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FINAL REPORT
EVALUATION AND IMPROVEMENT OF
THE DEFENSE CENTRAL INDEX
OF INVESTIGATIONS (DCII)
AN EVALUATION AND ANALYSIS
PROGRAM FOR THE
U.S. NAVAL POSTGRADUATE SCHOOL

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EVALUATION AND IMPROVEMENT OF THE
DEFENSE CENTRAL INDEX OF INVESTIGATIONS (DCII)
AN EVALUATION AND ANALYSIS PROGRAM FOR THE
U.S. NAVAL POSTGRADUATE SCHOOL

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Monterey, California   93943

November 22, 1985

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The Defense Central Index of Investigations (DCII) is the primary DoD automated data base containing personnel security information. The DCII is delivered quarterly to the Defense Manpower Data Center (DMDC), Monterey, California.

The DCII was carefully reviewed and edited by Dr. John Goral at the U.S. Naval Postgraduate School and several problems were revealed. For example, the records were ordered by phonetic name (making them difficult to link to

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20. ABSTRACT (Continued)

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Software was developed by BDM Services Company at DMDC to edit the DCII file. The improvements included reconfiguring the file so that the records were arranged by SSN. Duplicate SSNs and duplicate investigative data were dropped. This editing reduced the March 1985 DCII from eleven to six tapes, while providing a more accurate and efficient-to-use file.

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The Defense Central Index of Investigations (DCII) is the primary DoD automated data base containing personnel security information. The DCII is delivered quarterly to the Defense Manpower Data Center (DMDC), Monterey, California.

The DCII file was carefully reviewed and edited by Dr. John Goral at the U.S. Naval Postgraduate School and several problems were revealed. For example, the records were ordered by phonetic name (making them difficult to link to other personnel security files), approximately 15 percent of the records lacked social security numbers (SSN), and another 15 percent of the records contained redundant information.

Software was developed by BDM Services Company at DMDC to edit the DCII file. The improvements included reconfiguring the file so that the records were arranged by SSN. Duplicate SSNs and duplicate investigative data were dropped. This editing reduced the DCII file from eleven to six tapes, while providing a more accurate and efficient-to-use data base.

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FOREWORD

This report was prepared under the provisions of Contract Number N00014-84-C-0764, Evaluation and Improvement of the Defense Central Index of Investigations (DCII) -- An Evaluation and Analysis for the U.S. Naval Postgraduate School. Dr. John R. Goral at the U.S. Naval Postgraduate School (USNPS) had responsibility for review and evaluation of the DCII file. BDM Services Company had responsibility for software development and creation of the improved file. Ms. Donna Waldrop at BDM was the principal Programmer for this effort.

EVALUATION AND IMPROVEMENT OF THE
DEFENSE CENTRAL INDEX OF INVESTIGATIONS (DCII) -- AN
EVALUATION AND ANALYSIS PROGRAM FOR THE
U.S. NAVAL POSTGRADUATE SCHOOL

A.   PURPOSE AND BACKGROUND

The purpose of this effort was to develop an improved Defense
Central Index of Investigation (DCII) file. This file is very important
in that it is the primary DoD automated data base containing personnel
security information.

The Defense Manpower Data Center (DMDC) serves as a central facility
within the Department of Defense for collecting and integrating personnel
data. DMDC receives the DCII each quarter from the Defense Investigative
Service (DIS). DMDC links the DCII to other manpower data bases using
the social security number (SSN). DMDC then conducts personnel security
analyses on these data.

An in-depth examination of the DCII data base was conducted by Dr.
John R. Goral of the U.S. Naval Postgraduate School and several problems
were revealed. Software was developed to generate an improved data base
by severely editing the DCII records, removing redundancies, and correct-
ing errors such as invalid SSNs.

This report presents a description of the DCII file and the problems
with the file before modification. It also presents the methodology and
software developed to review and edit the file to create a data base
greatly improved for both operational and analytical use. Pertinent
personnel security reports written by Dr. Goral are presented in Appendix
A.

B.   DESCRIPTION OF THE DCII FILE

As of March 1985, the DCII data base included 15.5 million variable-
length records. Each DCII record consists of a master or base section
and one or more content segments.

The base section contains the following personnel identification data:

(1) First, middle, and last name;

(2) Social security number;

(3) Date of birth; and

(4) Place of birth.

The content segments contain information on past or pending DoD personnel security investigations. There are six types of content segments; each is referred to by a segment number. The segment numbers and the information the segments contain are as follows:

(1) Segment 0: Tracing of dossier data;

(2) Segment 1: Pending national agency checks (NAC);

(3) Segment 2: NAC history;

(4) Segment 3: Clearance;

(5) Segments 4 through 7: Not applicable;

(6) Segment 8: Current name; and

(7) Segment 9: "Also known as" (AKA) names.

Each segment is described in more detail below. The content segments that are of primary interest at DMDC are Segments 0, 2, and 3.

1. Tracing or Dossier Segment (Segment 0)

This is the most common segment in the DCII. The data base contained 8.6 million of these segments. The data included in this segment are the submitting agency; the context, retention and status codes; and the year of the file. The retention code is the length of time the segment is to remain in the DCII before being purged. Most of the DIS, Air Force OSI, and Air Force investigations transferred to DIS are to remain in the DCII for 15 years. Most Naval Investigative Service segments have a 25-year retention code. Almost all Army Criminal Records Division segments are coded for 40-year retention. Overall, 99 percent of the status codes refer to tracing segments, with the remaining segments open cases.

2. Pending NAC Segment (Segment 1)

The DCII file contained about 100,000 segments indicating pending National Agency Check (NAC). This segment also gives the start date of the NAC. Most of the NACs requested by the Services were ENTNACS; the others were standard military NACs. NACs requested by DIS were equally spread among military, civilian, and industrial personnel.

3. NAC History Segment (Segment 2)

The DCII file contained about 7.4 million NAC history segments. These segments give NAC completion dates and a status code indicating whether the NAC is closed or incomplete. Each segment includes space for identifying up to 11 agency files that may have been checked during the NAC. A total of 52 such files are described in the DCII documentation.

4. Clearance Segment (Segment 3)

3.2 million clearance segments were found: 1.5 for the Army segments and 1.7 for the Air Force. The Navy and Marine Corps do not submit clearance data to the DCII. The clearance segment contains a clearance status code, clearance basis code, adjudication date, investigation date, and review action code. The clearance basis code identifies the level of investigation on which a clearance decision is based. The review action code pertains only to Army segments. It, along with the status and basis codes, fully defines an Army clearance action.

