTEGER SIDE
      EQUIVALENCE(CNTRYOWN,VALUE(   4))
      TYPE INTEGER CNTRYOWN
      EQUIVALENCE(CNTRYLOC,VALUE(   5))
      TYPE INTEGER CNTRYLOC
      EQUIVALENCE(FUNCTION,VALUE(   6))
      TYPE INTEGER FUNCTION
      EQUIVALENCE(SITENO   ,VALUE(   7))
      TYPE INTEGER SITENO
      EQUIVALENCE(NAME     ,VALUE(   8))
      TYPE INTEGER NAME
      EQUIVALENCE(SUBNO    ,VALUE(   9))
      TYPE INTEGER SUBNO
      EQUIVALENCE(FLTNO    ,VALUE(  10))
      TYPE INTEGER FLTNO
      EQUIVALENCE(HEAD     ,VALUE(  11))
      TYPE INTEGER HEAD
      EQUIVALENCE(VULN     ,VALUE(  12))
      TYPE INTEGER VULN
      EQUIVALENCE(H1       ,VALUE(  13))
      TYPE INTEGER H1
      EQUIVALENCE(H2       ,VALUE(  14))
      TYPE INTEGER H2
      EQUIVALENCE(WACNO    ,VALUE(  15))
      TYPE INTEGER WACNO
      EQUIVALENCE(CATCODE  ,VALUE(  16))
      TYPE INTEGER CATCODE
      EQUIVALENCE(MAJOR    ,VALUE(  17))
      TYPE INTEGER MAJOR
      EQUIVALENCE(MINOR    ,VALUE(  18))
      TYPE INTEGER MINOR
      EQUIVALENCE(DESIG    ,VALUE(  19))
      TYPE INTEGER DESIG
      EQUIVALENCE(TASK     ,VALUE(  20))
      TYPE INTEGER TASK
      EQUIVALENCE(POSTURE  ,VALUE(  21))
      TYPE INTEGER POSTURE
      EQUIVALENCE(INDEXNO  ,VALUE(  22))
      TYPE INTEGER INDEXNO
      EQUIVALENCE(NOPERSON,VALUE(  23))
      TYPE INTEGER NOPERSON
      EQUIVALENCE(NOPSITE  ,VALUE(  24))
      TYPE INTEGER NOPSITE
      EQUIVALENCE(NOALERT  ,VALUE(  25))
      TYPE INTEGER NOALERT
      EQUIVALENCE(NOINCOM  ,VALUE(  26))
      TYPE INTEGER NOINCOM
      EQUIVALENCE(LINK     ,VALUE(  27))
      TYPE INTEGER LINK
      EQUIVALENCE(ZONE     ,VALUE(  28))
      TYPE INTEGER ZONE
      EQUIVALENCE(AREA     ,VALUE(  29))
      TYPE REAL    AREA
      EQUIVALENCE(LAT      ,VALUE(  30))
```

```
      TYPE REAL    LAT
      EQUIVALENCE(LONG     ,VALUE(  31))
      TYPE REAL    LONG
      EQUIVALENCE(LEGNO    ,VALUE(  32))
      TYPE INTEGER LEGNO
      EQUIVALENCE(RESERVE  ,VALUE(  33))
      TYPE INTEGER RESERVE
      EQUIVALENCE(BLEGNO   ,VALUE(  34))
      TYPE INTEGER BLEGNO
      EQUIVALENCE(NEXTZONE ,VALUE(  35))
      TYPE INTEGER NEXTZONE
      EQUIVALENCE(IPOINT   ,VALUE(  36))
      TYPE INTEGER IPOINT
      EQUIVALENCE(DATEIN   ,VALUE(  37))
      TYPE REAL    DATEIN
      EQUIVALENCE(DATEOUT  ,VALUE(  38))
      TYPE REAL    DATEOUT
      EQUIVALENCE(PUP      ,VALUE(  39))
      TYPE REAL    PUP
      EQUIVALENCE(IGIN     ,VALUE(  40))
      TYPE INTEGER IGIN
      EQUIVALENCE(AVA      ,VALUE(  41))
      TYPE INTEGER AVA
      EQUIVALENCE(RADIUS   ,VALUE(  42))
      TYPE REAL    RADIUS
      EQUIVALENCE(VAL      ,VALUE(  43))
      TYPE REAL    VAL
      EQUIVALENCE(VALU     ,VALUE(  44))
      TYPE REAL    VALU
      EQUIVALENCE(MISDEF   ,VALUE(  45))
      TYPE INTEGER MISDEF
      EQUIVALENCE(IAMDEF   ,VALUE(  46))
      TYPE INTEGER IAMDEF
      EQUIVALENCE(IAMDEFHI ,VALUE(  47))
      TYPE INTEGER IAMDEFHI
      EQUIVALENCE(IAMDEFLO ,VALUE(  48))
      TYPE INTEGER IAMDEFLO
      EQUIVALENCE(ICLASS   ,VALUE(  49))
      TYPE INTEGER ICLASS
      EQUIVALENCE(ITYPE    ,VALUE(  50))
      TYPE INTEGER ITYPE
      EQUIVALENCE(IMEG     ,VALUE(  51))
      TYPE INTEGER IMEG
      EQUIVALENCE(IMEFUEL  ,VALUE(  52))
      TYPE INTEGER IMEFUEL
      EQUIVALENCE(IOTHER   ,VALUE(  53))
      TYPE INTEGER IOTHER
      EQUIVALENCE(IGROUP   ,VALUE(  54))
      TYPE INTEGER IGROUP
      EQUIVALENCE(ICOMPLEX ,VALUE(  55))
      TYPE INTEGER ICOMPLEX
      EQUIVALENCE(ITGT     ,VALUE(  56))
      TYPE INTEGER ITGT
      EQUIVALENCE(JTYPE    ,VALUE(  57))
      TYPE INTEGER JTYPE
      EQUIVALENCE(MMTYPE   ,VALUE(  58))
```

```
      TYPE INTEGER ANDTYPE
      EQUIVALENCE(ASSTYPE ,VALUE( 59))
      TYPE INTEGER ASMTYPE
      EQUIVALENCE(NRECOVS ,VALUE( 60))
      TYPE INTEGER NRECOVS
      EQUIVALENCE(FFRAC   ,VALUE( 61))
      TYPE REAL    FFRAC
      EQUIVALENCE(DELTA   ,VALUE( 62))
      TYPE REAL    DELTA
      EQUIVALENCE(FVALM1  ,VALUE( 63))
      TYPE REAL    FVALM1
      EQUIVALENCE(T1      ,VALUE( 64))
      TYPE REAL    T1
      EQUIVALENCE(T2      ,VALUE( 65))
      TYPE REAL    T2
      EQUIVALENCE(T3      ,VALUE( 66))
      TYPE REAL    T3
      EQUIVALENCE(FVALT1  ,VALUE( 67))
      TYPE REAL    FVALT1
      EQUIVALENCE(FVALT2  ,VALUE( 68))
      TYPE REAL    FVALT2
      EQUIVALENCE(MINKILL ,VALUE( 69))
      TYPE REAL    MINKILL
      EQUIVALENCE(MAXKILL ,VALUE( 70))
      TYPE REAL    MAXKILL
      EQUIVALENCE(MAXFRACV,VALUE( 71))
      TYPE REAL    MAXFRACV
      EQUIVALENCE(MAXFACTV,VALUE( 72))
      TYPE REAL    MAXFACTV
      EQUIVALENCE(YIELD   ,VALUE( 73))
      TYPE REAL    YIELD
      EQUIVALENCE(NOBOMB1 ,VALUE( 74))
      TYPE INTEGER NOBOMB1
      EQUIVALENCE(NOBOMB2 ,VALUE( 75))
      TYPE INTEGER NOBOMB2
      EQUIVALENCE(NASMS   ,VALUE( 76))
      TYPE INTEGER NASMS
      EQUIVALENCE(NCM     ,VALUE( 77))
      TYPE INTEGER NCM
      EQUIVALENCE(PAYLOAD ,VALUE( 78))
      TYPE INTEGER PAYLOAD
      EQUIVALENCE(IREP    ,VALUE( 79))
      TYPE INTEGER IREP
      EQUIVALENCE(PROD    ,VALUE( 80))
      TYPE REAL    PROD
      EQUIVALENCE(CEP     ,VALUE( 81))
      TYPE REAL    CEP
      EQUIVALENCE(RANGE   ,VALUE( 82))
      TYPE REAL    RANGE
      EQUIVALENCE(RANGEDEC,VALUE( 83))
      TYPE REAL    RANGEDEC
      EQUIVALENCE(RANGEREF,VALUE( 84))
      TYPE REAL    RANGEREF
      EQUIVALENCE(SPEED   ,VALUE( 85))
      TYPE REAL    SPEED
      EQUIVALENCE(SPOLD   ,VALUE( 86))
```