5. Current Name and "Also Known As" Segments (Segments 8 and 9)

Over half of these segments resulted from NAC information. Another third came from the DIS and the Army's Investigative Records Repository.

C. PROBLEMS WITH THE DCII FILE

An examination of the DCII revealed instances of erroneous, duplicate, inactive, or incomplete records. For example, it was found that

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2.3 million records contained missing or incorrect social security numbers. This creates a problem in the operational use of the data base (i.e., in locating a certain individual when doing a security check) as well as in the analytical use of the data base (i.e., in linking the DCII with other DMDC data bases for various personnel security analyses).

It was also found that over 4.7 million records existed with redundant or overlapping data. Individuality in the DCII is defined as a single social security number (SSN). All data for one individual should exist in one record with that person's SSN. While this was true for 8.4 million records, other cases were found where some individuals were identified in over 100 different records.

The records in the DCII were arranged phonetically; this arrangement sometimes made it difficult to locate an individual. Also it made the file cumbersome to link with other DMDC personnel security data bases.

Active and inactive files were included in the same data base. Operational on-line searches of the DCII typically involve situations where the current status of an individual (e.g., active military) is known. Searching the entire file would be unnecessary if the file were divided into active and inactive subfiles.

Important personnel actions were missing in the DCII. This information can be added to the DCII from other DMDC data bases. Examples of these personnel actions are reason for separation, character of service, reenlistment eligibility, and changes in paygrade, marital/dependent status, or occupation.

D. METHODOLOGY FOR IMPROVING THE DCII FILE

1. Improvements

Based on Dr. Goral's evaluation, several improvements were noted that would make the DCII fi'. more accurate for operational use and more compatible with other personnel security files for analytical purposes. These improvements are listed below.

(1) Reorder the records by SSN; previously they were arranged phonetically;

(2) Correct invalid or missing SSNs where possible by matching DCII records with other DMDC files using name and date and place of birth;

(3) Drop duplicate data;

(4) Divide the DCII into subfiles based on current active and inactive status;

(5) Incorporate important personnel actions (e.g., reason for separation) from other DMDC security/suitability data bases; and

(6) Develop an historical DCII file.

2. Developing the Improved Data Base

The BDM Services Company was tasked to develop an improved DCII data base based on the list of requirements above. The DCII file from DIS consisted of eleven tapes. The edited DCII consisted of six tapes. Nine software programs were developed by BDM for this effort. Figure 1 gives the function of each of the programs.

The flow charts in Figures 2 and 3 show the procedure used to audit and edit the DIS tapes to develop the improved data base. Also shown is the procedure used to merge the DCII data with DMDC's Master Enlisted and Master Officer Files. DMDC continues to use these procedures to edit DCII data tapes received from the DIS.

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Name of Program	Function
DCIICOPY JCL	Copies of 11 DCII tapes received from DIS onto DMDC tapes
DCII SPLIT	Splits the base section from the content segments in each record
DCII BREAK	Breaks the segments into the following groups: Segments 1, 8 and 9 Segment 2 Segment 3 Segment 0
DCIISEG0 PL1 DCIISEG2 PL1 DCIISEG3 PL1	Drop invalid SSNs on the corresponding segment
DCIIMAST PL1	Drops invalid SSNs for the base records
DCIISORT PL1	A sort program sorts the base records by descending SSN and date; DCIISORT PL1 then keeps only the latest base record for each SSN
DCIISRT0 PL1 DCIISRT2 PL1 DCIISRT3 PL1	A sort program sorts segment data by descending SSN and date. These programs then keep only the latest segments (0, 2, 3) for each SSN
DCII JOIN	Merges the base record with segments 2, 3, and 0. A base record is written only if there is at least one segment. A base record can have only one of each segment but doesn't have to have all three segments.
DCII MERGE	Merges the DMDC Master Enlisted and Master Officer files with the DCII record. Each Enlisted and Officer record is written and if no DCII record is found, blanks are inserted. The officer and enlisted files are then merged.

Figure 1. Software Developed to Audit and Edit DCII File

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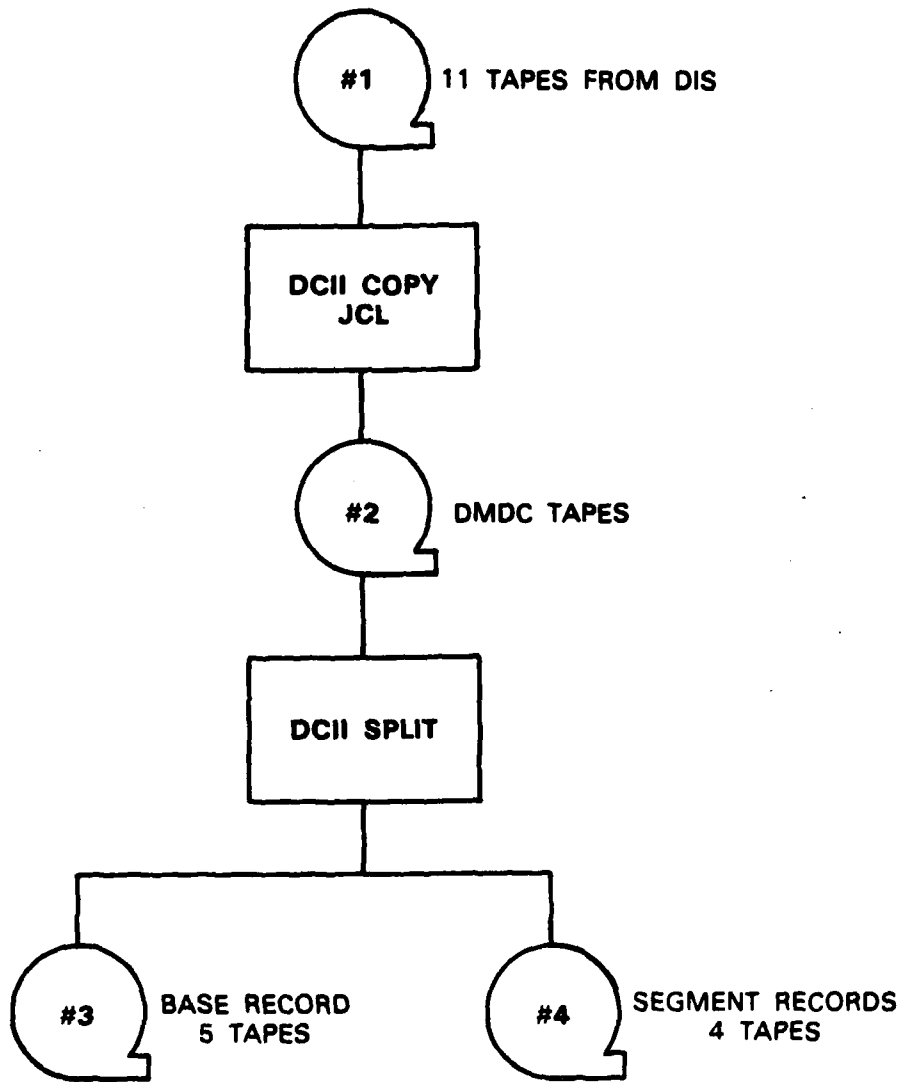
Figure 2. Procedure Developed to Audit/Edit DCII File