```
      TYPE REAL     SPOLO
      EQUIVALENCE(SPOASH  ,VALUE(  87):
      TYPE REAL     SPOASH
      EQUIVALENCE(REL     ,VALUE(  88))
      TYPE REAL     REL
      EQUIVALENCE(PEN     ,VALUE(  89))
      TYPE REAL     PEN
      EQUIVALENCE(ALERTORL,VALUE(  90))
      TYPE REAL     ALERTORL
      EQUIVALENCE(NALRTORL,VALUE(  91))
      TYPE REAL     NALRTORL
      EQUIVALENCE(ALERTDLY,VALUE(  92))
      TYPE REAL     ALERTDLY
      EQUIVALENCE(NALRTDLY,VALUE(  93))
      TYPE REAL     NALRTDLY
      EQUIVALENCE(CCREL   ,VALUE(  94))
      TYPE REAL     CCREL
      EQUIVALENCE(TTOS    ,VALUE(  95))
      TYPE REAL     TTOS
      EQUIVALENCE(TMDEL   ,VALUE(  96))
      TYPE REAL     TMDEL
      EQUIVALENCE(TVUL    ,VALUE(  97))
      TYPE REAL     TVUL
      EQUIVALENCE(THETARG ,VALUE(  98))
      TYPE REAL     THETARG
      EQUIVALENCE(PLANT   ,VALUE(  99))
      TYPE REAL     PLANT
      EQUIVALENCE(ANRATE  ,VALUE( 100))
      TYPE REAL     ANRATE
      EQUIVALENCE(PNANT   ,VALUE( 101))
      TYPE REAL     PNANT
      EQUIVALENCE(PINC    ,VALUE( 102))
      TYPE REAL     PINC
      EQUIVALENCE(PDES    ,VALUE( 103))
      TYPE REAL     PDES
      EQUIVALENCE(PFPF    ,VALUE( 104))
      TYPE REAL     PFPF
      EQUIVALENCE(PKNIS   ,VALUE( 105))
      TYPE REAL     PKNIS
      EQUIVALENCE(ATTRLEG ,VALUE( 106))
      TYPE REAL     ATTRLEG
      EQUIVALENCE(ATTRCORR,VALUE( 107))
      TYPE REAL     ATTRCORR
      EQUIVALENCE(KONSTYLE,VALUE( 108))
      TYPE INTEGER KONSTYLE
      EQUIVALENCE(DEFRANGE,VALUE( 109))
      TYPE REAL     DEFRANGE
      EQUIVALENCE(HILOATTR,VALUE( 110))
      TYPE REAL     HILOATTR
      EQUIVALENCE(ATTRSUPF,VALUE( 111))
      TYPE REAL     ATTRSUPF
      EQUIVALENCE(IWTYP2  ,VALUE( 112))
      TYPE INTEGER IWTYP2
      EQUIVALENCE(EFECTNES,VALUE( 113))
      TYPE REAL     EFECTNES
      EQUIVALENCE(ISITE   ,VALUE( 114))
```

```
      TYPE INTEGER ISITE
      EQUIVALENCE(IVULN    ,VALUE( 115))
      TYPE INTEGER IVULN
      EQUIVALENCE(NADBLI   ,VALUE( 116))
      TYPE REAL    NADBLI
      EQUIVALENCE(NADBLR   ,VALUE( 117))
      TYPE REAL    NADBLR
      EQUIVALENCE(ADBLI    ,VALUE( 118))
      TYPE REAL    ADBLI
      EQUIVALENCE(NAREADEC,VALUE( 119))
      TYPE INTEGER NAREADEC
      EQUIVALENCE(NWHDS    ,VALUE( 120))
      TYPE INTEGER NWHDS
      EQUIVALENCE(NTINT    ,VALUE( 121))
      TYPE INTEGER NTINT
      EQUIVALENCE(ADBLR    ,VALUE( 122))
      TYPE REAL    ADBLR
      EQUIVALENCE(TIMEN    ,VALUE( 123))
      TYPE REAL    TIMEN
      EQUIVALENCE(TIME     ,VALUE( 124))
      TYPE REAL    TIME
      EQUIVALENCE(DELAY    ,VALUE( 125))
      TYPE REAL    DELAY
      EQUIVALENCE(IALERT   ,VALUE( 126))
      TYPE INTEGER IALERT
      EQUIVALENCE(NWTYPE   ,VALUE( 127))
      TYPE INTEGER NWTYPE
      EQUIVALENCE(INDV     ,VALUE( 128))
      TYPE INTEGER INDV
      EQUIVALENCE(INTAR    ,VALUE( 129))
      TYPE INTEGER INTAR
      EQUIVALENCE(EVENT    ,VALUE( 130))
      TYPE INTEGER EVENT
      EQUIVALENCE(EVENTN   ,VALUE( 131))
      TYPE INTEGER EVENTN
      EQUIVALENCE(PLACE    ,VALUE( 132))
      TYPE INTEGER PLACE
      EQUIVALENCE(PLACEN   ,VALUE( 133))
      TYPE INTEGER PLACEN
      EQUIVALENCE(IALT     ,VALUE( 134))
      TYPE INTEGER IALT
      EQUIVALENCE(NWPNS    ,VALUE( 135))
      TYPE INTEGER NWPNS
      EQUIVALENCE(NTARG    ,VALUE( 136))
      TYPE INTEGER NTARG
      EQUIVALENCE(MCODE    ,VALUE( 137))
      TYPE INTEGER MCODE
      EQUIVALENCE(CODE     ,VALUE( 138))
      TYPE INTEGER CODE
      EQUIVALENCE(HCODE    ,VALUE( 139))
      TYPE INTEGER HCODE
      EQUIVALENCE(IDUD     ,VALUE( 140))
      TYPE INTEGER IDUD
      EQUIVALENCE(AGX      ,VALUE( 141))
      TYPE INTEGER AGX
      EQUIVALENCE(AGY      ,VALUE( 142))
```

```
      TYPE INTEGER AGY
      EQUIVALENCE(DGX      ,VALUE( 143))
      TYPE INTEGER DGX
      EQUIVALENCE(DGY      ,VALUE( 144))
      TYPE INTEGER DGY
      EQUIVALENCE(AMOB     ,VALUE( 145))
      TYPE INTEGER AMOB
      EQUIVALENCE(DMOB     ,VALUE( 146))
      TYPE INTEGER DMOB
      EQUIVALENCE(MMDTYPEN,VALUE( 147))
      TYPE INTEGER MMDTYPEN
      EQUIVALENCE(PRIMETAB,VALUE( 148))
      TYPE INTEGER PRIMETAB
      EQUIVALENCE(ICLASST ,VALUE( 149))
      TYPE INTEGER ICLASST
      EQUIVALENCE(ITYPET   ,VALUE( 150))
      TYPE INTEGER ITYPET
      EQUIVALENCE(JTYPET   ,VALUE( 151))
      TYPE INTEGER JTYPET
      EQUIVALENCE(TYPET    ,VALUE( 152))
      TYPE INTEGER TYPET
      EQUIVALENCE(CLASST   ,VALUE( 153))
      TYPE INTEGER CLASST
      EQUIVALENCE(CNTYCNT,VALUE( 154))
      TYPE INTEGER CNTYCNT
      EQUIVALENCE(CNTYLOCT,VALUE( 155))
      TYPE INTEGER CNTYLOCT
      EQUIVALENCE(IPENMODE,VALUE( 156))
      TYPE INTEGER IPENMODE
      EQUIVALENCE(IPECMODE,VALUE( 157))
      TYPE INTEGER IPECMODE
      EQUIVALENCE(IATTACK ,VALUE( 158))
      TYPE INTEGER IATTACK
      EQUIVALENCE(NAL      ,VALUE( 159))
      TYPE INTEGER NAL
      EQUIVALENCE(TAIM     ,VALUE( 160))
      TYPE INTEGER TAIM
      EQUIVALENCE(DMDS     ,VALUE( 161))
      TYPE INTEGER DMDS
      EQUIVALENCE(NPEN     ,VALUE( 162))
      TYPE INTEGER NPEN
      EQUIVALENCE(NDET     ,VALUE( 163))
      TYPE INTEGER NDET
      EQUIVALENCE(PARRIVE ,VALUE( 164))
      TYPE REAL    PARRIVE
      EQUIVALENCE(ADEFZON ,VALUE( 165))
      TYPE INTEGER ADEFZON
      EQUIVALENCE(ADEFCMP ,VALUE( 166))
      TYPE INTEGER ADEFCMP
      EQUIVALENCE(NAINT    ,VALUE( 167))
      TYPE INTEGER NAINT
      EQUIVALENCE(AZON1    ,VALUE( 168))
      TYPE INTEGER AZON1
      EQUIVALENCE(AZON2    ,VALUE( 169))
      TYPE INTEGER AZON2
      EQUIVALENCE(AZON3    ,VALUE( 170))
```