TR/0001/0038-85
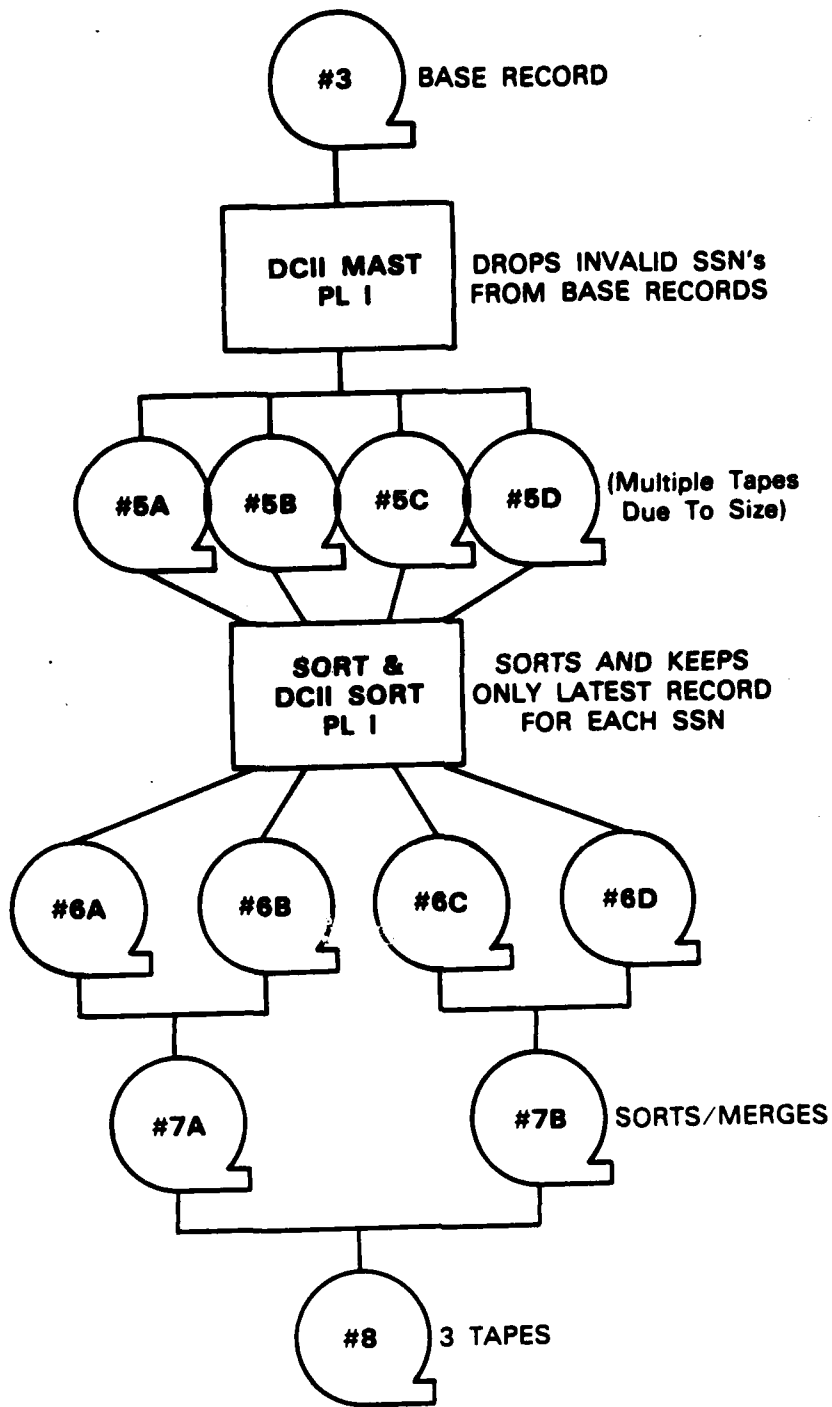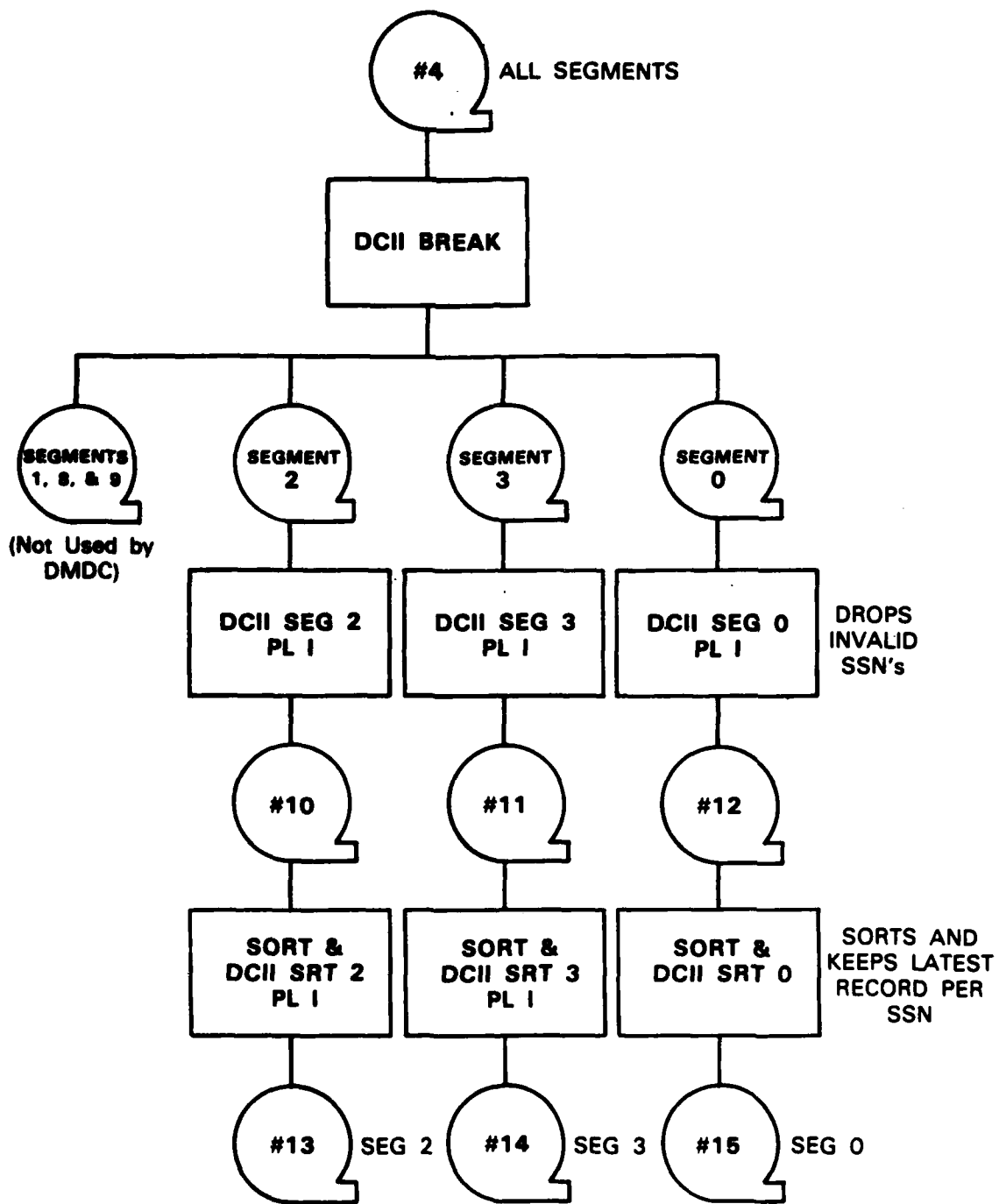
Figure 2. Procedure Developed to Audit/Edit DCII File (Continued)

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Figure 2. Procedure Developed to Audit/Edit DCII File (Continued)

TR/0002-0036-86
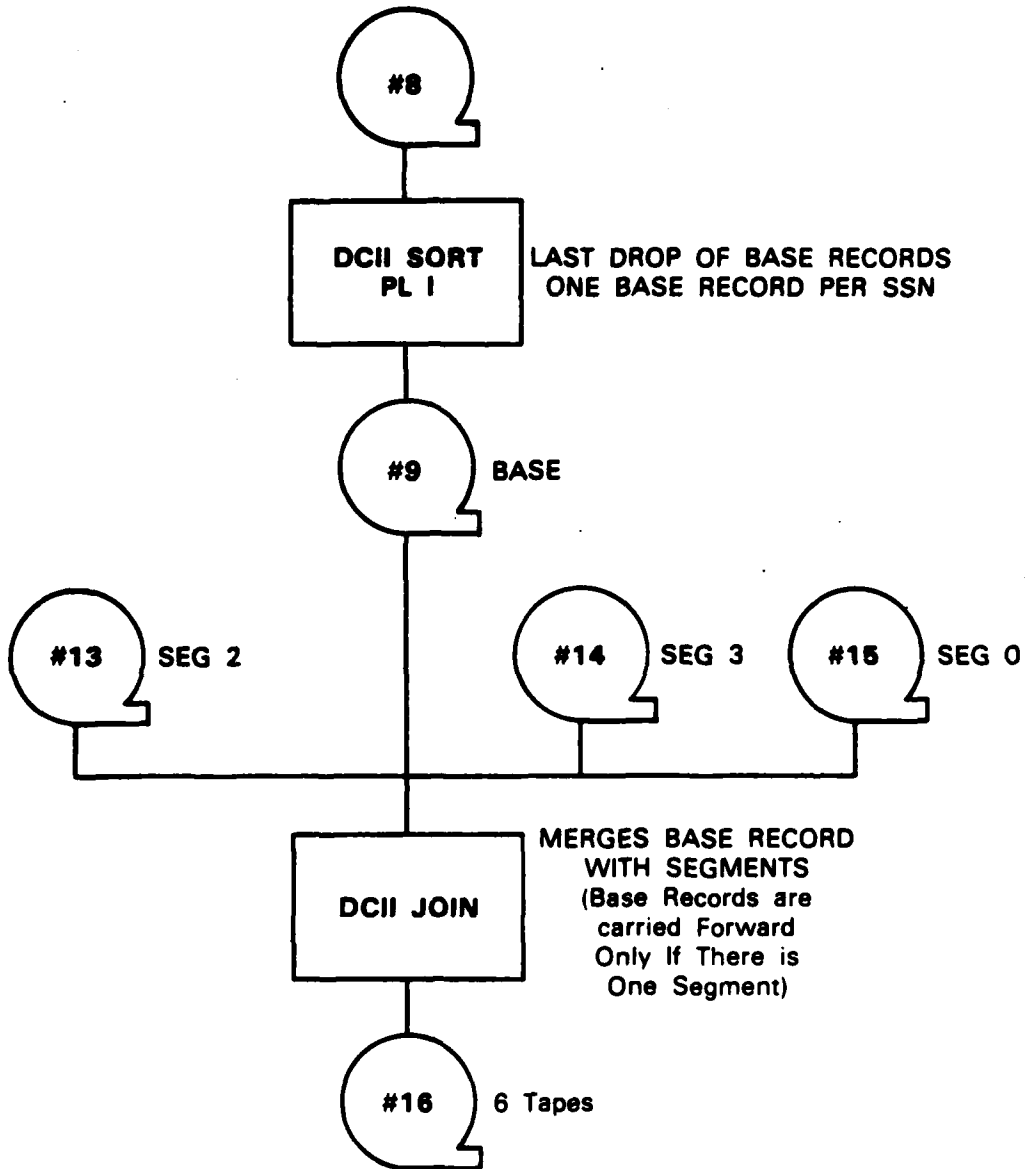
Figure 2. Procedure Developed to Audit/Edit DCII File (Concluded)