```
      TYPE INTEGER AZON3
      EQUIVALENCE(CPACTY  ,VALUE( 171))
      TYPE INTEGER CPACTY
      EQUIVALENCE(ICORR   ,VALUE( 172))
      TYPE INTEGER ICORR
      EQUIVALENCE(IDIRV   ,VALUE( 173))
      TYPE INTEGER IDIRV
      EQUIVALENCE(IDEL    ,VALUE( 174))
      TYPE INTEGER IDEL
      EQUIVALENCE(PKNAV   ,VALUE( 175))
      TYPE REAL    PKNAV
      EQUIVALENCE(ITIME   ,VALUE( 176))
      TYPE INTEGER ITIME
      EQUIVALENCE(PSASW   ,VALUE( 177))
      TYPE REAL    PSASW
      EQUIVALENCE(TPASW   ,VALUE( 178))
      TYPE REAL    TPASW
      EQUIVALENCE(TGISTAT ,VALUE( 179))
      TYPE INTEGER TGTSTAT
      EQUIVALENCE(FLAG    ,VALUE( 180))
      TYPE INTEGER FLAG
      EQUIVALENCE(NOPERS01,VALUE( 181))
      TYPE INTEGER NOPERS01
      EQUIVALENCE(NOPERS02,VALUE( 182))
      TYPE INTEGER NOPERS02
      EQUIVALENCE(NOPERS03,VALUE( 183))
      TYPE INTEGER NOPERS03
      EQUIVALENCE(NUMDEL  ,VALUE( 184))
      TYPE INTEGER NUMDEL
      EQUIVALENCE(EFFCNFS1,VALUE( 185))
      TYPE REAL    EFFCNFS1
      EQUIVALENCE(EFFCNFS2,VALUE( 186))
      TYPE REAL    EFFCNFS2
      EQUIVALENCE(VAL1    ,VALUE( 187))
      TYPE REAL    VAL1
      EQUIVALENCE(VAL2    ,VALUE( 188))
      TYPE REAL    VAL2
      EQUIVALENCE(TYPE1   ,VALUE( 189))
      TYPE INTEGER TYPE1
      EQUIVALENCE(TYPE2   ,VALUE( 190))
      TYPE INTEGER TYPE2
      GO TO(1,2,3,4,5,6,7,8,9,10) NOP                                  19000
C     INITIALIZE SI-TAPE AND DO FIRST WRITES                           20000
    1 CONTINUE                                                         21000
      ITP=5                                                            22000
      MYFORT = MAJOV70                                                 23000
      MYIBFT = 7HSI-TAPE                                               24000
      CALL SETWAIT                                                     25000
      ITACME=LMAX                                                      26000
      CALL ZERO(0)                                                     29000
      CALL SWAPWAY(I-DREG,LMAX)                                        30000
      CALL SWAPWAY(ITYPENAM,LMAX)                                      31000
      CALL SWAPWAY(COMMON, MTAPCLS)                                    32000
      CALL SWAPWAY(I-TYPES, MTAPCLS)                                   33000
      CALL SWAPWAY(I-DCLAS, MTAPCLS)                                   34000
      CALL SWAPWAY(I-MCLAS, MTAPCLS)                                   35000
```

```
      RETURN                                                        36000
C      WRITECVULN                                                   37000
    2 ITP = 5                                                      38000
      ITWORD=NVULN                                                 39000
      CALL WRWORD                                                  40000
      CALL WRARRAY(CVULN,NVULN)                                    41000
      RETURN                                                       42000
C     WRITE COLAB                                                  43000
    3 CONTINUE                                                     44000
      ITP=5                                                        45000
      ITWORD=' COL                                                 46000
      CALL WRWORD                                                  47000
      CALL WRARRAY(COLAB,NCOL)                                     48000
      RETURN                                                       49000
C     FINISH                                                       50000
    4 CONTINUE                                                     51000
      ITP=5                                                        52000
      ITWORD = ATDEF                                               53000
      CALL WRWORD                                                  54000
      CALL WRARRAY(ORIGTX, NTDEF)                                  55000
  916 CONTINUE                                                     56000
C     FINISH SIMULATOR INPUT TAPE                                  57000
      ITP=5                                                        58000
      ITWORD = MARMDEZ * MARNSIT                                   59000
      CALL WRWORD                                                  60000
      CALL WRARRAY(AENT, ITWORD)                                   61000
      ITWORD = MARMDEZ                                             62000
      CALL WRWORD                                                  63000
      CALL WRARRAY(MLRP, MARMDEZ)                                  64000
      ITWORD = MARMDEZ                                             65000
      CALL WRWORD                                                  66000
      CALL WRARRAY(IOVERLP, MARMDEZ)                               67000
      ITWORD=MAXIND                                                68000
      CALL WRWORD                                                  69000
      CALL WRARRAY(STATUS,MAXIND)                                  70000
      M=CUMNO(1)                                                   71000
C     M = NUMBER  MISSILES                                         72000
      ITWORD=M                                                     73000
      CALL WRWORD                                                  74000
      DO 391 I = 1, 11                                             75000
      CALL WRARRAY(MIS(1,I),M)                                     76000
  391 CONTINUE                                                     77000
      M=CUMNO(2)-M                                                 78000
C     M = NUMBER  BOMBERS                                          79000
      ITWORD=M                                                     80000
      CALL WRWORD                                                  81000
      DO 392 I = 1, 7                                              82000
      CALL WRARRAY(BOM(1,I),M)                                     83000
  392 CONTINUE                                                     84000
      M=CUMNO(3)-CUMNO(2)                                          85000
C     M = NUMBER  TANKERS                                          86000
      ITWORD=M                                                     87000
      CALL WRWORD                                                  88000
      DO 393 I = 1, 5                                              89000
      CALL WRARRAY(TANK(1,I),M)                                    90000
  393 CONTINUE                                                     91000
```