TR 0004 0036 85

DMDC MASTER ENLISTED FILE   DMDC MASTER OFFICER FILE

DCII BASE RECORD
WITH SEGMENTS

#16

DCII MERGE   DCII MERGE

#17   ENLISTED W/DCII   #18   OFFICER W/DCII

SYNC SORT
MERGE

#19   DOD MASTER
      WITH DCII

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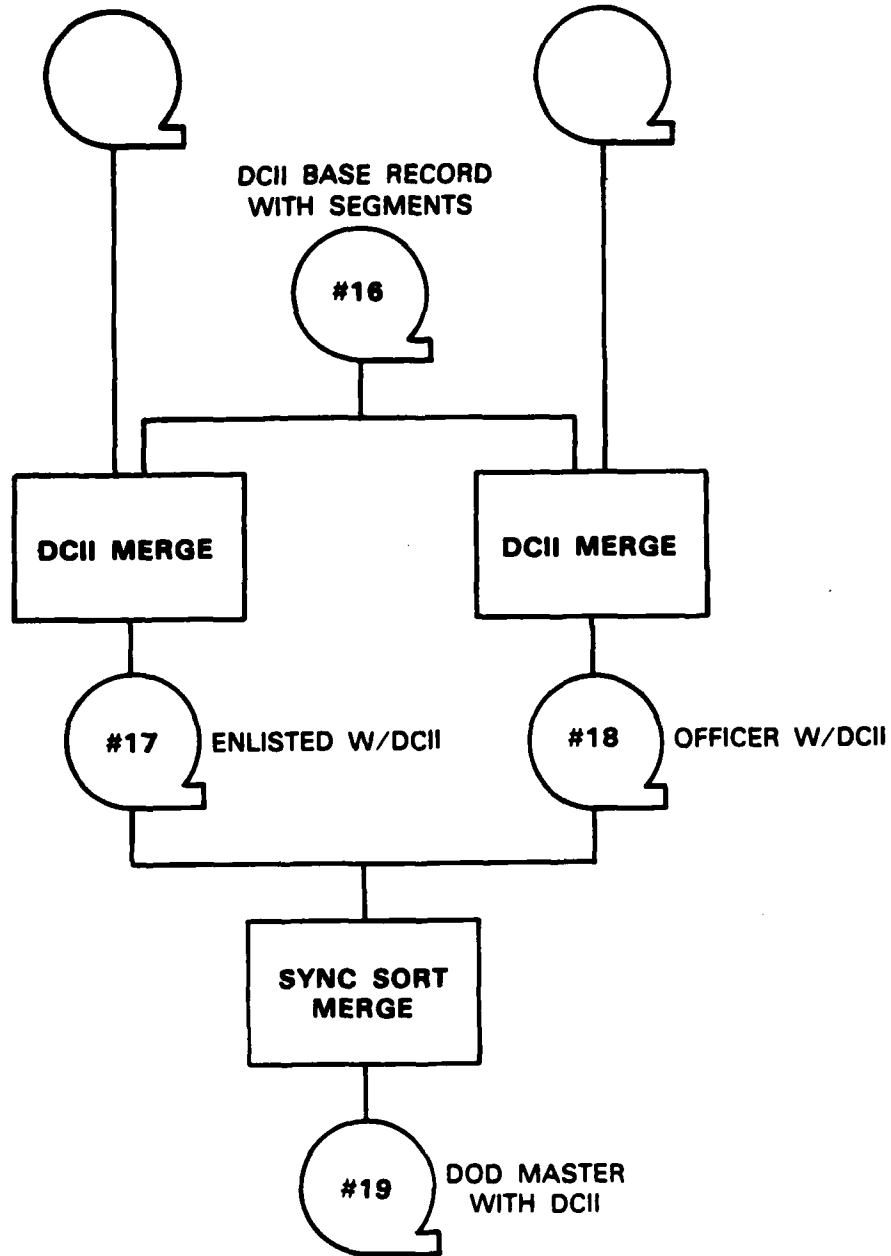
Figure 3. Procedure for Merging DCII With DMDC Master
           Enlisted and Master Officer Files

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E. PERSONNEL SECURITY ANALYSES

Several pertinent analytical studies on personnel security were conducted by Dr. John Goral from the U.S. Naval Postgraduate School. Each of Dr. Goral's reports is written as a stand-alone report. A list of his reports is given in Figure 4. The reports are presented in Appendix A in the order shown in Figure 4.

DOD PERSONNEL SECURITY RESEARCH PROGRAM REPORTS

1. Personnel Security Investigation and Clearance Contents of the Defense Central Index of Investigations, 84-1, March 1984

2. Defense Investigative Service Investigations and Army and Air Force Adjudications Contained in the DCII, 84-2, May 1984

3. Army and Air Force Adjudications During FY83 and DIS Investigation and Clearance Status of DoD Personnel as of the End of FY83, June 1984

4. Investigation and Clearance Status of Those in Army Personnel Security Screening Program Occupations, 84-4, July 1984

5. Identification of Army Top Secret and SCI Eligibles Not Included in DCII Clearances, 84-5, July 1984

6. Navy Security Clearances, 84-6, August 1984

7. Projections of Military Periodic Review Requirements, 84-7, August 1984

8. Security Clearances Among Army and Air Force Reserve Component Personnel, 84-8, September 1984

9. Comparison of Investigations and Adjudications During FY83 and the First Half of FY84, 84-9, September 1984

10. DIS Investigations and Clearance Eligibility of Air Force Enlistees Requiring BIs and SBIs, 85-1, October 1984

11. The DoD Personnel Security Research Program: Initial USAF Findings and Future Areas of Study, 85-2, November 1984

12. Identification of Unnecessary Background Investigations, 85-3, December 1984

13. Personnel Security Investigations: Service Differences for Similar Occupations, 85-4, December 1984

14. Most Recent DIS Investigation and Clearances Information in the DCII at the Beginning of Fiscal Year 1985, 85-5, March 1985