```
      IT*ORD=*ASMT                                                    92000
      CALL *R*ORD                                                     93000
      CALL *W*ARRAY(ASMT(1,1),*ASMT)                                  94000
      CALL *W*ARRAY(ASMT(1,2),*ASMT)                                  95000
      IT*ORD=*HD                                                      96000
      CALL *R*ORD                                                     97000
      CALL *R*ARRAY(*HD(1,1),*E*HD)                                   98000
      CALL *W*ARRAY(*HD(1,2),*E*HD)                                   99000
      CALL *W*ARRAY(*HD(1,3),*E*HD)                                  100000
      IT*ORD=*ZONES                                                  101000
      CALL *R*ORD                                                    102000
      DO 394 I=1,3                                                   103000
      CALL *R*ARRAY(ZONES(1,I),*ZONES)                               104000
  394 CONTINUE                                                       105000
      DO 395 I=1,2                                                   106000
      *=CUM*D(I+3)-CUM*D(I,2)                                        107000
      IT*ORD=*                                                       108000
      CALL *R*ORD                                                    109000
      CALL *R*ARRAY(CAPACTY(1,I),*)                                  110000
  395 CONTINUE                                                       111000
      ISIDE=1                                                        112000
      IT*ORD=*RLUPLD                                                 113000
  396 CALL *R*ORD                                                    114000
      NP=IT*ORD                                                      115000
      CALL *R*ARRAY(*IRV(1,ISIDE),NP)                                116000
      CALL *W*ARRAY(I*HDTYP(1,ISIDE),NP)                             117000
      CALL *R*ARRAY(I*W*DS(1,ISIDE),NP)                              118000
      CALL *W*ARRAY(I*DECYS(1,ISIDE),NP)                             119000
      CALL *R*ARRAY(I*ANDEC(1,ISIDE),NP)                             120000
      GO TO (397,398) ISIDE                                          121000
  397 ISIDE=2                                                        122000
      IT*ORD=*REDPLD                                                 123000
      GO TO 396                                                      124000
  398 CONTINUE                                                       125000
      IT*ORD = IDRLM*X * IT*AX                                       126000
      CALL *R*ORD                                                    127000
      NAV=IT*ORD                                                     128000
      CALL *R*ARRAY(IDRLA*,NAV)                                      129000
      CALL *R*ARRAY(IT*AS*,NAV)                                      130000
      CALL TE*MTAP                                                   131000
      RETURN                                                         132000
    5 CONTINUE                                                       133000
    6 CONTINUE                                                       134000
    7 CONTINUE                                                       135000
    8 CONTINUE                                                       136000
    9 CONTINUE                                                       137000
   10 CONTINUE                                                       138000
      RETURN                                                         139000
      END                                                            140000
```

IDENT ERSIMT

PROGRAM LENGTH		00530
ENTRY POINTS	ERSIMT	00005
BLOCK NAMES		
	COMMON	00003
	AREADAT	00144
	IFTPRNT	00012
	ITP	00001
	MAX	00050
	MYIDENT	00001
	NAVALTR	00312
	NOPRINT	00001
	PRNT	00017
	TRANS	00006
	TWORD	00001
	1	37204
	3	10006
	4	11616
	5	02001
	MYLABEL	00010
	PROCESS	01173
	EDITERM	00001
	EDITAPE	00015
EXTERNAL SYMBOLS		
	QRDDICT.	
	SETWAIT	
	WRWORD	
	WRARRAY	
	TERMTAP	

C00312	ARRATE											
C00334	ARHLI											
C00340	ARHLW											
C00414	ARFFCNP											
C00413	ARFFZON											
C00363	AGX											
C00364	AGY											
C00367	AHOR											
C00000	AIMT	00127										
C00300	ALERTPRL											
C00302	ALERTRLY											
C00203	AREA											
C07172	ASMT	00245	00250									
C00241	ASMTYPE											
C00321	ATTHCORR											
C00320	ATTRLEG											
C00325	ATTRSURF											
C00416	AZON1											
C00417	AZON2											
C00420	AZON3											
C00361	BCODE											
P00464	BEGIN.	00500	00506	00514								
C00161	BEND											
C00210	BLEDNO											
C00602	BOX	00207	00212									
C00020	BTYPES	00052										
C13031	CAPACTY	00317	00322									
C00166	CATCODE											
C00304	CCHFL											
C00267	CFP											
C00147	CLASS											
C00377	CLASST											
C00153	CNTRYLOC											
C00152	CNTRYOWN											
C00401	CNTYLOCT											
C00400	CNTYOWNT											
C00360	CODE											
C00002	COLAR	00104										
C00146	COMPLEX											
C00421	CPACTY											
C00146	CPTIST											
C00001	CUMNO	00047	00155	00155	00175	00175	00214	00216	00217	00310	00313	00311
C00312	CVULN	00072										
C00213	DATAIN											
C00214	DATAOUT											
C00144	DBLASM	00407										
C01133	DEF											
C00323	DEFRANGE											
C00343	DELAY											
C00244	DELTA											
C00171	DESIG											
C00365	DGX											
C00366	DGY											
C00370	DHOR											

P00001	DICT.	00007	00032	00038	00040	00043	00046	00051	00054	00057	00067	00071
		00101	00103	00113	00115	00124	00126	00133	00135	00142	00144	00151
		00153	00161	00170	00202	00211	00223	00232	00242	00244	00247	00254
		00256	00261	00264	00271	00300	00315	00321	00333	00341	00346	00352
		00357	00363	00402	00406	00411	00414	00467	00470			
C00437	EFFCNES1											
C00440	EFFCNES2											
C00327	EFFCTNES											
P00501	ENDING.	00010	00061	00073	00105	00415	00416	00464	00465	00465	00465	00466
C00350	EVENT											
C00351	EVENTN											
P00000	EXIT.	00504										
C00243	FERAC											
C00432	FLAG											
C00160	FLTNO											
C01042	FMIS											
P00003	FORMAT.	00025	00027									
P00011	FRROOOI.	00476	00477									
C00154	FUNCTION											
C00245	FVALHI											
C00251	FVALTI											
C00252	FVALT2											
P00515	GETPL.	00471										
P00505	GETPU.	00474	00511									
C00163	H1											
C00164	H2											
C00324	HILOATTR											
P00522	I	00163	00172	00204	00213	00225	00234	00273	00302	00305	00307	00323
		00437										
C00344	IALERT											
C00354	IALT											
C00224	IARDEF											
C00404	IATTACK											
C05602	IBOM											
C00002	IBREAK											
C10175	ICHR											
C00227	ICLASS											
C00373	ICLASST											
C00235	ICOMPLEX											
C00422	ICOND											
C00000	ICOR											
C00424	IDEL											
C00311	IDELMAX	00376	00376									
C00362	IDUP											
C00000	IETRRT											
C00216	IGIV											
P00523	IGOTO.	00012	00345									
C00234	IGROUP											
C00423	IMIPV											
P00417	IN00001.	00165	00206	00431	00447							
P00420	IN00002.	00227	00426	00443								
P00421	IN00003.	00275	00430	00446								
P00422	IN01005.	00316	00427	00444								
P00423	IN00006.	00336	00462									

```
P00424  IN00007.  00343  00440
P00425  IN00010.  00354  00457
C11457  INANDEC   00361  00364
C27344  IND
C00056  INDNEG    00041
C00037  INDCLAS   00055
C05210  INDCUR
C11337  INDECYS   00354  00360
C00174  INDEXNO
C00346  INDV
C00003  INITEM
P00464  INITIAL.  00010
C00347  INTAN
C00000  INTP
C11173  INWHOS    00350  00353
C00233  IOTHER
C00120  IOVERLP   00145
C00402  IPENMODE
C00212  IPOINT
C00000  IPRNT
C00403  IPECMODE
C00232  IREFUEL
C00231  IREG
C00265  IREP
P00524  ISIDF     00326  00365  00371  00453
C00330  ISITE
C00001  ISTORF
C00000  ISNTERM
C06662  ITANK
C00061  ITERM
C00236  ITGT
C00426  ITIME
C00310  ITMAX     00377
C00002  ITOUT
C00000  ITP       00023  00024  00062  00063  00074  00075  00106  00107  00117  00120
C00000  ITYDED    00034  00034  00064  00065  00076  00077  00110  00111  00122  00122  00127
                  00131  00131  00140  00140  00147  00147  00157  00157  00177  00200  00220
                  00221  00246  00246  00252  00252  00267  00267  00312  00313  00331  00331
                  00334  00334  00374  00374  00377  00400  00403
C00230  ITYPE
C00374  ITYPET
C00331  IVULN
C11027  IWHOTYP   00343  00347
C00326  IWTYP2
P00023  .1        00013
P00416  .10       00022
P00062  .2        00014
P00074  .3        00015
P00172  .391
P00213  .392
P00234  .393
P00302  .394
P00323  .395
P00332  .396      00375
```