15. Continued Top Secret and SCI Status of Former Army Personnel with Unsuitability Discharges, 85-6, April 1985

16. Continued Top Secret and SCI Status of Former Air Force Personnel with Unsuitability Discharges, 85-7, April 1985.

17. Security Investigations and Clearances in the DCII at the End of Fiscal Year 1984: A Profile of 2.1 Million Active Duty Military Personnel, 85-8, May 1985

18. A Census of Key Data Elements in the Defense Central Index of Investigations (As of 1 April 1985), 85-9, June 1985

19. Cleaning Up the Periodic Review Backlog: Estimates of the Numbers and Location of Military Subjects, 85-10, August 1985

20. Extent of National Agency Checks on Active Military Personnel, 85-11, September 1985

Figure 4. DoD Personnel Security Research Program Reports

APPENDIX A
DOD PERSONNEL SECURITY RESEARCH
PROGRAM REPORTS

PERSONNEL SECURITY INVESTIGATION AND CLEARANCE CONTENTS
OF THE DEFENSE CENTRAL INDEX OF INVESTIGATIONS

March 1984

Prepared by:

Dr. John R. Goral
Adjunct Research Professor
Manpower Research Center

PERSONNEL SECURITY INVESTIGATION AND CLEARANCE CONTENTS
OF THE DEFENSE CENTRAL INDEX OF INVESTIGATIONS
(AS OF OCTOBER 1983)

The Defense Central Index of Investigations (DCII) is the primary DoD automated data base containing personnel security information. It consisted of 14.5 million records in October 1983. This study was initiated to develop analytical familiarity with the idiosyncrasies inherent in such a large data base and to inventory its relevant characteristics. Future management information and research applications utilizing the DCII require such initial steps.

DCII records are constructed of various types of segments. These include investigations, national agency checks (NAC), current name and "also known as" (AKA) segments and, for the Army and Air Force only, clearance segments. Since the focus of future studies is to be on background investigations and clearance actions, initial DCII processing excluded all but investigation (type 0) and clearance (type 3) segments. A further refinement on the type 0 segments was to exclude from the initial working file those investigations coded as cross references and victims other than subjects. These adjustments resulted in a data base of 8.1 million records. In addition to one or more clearance or investigation segments, these records contained the subject's full name, SSN, and date and place of birth.

A total of 5.7 million records contained only investigation segments, while 2.0 million contained only clearance segments. The remaining 370 thousand records consisted of both types of seg ments. As table 1 shows, most records consisted of only a single segment. The mean was 1.1 investigation segments and clearance segments per record.

Table 1. Investigation and clearance segments per record

Investigation Segments	Number	Percent	Clearance Segments	Number	Percent
none	2,087,113	24.2	none	6,105,002	75.1
1	5,005,129	62.1	1	1,999,200	24.6
2	907,454	11.0	2	11,601	0.1
3	234,955	2.3	Total	8,117,803	100.0
4	34,455	0.4			
5-11	8,150	0.1			
Total	8,117,403	100.0			

Further computations revealed that the 8.1 million records contained a total of 7.1 million investigation segments and 2.0 million clearance segments, for a total of 9.1 million segments.

As has been mentioned, SSN is one of the data elements in the DCII records. This is of particular importance when considering the intended linking of the DCII with various personnel data bases in future work. While name serves as the primary identifier in operational use of the DCII, other DoD personnel data bases use SSN as the key element. At issue is whether DCII-SSN data is sufficient to be used in studies linking the DCII with other data bases.

With respect to SSN, two major concerns emerge in this initial review of the contents of the DCII. A total of 1.4 million of the 8.4 million records (16.7%) did not include valid SSN data. To link these records with other data bases would require name and date of birth matching procedures which are more time consuming and less reliable than SSN matching.

The second problem is the issue of duplicate SSNs in the file. Each record does not necessarily correspond to a unique individual. In fact, 1.4 million of the records (16.7%) contained SSNs that were found more than once. In most of these instances, the SSN was in two or three records, however, in the extreme, single SSNs were found in 129, 142, 270, and 377 separate records. This presents a difficulty for management information and research uses of the DCII that will focus on individuals rather than records. Procedures to concatenate such records will need to be developed. The number of times unique SSNs appear in the 8.4 million record DCII is displayed on Table 2.

TABLE 2. Duplication of SSNs in the DCII Records

Times SSN in DCII	Number of Records	Number of Individuals
no SSN	1,371,044	1,371,044
1	5,638,111	5,638,111
2	1,080,460	540,230
3	249,612	83,204
4	68,640	17,160
5	19,085	3,817
6	6,018	1,003
7	1,960	280
8	904	113
9	495	55
10-377	1,605	54

The figures in this table, when those with duplicate SSNs are totalled, show that the 1,428,289 such records refer to 646,166 individuals. Thus, the total number of individuals with records containing SSNs is about 6.3 million. As indicated in Table 2, the number of individuals represented by the non-SSN records is unknown. Manual review of samples of record listings would reveal instances of duplication among non-SSN records.

A-1-3

wherein the names were essentially the same and the dates and places of birth matched exactly. This means that it is not currently possible to state the exact number of individuals contained in the 8.4 million record extract of the DCII.

Manual review also readily revealed numerous cases in which records with slightly different SSNs had the same name, date, and place of birth, and were thus presumably the same individual. The slight SSN variations consisted of one of the nine digits differing between the SSNs or two and three digit combinations being transposed. These instances suggest manual or keypunch errors either by those completing the forms or those entering the information into the DCII.

Special attention was given to those 2,100 records in which SSNs occurred more than eight times. They were reviewed manually and their relevant characteristics were categorized. Discussion of results will first focus on SSNs appearing 9-41 times and then on the four situations where the same SSN was found more than 100 times in the DCII. These analyses revealed that not only is the same individual found more than once in the DCII but that some of these times, the same investigation segment is repeated, while other times, different investigations or clearances are referenced.

Table 3 shows, for each number of duplications, how many total instances there were and for each characteristic studied, an index of consistency, along with the total number and number of unique segments.