```
P00370  .347        00366
P00376  .348        00367
P00106  .4          00015
P00416  .5          00016
P00416  .6          00017
P00416  .7          00020
P00416  .8          00020
P00416  .9          00021
P00117  .916
P00003  ..100000    00025
P00004  ..100001    00027
P00171  .Z00001.    00166
P00212  .Z00002.    00207
P00233  .Z00003.    00230
P00301  .Z00004.    00276
P00322  .Z00005.    00317
P00342  .Z00006.    00337
P00347  .Z00007.    00344
P00353  .Z00010.    00350
P00360  .Z00011.    00355
P00364  .Z00012.    00361
C00014  JOUT
C00237  JTYPE
C00375  JTYPET
C00322  KORSTYLE
C00206  LAT
C00206  LEGNO
C01153  LGLOB
C00201  LINK
C00000  LMAX        00033   00033   00041   00044
C00205  LONG
P00525  M           00156   00171   00176   00177   00212   00220   00233   00312   00322
C00000  MABMDFZ     00120   00121   00130   00130   00136   00137   00137   00145
C00047  MABMSIT     00121
C00167  MAJOR
C00001  MALERT
C00002  MASMTYP
C00256  MAXFACTV
C00255  MAXFRACV
C00004  MAXIND      00146   00146   00154
C00254  MAXKILL
C00003  MBNDRY
C00004  MCCREGN
C00005  MCLASS
C00006  MCNTRYS
C00357  MCODE
C00007  MCORR
C00010  MCORTYP
C00012  MDEPNLG
C00011  MOPEN
C00013  MGROUP
C00253  MINKILL
C00170  MINOR
C10567  MIRV        00336   00342
```

C01042	MIS	00166	00171		
C00223	MISDEF				
C00014	MPAYLOD				
C00015	MRECOVR				
C00016	MRECVLG				
C00017	MREF				
C00020	MRTLEG				
C00021	MRTST				
C00022	MSPERMT				
C00023	MTARGRS				
C00024	MTARGLS	00047	00052	00055	00060
C00025	MTARGOL				
C00026	MTARGPX				
C00027	MTARERS				
C00030	MTARGET				
C00031	MTARIND				
C00046	MTARPCL				
C00032	MTARSEC				
C00033	MTARTEI				
C00034	MTARTYP				
C00035	MTARVAL				
C00036	MTELMCM				
C00037	MTOTBAS				
C00040	MTYPE				
C00217	MVA				
C00041	MVULN				
C00042	MWEAPGP				
C00407	MWHOS				
C00043	MWHOTPE				
C00003	MYCOMM				
C00006	MYFORM	00026	00026		
C00000	MYIDENT	00030	00030		
C00002	MYLENGTH				
C00001	MYSECR				
C00044	MZONEPT				
C00045	MZONES				
C00332	NADRLI				
C00333	NADRLR				
C00415	NAINT				
C00405	NAL				
C00301	NALRTDBL				
C00303	NALRTDLY				
C11577	NAMCLAS	00060			
C00156	NAME				
C00335	NAREADEC				
C00262	NASMS				
C00001	NASMT	00237	00237	00245	00250
P00526	NAV	00404	00407	00412	
C00003	NBLUPLD	00330	00330		
C00002	NC				
C00263	NCM				
C00002	NCOL	00075	00076	00104	
C00242	NDECOYS				
C00411	NDET				

```
C01042  NEWIND
C00211  NEXTZONE
C00000  NI
C00000  NISL
C00003  NITER
C00074  NLRR        00136
C00176  NMPSITE
C00001  NN
C00177  NOALERT
C00260  NOROMR1
C00261  NOROMR2
C00200  NOINCOM
P00003  NOP         00011
C00433  NOPERSQ1
C00434  NOPERSQ2
C00435  NOPERSQ3
C00175  NOPERSQA
C00000  NOPRINT
C00001  NOUT
P00527  NP          00335   00342   00347   00353   00360   00364
C00410  NPEN
C00005  NREQPLD     00373   00373
C00356  NTARG
C00000  NTDEF       00107   00110   00116
C00337  NTINT
C01001  NTIATX      00116
C00000  NULL
C00436  NUMBAL
C00001  NV
C00002  NVULN       00063   00064   00072
C00000  NWHO        00251   00251   00257   00262   00265
C00336  NWHOS
C00355  NWPNS
C00345  NWTYPE
C00001  NZONES      00266   00266   00301
P00427  P=0000.0    00434
C00412  PASRIVE
C00264  PAYLOAD
C00315  PBES
C00264  PDUD
C00277  PER
P00500  PE00002.    00475
C00316  PEPE
C00314  PING
C00317  PKHIS
C00425  PKNAV
C00311  PLANT
C00352  PLACE
C00353  PLACEN
C00215  POP
C00173  POSTURE
C00313  PRANT
C00372  PRIMETAR
C00427  PSAS%
```

```
X00001  QRWQIET.  00000  00006
C00220  RADIUS
C00270  RANGE
C00271  RANGEREC
C00272  RANGEWEE
C00276  REL
C00207  RESERVE
X00002  SETPNTT   00031
C00151  SIDE
C00155  SITEXO
C00275  SPLASH
C00274  SPLED
C00273  SPEED
C00157  SPNSO
C00004  STATUS    00154
C00246  T1
C00247  T2
C00250  T3
C00406  TAIL
C00462  TANK      00230  00233
C00225  TARGETHI
C00226  TARGETLO
C00172  TASK
X00005  TERMTSP   00413
C00431  TGTSTAT
C00342  TIME
C00341  TIMEX
C00000  TMASK     00412
C00306  TNOEL
C00435  TRASH
C00310  TRETURN
C00305  TTOS
C00307  TVEL
C00000  TWORK
C00150  TYPE
C00443  TYPE1
C00444  TYPE2
C00450  TYPESAV   00044
C00374  TYPET
C00730  TYPETBL
P00436  UEP0000.  00154  00173  00205  00214  00226  00235  00274  00303  00306  00324  00432
                  00437  00440  00441  00450  00450
P00452  UEP0001.  00427  00372  00453  00454  00455  00462  00463
C00221  VAL
C00441  VAL1
C00442  VAL2
C00222  VAL3
C00147  VALUE
C00162  VOLT
C00165  XACCO
C00242  XMIT     00257  00262  00265
C00240  XMITTYPE
C00371  XMITXPER
X00004  XPERRAY   00037  00042  00045  00050  00053  00056  00070  00102  00114  00125  00134
```

```
                    00143  00152  00167  00210  00231  00243  00246  00255  00260  00263  00277
                    00320  00340  00345  00351  00356  00362  00405  00410
P00005  PSTART      00005
X00003  PSTOP       00035  00046  00106  00112  00123  00132  00141  00150  00160  00201  00222
                    00241  00253  00270  00314  00332  00401
P00165  PSTOP001.   00174
P00206  PSTOP002.   00215
P00227  PSTOP003.   00234
P00275  PSTOP004.   00304
P00307  PSTOP005.   00325
C00004  X
C00564  Y
C00267  YIELD
C17504  Z
C00202  ZERO
C03470  ZONES      00276  00301
   00476 SYMBOLS
```

```
FTN5,S
      PROGRAM BASESUM
      BANK (0), /DIRECTRY/
      COMMON/DIRECTRY/IDEF,LASTLIST,NDIMDIR,NDIMLIST,ATTNAME(500)
     1,       IFORMAT(500),ICODE(500),DEFAULT(500),IDEFAULT(500),
     1        N1(500),FN1(500),N2(500),FN2(500),LISTCHEK(500),
     1        GLOB(500),LISTVALS(2000)
      EQUIVALENCE (N1,FN1),(N2,FN2),(DEFAULT,IDEFAULT)
      TYPE LOGICAL LISTCHEK,GLOB
      TYPE INTEGER ATTNAME
      COMMON/PROCESS/NA,NV,NC,INITEM(100),VALUE(500),DEF(500),LGLOB(500)
      TYPE INTEGER VALUE
      TYPE LOGICAL DEF,LGLOB
      COMMON/EDITERM/ISWTERM
      COMMON /TABLES/ NAMECLAS(25), NAMETYPE(200), CLASTYPE(200)
     1 , NAMEATT(100,25,2), NUMATT(25), VALATT(100,200),MVALATT(100,200)
     2 , NMATT(5000), ITEMS(100,200), PARRAY(10), IC(2), MFORMAT(4)
      EQUIVALENCE (MVALAT,VALATT)
      EQUIVALENCE (NMATT,NAMEATT)
      EQUIVALENCE (MVAL,VAL)
      TYPE INTEGER CLASTYPE,PARRAY
      TYPE LOGICAL ITEMS
      DIMENSION NPARR(10)
      DIMENSION IPRSIDE(2),IPRCLAS(200), IPRTYP(200), IPRVAL(200)
      DIMENSION IPRITEM(200)
      COMMON /MYIDENT/ MYIDENT
      COMMON /NOPRINT/ NOPRINT
      ISIDEP=4HRLUE
      IPRSIDE(1) = ISIDEP
      ISIDEP1=3HRED
      IPRSIDE(2) = ISIDEP1
      NTYPONE = 0
      NTOTPR = 0
      MFORMAT(1)=8H(2X,A8,
      MFORMAT(2)=5HB(3X,
      MFORMAT(3)=1H
      MFORMAT(6)=8H,1X,A1))
      NTYPEXP = 200
      NATTEXP = 100
      NATTEX=NATTEXP+1
      *CLASEXP=25
      NOPRINT = 1
      MYIDENT = 8HBASESUM
      CALL ALOCDIR
      CALL INITAPE
  164 CONTINUE
      NUMCLAS=0
      NUMTYPE=0
      DO 4 I=1,NCLASEXP
    4 NUMATT(I)=0
      DO 181 I=1,NTYPEXP
      CLASTYPE(I)=0
      DO 1 J=1,NATTEXP
      MVALATT(J,I)=0
      ITEMS(J,I)=0
    1 CONTINUE
      MVALATT(NATTEXP,I)=0
```

```
FTN5,S

      181 CONTINUE
          MYIDENT = 8HQUICKDB
          CALL INITEDIT(1)
          CALL INPITEM
          ICLAS=ITLE(5HCLASS,ATTNAME,IDEF)
          ITYPE=ITLE(4HTYPE,ATTNAME,IDEF)
          ISIDE=ITLE(4HSIDE,ATTNAME,IDEF)
       16 IF(VALUE(ISIDE) .EQ. ISIDEP) 161,3456
     3456 IF(VALUE(ISIDE) .EQ. ISIDEP1) 8184,161
      161 INDCLAS=ITLE(VALUE(ICLAS),NAMECLAS,NUMCLAS)
          IF(INDCLAS .EQ. 0) 3,2
        3 IF(NUMCLAS .EQ. NCLASEXP) 8185,8186
     8185 PRINT 8187,NCLASEXP,VALUE(ICLAS)
     8187 FORMAT(10H MORE THAN I5,8H CLASSES,5X,A8,2X,9HMISSING:
          GO TO 8184
     8186 NUMCLAS=NUMCLAS+1
          NAMECLAS(NUMCLAS)=VALUE(ICLAS)
          INDCLAS=NUMCLAS
        2 NTRYTYPE=NUMTYPE
          ITRY=1
       69 INDTYPE=ITLE(VALUE(ITYPE),NAMETYPE(ITRY),NTRYTYPE)
          IF(INDTYPE .EQ. 0) 5,67
        5 IF(NUMTYPE .EQ. NTYPEXP) 8182,8181
     8182 PRINT 8183,NTYPEXP,VALUE(ITYPE)
     8183 FORMAT(10H MORE THAN I5,6H TYPES,5X,A8,2X,7HMISSING)
          GO TO 8184
       67 INDTYPE=ITRY+INCTYPE-1
       66 IF(INDCLAS .EQ. CLASTYPE(INDTYPE)) 6,68
       68 NTRYTYPE=NUMTYPE-INDTYPE
          ITRY=INDTYPE+1
          IF(ITRY .GT. NUMTYPE) 5,69
     8181 NUMTYPE=NUMTYPE+1
          NAMETYPE(NUMTYPE)=VALUE(ITYPE)
          INDTYPE=NUMTYPE
          CLASTYPE(INDTYPE)=INDCLAS
C         COUNT TOTAL ITEMS OF EACH CLASS
        6 MVALATT(NATTEXP,INDTYPE)=MVALATT(NATTEXP,INDTYPE)+1
C         FIND CLASS ATTRIBUTES
          DO 7 I=1,IDEF
          IF(DEF(I)) 8,7
        8 ICODESW=ICODE(I)
          MVAL=VALUE(I)
          ISUBS=NATTEXP*(INDCLAS-1)+1
          INDATT=ITLE(ATTNAME(I),NMATT(ISUBS),NUMATT(INDCLAS))
          IF(INDATT .EQ. 0) 9,10
        9 IF(NUMATT(INDCLAS) .EQ. NATTEX) 8191,8192
     8191 PRINT 8193,NATTEX,NAMECLAS(INDCLAS),ATTNAME(I)
     8193 FORMAT(I0H MORE THAN I5,2HATTRIBUTES FOR CLASS A8,2X,A8,2X,7HMISS
         1ING )
          GO TO 7
     8192 NUMATT(INDCLAS)=NUMATT(INDCLAS)+1
          INDATT=NUMATT(INDCLAS)
          NAMEATT(INDATT,INDCLAS,1)=ATTNAME(I)
          NAMEATT(INDATT,INDCLAS,2)=I
       13 GO TO (130,130,131,131,132,131,130),ICODESW
      130 VALATT(INDATT,INDTYPE)=MVAL+VALATT(INDATT,INDTYPE)
```

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FTN5,S

      GO TO 7
  131 MVALATT(INDATT,INDTYPE)=MVAL
      GO TO 7
  132 MVALATT(INDATT,INDTYPE)=MVAL
      GO TO 7
   10 IF(ITEMS(INDATT,INDTYPE)) 141,140
  141 GO TO (150,130,7,7,7,7,150),ICODESW
  140 IF(MVALATT(NATTEXP,INDTYPE) .EQ. 1) 13,14
   14 IF(MVALATT(INDATT,INDTYPE) .EQ. VALUE(I)) 7,15
   15 ITEMS(INDATT,INDTYPE)=1
      GO TO (151,151,7,7,7,7,151),ICODESW
  151 VALATT(INDATT,INDTYPE)=VALATT(INDATT,INDTYPE)*(MVALATT(NATTEXP,
     1INDTYPE)-1)
      GO TO 130
    7 CONTINUE
 8184 CONTINUE
      CALL NEXTITEM
      GO TO (16,17),ISWTERM
   17 DO 18 I=1,NUMTYPE
      NA=NUMATT(CLASTYPE(I))
      DO 18 J=1,NA
      IF(ITEMS(J,I)) 19,18
   19 NM=NAMEATT(J,CLASTYPE(I),2)
      ICODESW=ICODE(NM)
      GO TO (20,20,18,18,18,18,20),ICODESW
   20 VALATT(J,I)=VALATT(J,I)/MVALATT(NATTEXP,I)
   18 CONTINUE
C     PRINT OUT
      CALL PAGESKP
      NDO=NATTEXP+1
      DO 39 K=1,NUMCLAS
      NC=NUMATT(K)
      NCOUNT=0
      DO 41 I=1,NDO
      DO 41 J=1,10
      DO 41 L=1,2
   41 PARRAY(I,J,L)=0
      DO 34 I=1,NUMTYPE
      IF(CLASTYPE(I) .EQ. K) 30,34
   30 IF(NCOUNT .EQ. 8) 37,31
   31 NCOUNT=NCOUNT+1
      PARRAY(1,NCOUNT,1)=NAMETYPE(I)
      PARRAY(2,NCOUNT,1)=MVALATT(NATTEXP,I)
      DO 36 J=1,NA
      PARRAY(J+2,NCOUNT,1)=MVALATT(J,I)
      IF(ITEMS(J,I)) 32,33
   32 PARRAY(J+2,NCOUNT,2)=1H*
      GO TO 36
   33 PARRAY(J+2,NCOUNT,2)=1H
   36 CONTINUE
      GO TO 34
   37 ASSIGN 38 TO NBACK
      GO TO 100
   38 NCOUNT=0
      DO 42 IX=1,NDO
      DO 42 JX=1,10
```