TABLE 3 - Characteristics of Duplicate SSNs

Times SSN in DCII	Number of Instances	Index of Consistency							Total Segments	Unique Segments
		Year of Birth	Month of Birth	Day of Birth	Place of Birth	Last Name	First Name	Middle Name		
9	55	1.3	1.7	1.8	2.2	3.3	3.4	3.8	589	319
10	18	1.4	1.4	1.3	2.3	4.1	4.3	4.4	231	115
11	9	1.9	1.6	2.2	1.6	4.3	4.0	3.7	109	28
12	5	1.4	1.4	1.6	2.3	6.3	5.6	5.8	97	27
13	6	1.5	1.8	1.8	2.2	5.2	5.3	4.5	79	15
14	2	1.5	1.5	2.0	2.0	7.0	6.0	5.5	28	6
15	3	2.7	1.3	1.3	2.3	5.0	5.3	5.7	66	27
17	1	1.0	1.0	1.0	1.0	9.0	11.0	10.0	17	1
18	1	7.0	6.0	6.0	4.0	10.0	9.0	8.0	19	4
21	1	1.0	1.0	1.0	1.0	19.0	15.0	8.0	23	3
25	1	1.0	1.0	1.0	2.0	6.0	7.0	5.0	25	1
31	1	1.0	1.0	2.0	2.0	6.0	7.0	7.0	37	6
41	2	2.0	2.0	2.0	3.5	3.5	4.0	2.5	82	3
Overall	105	1.7	1.6	1.8	2.2	4.3	4.3	4.3	1,391	555

The consistency index used in Table 3 reflects the average number of different values taken on in each instance of duplication. For example, consider the 18 instances in which a SSN occurred in 10 different DCII records. In 12 of those instances, the day of birth data element was identical for all 10 records, while in the other six instances, two different days of birth were found among the 10 records. This could occur for example, if in nine records, a day of birth was carried as '12' and in the tenth it was coded '21' or if five were coded as '03' and the other five '30'. In either example, two different days of birth were found in the 10 records and the consistency index computation and interpretation would be the same. Here it is figured as the total number of different days of birth (12 instances with 1 each plus 6 instances with 2 each for a total of 24) divided by the total number of instances (18), which comes to 24 divided by 18 or 1.3 as shown on Table 3.

By definition, the minimum consistency index is 1.0, which indicates a single value for all records with the same SSN. The larger the consistency index, the greater the variation in values found for a given data element. Table 3 indicates that the date of birth data elements were somewhat more consistent than place of birth, while the name data elements were far less consistent. It also shows that of the total number of 1391 investigation and clearance segments contained in these records, only 555 are unique. This adds double-counting of segment types as another potential problem.

Three of the four groups of DCII records with SSNs appearing more than 100 times appear to be related in that they contain only Air Force Office of Special Investigation (OSI) segments and have incrementally related SSNs and birthdays. They all start with the same initial five digit sequence and terminate in '3333' (377 records), '5555' (129 records), and '7777' (270 records). The OSI investigations are coded as subject segments and include a wide variety of names and locator codes, (which would suggest different individuals) yet most show a birth date of 28 or 29 Feb. 1943 or 1944 ('3333'), 1945 ('5555'), or 1947 or 1948 ('7777'). Few list a place of birth.

The other set of records with a large number of SSN duplications (142 times) are primarily Army Criminal Records Division subject investigations. They contain a large number of different names, relatively few unique locator codes and almost all share the same date and place of birth.

This report has, to this point, identified aspects of the DCII which present processing and analytic complications. Foremost among these problems are the variable number of segments per record, duplication of certain SSNs and segments across records, and missing SSNs. Subsequent detailed examination of various subsets of DCII records has demonstrated that a more streamlined approach can be applied to future DCII analyses. This new

approach is expected to minimize, if not eliminate, the problems previously discussed. It will greatly simplify DCII working files in return for deleting certain investigation and clearance segments. Time can then be spent pursuing key analytic tasks rather than designing methods to bypass problems with the current file.

As shown on Table 1, most records in the 8.4 million record file contain only one or two segments. Yet, a few consisted of as many as 11 segments. A total of 964 records, with SSNs, contained more than six segments. These were studied in detail to determine the source of each segment. Table 4 lists the numbers and relevant percentages contributed by various sources. Of greatest importance is the relatively small number of DIS investigations and the fact that in only 10 of the 436 records containing DIS segments, was more than a single DIS segment found. Also, with regard to clearance segments, of the 518 records containing them, only three carried more than one.

TABLE 4 - Characteristics of Records (with SSNs)
Containing More Than Six Segments

Source	Records	Percent of Records	Segments	Percent of Total Segments
Army Criminal Records Division	644	66.8	3563	49.5
Air Force Office of Special Investigations	351	36.4	2084	29.0
Defense Investigative Service	436	45.2	446	6.2
Army Investigatory Records Repository	390	40.5	426	5.9
Naval Investigative Service	54	5.6	125	1.7
Air Force Personnel Security Investigations	29	3.0	32	0.4
Army Central Clearance Facility	346	35.9	346	4.8
Air Force Security Clearance Office	175	18.2	175	2.4
TOTAL	964	—	7197	100.0%

A manual review of record segments was also done for the first 3,000 records without SSNs. For this group also, few of the segments involved DIS investigations or clearances, the two types of segments of most interest in future studies involving the DCII. In this case, the 3,000 records contained 3,102 segments of which only 20 were DIS investigations and seven involved clearance adjudications. If these findings are projectable to the 1.4 million records without SSNs, then under 12,000 of them should contain these types of segments.

Partial confirmation of this projection is seen in Table 5, which presents the source of all type 0 segments found for 320 thousand non-SSN records with year of birth between 1938 and 1967. Note that the DIS segments constitute less than 1% of the total number of segments in this DCII subgroup.

TABLE 5 - Source of Investigation Segment

Source	Number of Segments	Percent of Segments
Army Criminal Records Division	136,054	40.8
Army Investigatory Records Repository	83,925	25.2
Naval Investigative Service	73,889	22.1
Air Force Office of Special Investigations	35,927	10.7
Defense Investigative Service	2,239	0.7
Air Force Personnel Security Investigations	1,622	0.5
TOTAL	333,656	100.0%

Since DIS background investigations are of primary interest, an analysis of the entire 8.4 million record file was made to determine, by year, the number of various kinds of DIS investigations in the DCII. A total of 1.8 million relevant segments were identified, including 372 different DIS case category codes. Many of these codes are not included among the 31 defined in attachment 8 of the current DIS Manual or the 159 listed in a recent DIS memorandum. The 178 case codes not defined by either of these documents have been forwarded to DIS for clarification.