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FTN5,5

      DO 42 LX=1,2
   42 PARRAY(IX,JX,LX)=0
      GO TO 31
   34 CONTINUE
      ASSIGN 39 TO NBACK
      GO TO 100
   39 CONTINUE
      IF(ISIDEP .EQ. 3HRED) 162,163
  162 CONTINUE
      IBEG = 1
      IEND = NTYPONE
      DO 1005 I = 1, 2
      CALL PAGESKP
      PRINT 1006, IPRSIDE(I)
 1006 FORMAT(' SUMMARY OF VALUES IN TARGET CLASSES FOR SIDE ',A8//'  CLA
     1SS       TYPE    AVERAGE VALUE  NO. OF ITEMS  TOTAL VALUE')
      TVAL = 0.
      ISAVCL = 8H
      DO 1007 J = IBEG, IEND
      IF (ISAVCL - IPRCLAS(J)) 1004, 1009, 1004
C     NEW CLASS NAME
 1004 PRINT 1008, IPRCLAS(J)
 1008 FORMAT(1H0,A8)
      ISAVCL = IPRCLAS(J)
C     OLD CLASS
 1009 MVAL = IPRVAL(J)
      VAL = MVAL * IPRITEM(J)
      TVAL = TVAL + VAL
      PRINT 1010, IPRTYP(J), IPRVAL(J), IPRITEM(J), VAL
 1010 FORMAT(11X,A8,4X,F8.2,3X,I8,3X,F14.2)
 1007 CONTINUE
      PRINT 1011, IPRSIDE(I), TVAL
 1011 FORMAT(//' GRAND VALUE TOTAL FOR SIDE ',A8,' IS ',F14.2)
      IBEG = NTYPONE + 1
      IEND = NTOTPR
 1005 CONTINUE
      STOP
  163 ISIDEP=3HRED
      ISIDE1=4HBLUE
      NTYPONE = NTOTPR
      GO TO 164
  100 IF(NCOUNT .EQ. 0) 104,105
  105 PRINT 101,NAMECLAS(K)
      MM=NN*2
      PRINT 102,(PARRAY(1,L,1),L=1,NCOUNT)
      PRINT 103,(PARRAY(2,L,1),L=1,NCOUNT)
      DO 104 L=3,MM
      MFORMAT(3)=IFORMAT(NAMEATT(L-2,K,2))
      PRINT MFORMAT,NAMEATT(L-2,K,1),(PARRAY(L,M,1),PARRAY(L,M,2),M=1,NC
     1OUNT)
      IF(NAMEATT(L-2,K,1) .EQ. 3HVAL) 1003,106
 1003 DO 1002 IPUNCH=1,NCOUNT
      NTOTPR = NTOTPR + 1
      IPRCLAS(NTOTPR) = NAMECLAS(K)
      IPRTYP(NTOTPR) = PARRAY(1,IPUNCH,1)
      IPRVAL(NTOTPR) = PARRAY(L,IPUNCH,1)
```

```
FTN5.5

      IPRITEM(NTOTPR) = PARRAY(2,IPUNCH,I)
 1002 CONTINUE
  106 CONTINUE
      PRINT 107
  104 GO TO NRACK
  107 FORMAT(/////)
  101 FORMAT(1$X,5HCLASS,5X,A8//)
  102 FORMAT(10X,8(3X,A5,2X))
  103 FORMAT(2X,5HITEM ,3X,8(3X,I8,2X))
      END
```

IDENT BASESUM

PROGRAM LENGTH		03451
ENTRY POINTS	BASESUM	01671
BLOCK NAMES		
	DIRECTRY	11654
	PROCESS	01173
	EDITERM	00001
	TABLES	66703
	MYIDENT	00001
	NOPRINT	00001
EXTERNAL SYMBOLS		
	Q8QENTRY	
	Q3Q10040	
	THEND.	
	Q3Q00040	
	Q1Q05100	
	Q1Q04100	
	Q8QSTOPS	
	Q8QDICT.	
	ALOCDIR	
	INITAPE	
	INITEDIT	
	INPITEM	
	ITLE	
	NEXTITEM	
	PAGESKP	
	STH.	
	QNSINGL.	

X00011	ALOCDIR	01726										
C00004	ATTRNME	02006	02013	02020	02177	02206	02230	02243				
P01671	BASESUM	01671										
C00341	CLASTYPE	01752	01753	02131	02132	02153	02153	02355	02355	02376	02376	02473
		02473										
P03104	CNVRTI.	02053	02055	02116	02120	02224	02226	02231	02420	02641	02661	02662
		02663	02664	02700	02701	02733	02751	02772	03017	03026	03027	
P03400	COUNT.	01740	01741	01757	01760	02365	02367	02516	02520	03046	03050	
P01460	CREAT.	02060	02123	02234	02623	02644	02667	02704	03103	03103	03103	03103
C01133	DEF	02165										
C02740	DEFAULT											
P00001	DICT.	01673	01675	01727	01731	02000	02003	02005	02012	02017	02036	02050
		02057	02101	02113	02122	02205	02221	02233	02344	02430	02612	02615
		02622	02636	02643	02657	02666	02675	02703	02714	02727	02735	02742
		02757	02762	03000	03015	03035	03074	03077				
P03365	ENDING.	02714										
P00000	EXIT.	03365										
C03724	FN1											
C04710	FN2											
P01460	FORMAT.	01676	01700	01704	01706	01710	01712	01724	01775	02004	02011	02016
		02512	02602	02615	02715	02717	03036					
P02060	GG0C000.	02046										
P02123	GG0C001.	02111										
P02234	GG0C002.	02217										
P02623	GG0C003.	02613										
P02644	GG0C004.	02634										
P02667	GG0C005.	02655										
P02704	GG0C006.	02673										
P02736	GG0C007.	02725										
P02760	GG0C010.	02740										
P03001	GG0C011.	02760										
P03036	GG0C012.	03013										
P03100	GG0C013.	03072										
C05714	GLOB											
P03401	I	01735	01741	01746	01752	01771	02160	02163	02167	02227	02242	02246
		02311	02337	02351	02354	02366	02423	02443	02463	02467	02472	02504
		02570	02607	02617	02677	02707	03132					
P03402	IBEG	02605	02626	02705								
P03403	ICLAS	02010	02033	02054	02063							
C01754	ICODE	02170	02406									
P03404	ICODES#	02171	02250	02274	02320	02407						
C00000	IDEF	02007	02014	02021	02341							
C02740	IDEFAULT											
P03405	IEND	02606	02671	02706								
C00770	IFORMAT	03011										
P03406	IGOTO.	02251	02275	02320	02346	02410						
P03105	IN0C002.	01760	02366	02517	03124	03137	03142	03154				
P03106	IN0C003.	01767	02367	02510	03125	03140	03340					
P03107	IN0C013.	02154	02303	02326	03341	03362						
P03110	IN0C016.	02244	03321	03330								
P03111	IN0C017.	02257	02263	02266	02270	02307	02315	02334	03331	03363		
P03112	IN0C022.	02454	03123	03135	03143	03157	03200	03215				
P03113	IN0C023.	02506	03351									
P03114	IN0C024.	02517	03142	03155	03352							

P03115	IN0C025.	02554	03217	03227	03231	03243	03245	03257			
P03116	IN0C027.	02747	02770	03177	03214						
P03117	IN0C030.	03C05	03036	03161	03173	03175	03211				
P03120	IN0C031.	03C2[illegible]	03176	03210	03261	03273					
P03121	IN0C033.	03C47	03276	03311							
P03122	IN0C034.	03C47	03176	03212	03276	03310					
P03407	INDATT	02210	02240	03325							
P03410	INDCLAS	02C91	02067	02130	02152	02174	02202	02213	02225	02235	03315
P03411	INDTYPE	02104	02126	02126	02131	02135	02136	02150	02152	03356	
X00012	INITAPE	01730									
X00013	INITEDIT	01777									
C00003	INITEM										
X00014	INPITEM	02C02									
P00017	IPRCLAS	02632	02641	02645	03056						
P01147	IPRITEM	02652	02663	03063							
P00015	IPRSIDE	01677	01701	02620	02677						
P00327	IPRTYP	02661	03057								
P00637	IPRVAL	02647	02662	03061							
P03412	IPUNCH	03043	03304								
P03413	ISAVCL	02625	02637	02645							
P03414	ISIDE	02022	02023	02027							
P03415	ISIDEP	01677	02025	02602	02716						
P03416	ISIDEP1	01700	02031	02717							
P03417	ISURS	02177	02200								
C00000	ISWTERM	02345	02345								
C61552	ITEMS	01764	02279	02317	02371	02524					
X00015	ITLE	02004	02011	02016	02035	02100	02204				
P03420	ITRY	02073	02076	02124	02137	02137					
P03421	ITYPE	02045	02074	02117	02144						
P03422	IX	02543	02563	03224							
P01765	.1										
P02270	.10	02212									
P02722	.100	02537	02575								
P03064	.1002										
P03042	.1003										
P02634	.1004	02633									
P02707	.1005										
P02667	.1007										
P02646	.1009	02633									
P03100	.104	02724									
P02725	.105	02723									
P03066	.106	03041									
P02250	.13	02304									
P02256	.130	02252	02252	02276	02276	02302	02336				
P02262	.131	02253	02254	02255							
P02265	.132	02255									
P02303	.140	02273									
P02307	.14	02305									
P02274	.141	02273									
P02314	.15	02313									
P02326	.151	02321	02322								
P02023	.16	02347									
P02033	.161	02026	02032								
P02604	.162										

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P02715  .163        02603
P01732  .164        02721
P02350  .17
P02421  .18         02372   02412   02413   02414   02414
P01771  .181
P02373  .19         02372
P02415  .20         02411   02411
P02071  .2          02043
P02044  .3
P02476  .30
P02501  .31         02477   02567
P02526  .32         02525
P02531  .33         02525
P02570  .34         02475   02535
P02027  .3456       02026
P02533  .36         02530
P02536  .37         02500
P02540  .38         02546
P02576  .39         02574
P01742  .4
P02455  .41
P02555  .42
P02107  .5          02141
P02154  .6          02133
P02130  .66
P02124  .67         02106
P02134  .68         02132
P02074  .69         02140   02141
P02337  .7          02166   02234   02261   02264   02267   02277   02300   02301   02301   02313   02323
                    02323   02324   02325
P02167  .8          02166
P02142  .8181       02110
P02111  .8182
P02343  .8184       02032   02060   02123
P02045  .8185
P02061  .8186       02045
P02217  .8191
P02235  .8192       02216
P02213  .9
P03367  .ERASER.    02175   02176   02334   02374   02375   02400   02401
P01460  ..1C0000    01676
P01461  ..1C0001    01700
P01462  ..1C0002    01704
P01463  ..1C0003    01706
P01464  ..1C0004    01710
P01465  ..1C0005    01712
P01466  ..1C0006    01724
P01467  ..1C0007    01726
P01470  ..1C0008    02006
P01471  ..1C0009    02013
P01472  ..1C0010    02022
P01545  ..1C0011    02526
P01546  ..1C0012    02531
P01547  ..1C0013    02602
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P01574	..1C0014	02625										
P01630	..1C0015	02715										
P01631	..1C0016	02717										
P01632	..1C0017	03040										
P01550	..1C06	02616										
P01575	..1C08	02637										
P01602	..1C10	02660										
P01636	..1C1	02730										
P01614	..1C11	02676										
P01646	..1C2	02743										
P01656	..1C3	02763										
P01633	..1C7	03075										
P01510	..8183	02114										
P01473	..8187	02051										
P01525	..8193	02222										
P03366	.NSTIFF.	02357	02357	02402	02403	03010	03010					
P02037	.200001.	02034										
P02102	.200002.	02075	02077									
P02206	.200003.	02200	02201	02203								
P03423	J	01754	02362	02401	02422	02447	02460	02513	02526	02632	02640	02644
		02646	02667	03151								
P03424	JX	02547	02560	03237								
P03425	K	02433	02436	02474	02576	02731	03050	03167				
P03426	L	02452	02744	02752	02765	02773	03002	03066	03205			
C00001	LASTLIST											
C01153	LGLOB											
C05674	LISTCHEK											
C05734	LISTVALS											
P03427	LX	02552	03253									
P03430	M	03021	03030	03267								
C66677	MFORMAT	01704	01705	01707	01707	01711	01711	01713	01713	03012	03012	03016
P02431	MM	02737	03076									
P01457	MVAL	02173	02262	02265	02647							
C12512	MVALATT	01761	01765	01767	01770	02155	02155	02156	02263	02264	02266	02267
		02304	02304	02310	02310	02327	02327	02417	02417	02510	02511	02521
		02521										
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C03724	N1											
C04710	N2											
C00651	NAMEATT	02244	02245	02246	02247	02402	02404	03006	03006	03017	03037	03037
C00000	NAMECLAS	02037	02065	02068	02225	02226	02732	02732	03053	03053		
C00031	NAMETYPE	02075	02105	02146	02147	02504	02505					
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P03433	NATTEXP	01716	01756	02175	02431	03335						
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C00002	NC											
P03435	NCLASEXP	01721	01737	02045	02052							
P03436	NCOUNT	02441	02476	02501	02502	02541	02722	02754	02775	03032	03045	03345
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C00003	NDIMLIST											
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X00016	NEXTITEM	02343										
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C00651	NMATT	02201	02206									
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P03442	NTOTPR	01703	02706	02720	03051	03052	03054					
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P03444	NTYPEXP	01715	01773	02110	02115							
P03445	NTYPONE	01702	02605	02704	02720							
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		02437	02437									
P03446	NUMCLAS	01733	02040	02044	02061	02062	02065	02067	02400			
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P03161	P00002.U	03164										
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P03231	P00005.U	03234										
P03245	P00006.U	03250										
P03261	P00007.U	03264										
P03275	P00010.U	03301										
X00017	PAGESKP	02427	02611									
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		02556	02750	02750	02771	02771	03025	03025	03027	03055	03056	03057
		03060	03061	03062								
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X00010	Q8QDICT.	00000	01672									
X00001	Q8QENTRY	01674										
X00007	Q8QSTOPS	02713										
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P01745	TS00001.	01740										
P01773	TS00002.	01750										
P01766	TS00003.	01757										
P02341	TS00004.	02162										
P02425	TS00005.	02353										
P02423	TS00006.	02355										
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P02465	TS00010.	02445										
P02572	TS00013.	02471										
P02535	TS00014.	02516										
P02565	TS00015.	02545										
P02671	TS00021.	02630										
P02754	TS00022.	02746										
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P03032	TS00025.	03023										

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                   02610  02710  03125  03132  03133  03134  03141  03141
P03150  UPOC001.   01795  02363  02450  02461  02514  02627  02670  03144  03151  03152  03153
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P03166  UPOC002.   02434  02577  03162  03167  03170  03171  03173  03174
P03204  UPOC003.   02453  02745  02753  02766  02774  03003  03067  03200  03203  03206  03207
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P03223  UPOC004.   02554  02564  03217  03224  03225  03226  03230  03230
P03236  UPOC005.   02550  02561  03232  03237  03240  03241  03243  03244
P03252  UPOC006.   02553  03246  03253  03254  03255  03257  03260
P03266  UPOC007.   03022  03031  03262  03267  03270  03271  03273  03274
P03303  UPOC010.   03044  03277  03304  03305  03306  03312  03312
P03314  UPOC013.   02042  02070  03315  03316  03317  03321  03322
P03324  UPOC014.   02211  02241  03325  03326  03327  03332  03332
P03334  UPOC016.   01717  03335  03336  03337  03342  03342
P03344  UPOC020.   02442  02503  02542  03345  03346  03347  03353  03353
P03355  UPOC025.   02105  02127  02151  03356  03357  03360  03364  03364
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P01751  WSOC002.   01774  01774
P01761  WSOC003.   01765
P02163  WSOC004.   02342  02342
P02354  WSOC005.   02426  02426
P02370  WSOC006.   02422
P02436  WSOC007.   02601  02601
P02446  WSOC010.   02466  02466
P02451  WSOC011.   02462
P02455  WSOC012.   02457
P02472  WSOC013.   02573  02573
P02521  WSOC014.   02534
P02546  WSOC015.   02566  02566
P02551  WSOC016.   02562
P02555  WSOC017.   02557
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P02747  WSOC022.   02755  02755
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P03005  WSOC024.   03071  03071
P03024  WSOC025.   03033  03033
P03051  WSOC026.   03065
   00446 SYMBOLS
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