Table 6 presents the most frequently found DIS case category codes from among the 1.8 million DIS investigation segments. In total, these 19 codes account for 1.6 million or 86.3% of the segments.

TABLE 6 - Most Frequent DIS Case Category Codes

Code	Number	Percent	Description	Code	Number	Percent	Description
1A1	329,020	17.8	Military BI	1B2	36,957	2.0	Civilian SBI
1A2	240,393	13.0	Military SBI	1D5	34,631	1.9	Military SBI-PR
1G1	225,398	12.2	Military Entrance NAC	1B1	32,853	1.8	Civilian BI
1G2	171,315	9.3	Military Standard NAC	1M2	32,251	1.7	Industrial ENAC
1K1	122,997	6.7	Military Entrance ENAC	1V9	24,840	1.3	Industrial ENAC, Suitability
1A7	66,652	3.6	Military SBI, Supplemental	1K2	23,615	1.3	Military Standard ENAC
1C1	66,123	3.6	Industrial BI	1E5	21,992	1.2	Civilian SBI-PR
1J2	52,320	2.8	Industrial NAC	1C3	20,539	1.1	Industrial E91
1C2	46,255	2.5	Industrial SBI	42 Others	231,361	12.5	1,000 - 20,000 Segments
1A3	45,550	2.5	Military E91	312 Others	22,768	1.2	1 - 999 Segments

Table 7 provides a look at how the 18 most frequently found case category codes have varied in terms of percentage of total annual cases since 1972 when DIS began conducting personnel security investigations.

TABLE 7 - Percent of Yearly DIS Codes

DIS Code	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
1A1	13.3	20.6	18.7	22.9	25.1	25.4	23.5	20.7	18.0	19.3	9.5	0.1
1A2	7.0	15.5	13.1	12.3	11.2	11.5	13.7	13.1	13.5	13.0	12.4	16.5
1B1	38.5	21.9	30.9	19.1	16.1	7.6	5.3	4.8	4.3	3.9	3.8	2.6
1B2	8.7	8.0	9.6	18.3	7.6	8.4	7.6	8.6	8.8	8.9	9.0	7.7
1K1	13.7	8.4	4.4	2.7	2.8	7.1	5.5	5.6	6.1	9.9	9.3	6.2
1A7	-	-	0.1	2.8	5.8	5.9	5.0	4.9	3.6	5.7	7.1	2.0
1C1	1.2	2.4	2.0	2.7	3.7	4.1	4.3	4.9	6.7	5.4	4.2	0.2
1J2	5.3	4.2	2.7	2.6	2.5	2.6	2.3	2.3	2.2	2.3	3.0	3.1
1C2	0.5	0.9	1.0	1.2	1.6	2.3	2.2	3.4	3.9	3.7	3.8	3.8
1A3	0.1	0.7	0.5	0.5	0.8	0.4	-	-	-	-	7.5	16.3
1B2	0.8	1.8	1.7	1.7	2.1	2.1	2.0	2.2	2.1	2.2	2.2	2.6
1D5	-	-	0.2	1.6	3.3	3.7	4.2	4.0	3.8	1.8	0.0	0.0
1B1	1.0	1.6	1.4	1.9	2.2	2.2	2.1	1.9	1.6	1.9	1.7	1.8
1M2	1.0	1.0	0.4	0.3	0.3	1.0	2.7	2.3	2.2	2.5	3.0	3.3
1V9	-	-	-	-	-	0.5	2.2	2.0	2.1	2.2	2.9	3.1
1K2	1.4	0.7	0.6	0.7	1.0	1.8	1.5	1.4	1.1	1.7	1.9	1.9
1E5	-	-	0.0	0.6	2.4	1.5	2.0	2.5	3.8	1.2	0.0	-
1C3	-	0.0	-	-	-	-	-	-	-	-	3.8	8.1
354 Others	7.5	12.3	12.7	8.1	11.5	11.9	13.9	15.4	16.2	14.4	14.9	20.7

It it clear from these tables that many of the DIS segments refer to national agency checks, which developed negative information, rather than to background investigations such as BIs, SBIs, or EPIs. The DIS case category codes will, therefore, be critical in defining future studies and analyses.

In sum, the probing of the DCII that has been conducted to date indicates that little of critical interest would be lost if the 8.4 million record working file were further condensed by deleting non-DIS investigative segments. Also, in those few cases with multiple DIS or clearance segments, only the most recent would be retained. These adjustments should produce a more streamlined DCII working file with far fewer records, a maximum of two segments per record, and minimal problems with missing and duplicate SSNs.

As an example of how this adjustment would work, consider again those instances in which more than 5 records shared the same SSN. By only including DIS investigations and clearance segments, what were 2,100 records now become 63, of which 5 require no special attention since at most, a simple type 1 and type 5 segment are found for a given SSN. In the 58 other records, which had two different DIS segments on the same record, the earliest is

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which will be deleted. Additionally, five involve different DIS
segments on different records with the same SSN and 17 have the
same DIS or clearance segments on different records. Elimination
of duplicate segments and retention of only the most recent will
reduce these 22 records to five. Finally, seven records contain
unique DIS and clearance segments, which when only the most recent
are retained will yield two records. Table 8 provides a summary
of these manipulations and a comparison with the initial situa-
tion.

<u>Table 8</u> – Impact of Planned Adjustments to DCII
Working File

	Before Adjustments	After Adjustments
Total records	2,100	41
Total DIS segments	43	26
Total clearance segments	26	20
Unique DIS segments	30	26
Unique clearance segments	25	20

For these records then, the cost of simplifying the file by
deleting 98% of the 2,100 records is the loss of four DIS and five
clearance segments for five of the 41 individuals involved. For
these individuals, the unique segments dropped and remaining are:

<u>Dropped</u>   Remaining

18 Jan 73, Industrial File NAC   5 Oct 80, Industrial File NAC
19 Mar 73, Industrial File NAC

19 Oct 75, Military EI   21 Mar 77, Military (Entrance)
                                            File NAC

2 June 77, Industrial ENAC   9 Nov 77, Industrial ENAC,
                                            Security

22 Jul 74, Air Force-favorable   11 Aug 80, Air Force-Secret
       adjudication.
22 Aug 75, Air Force-Secret
14 Jul 80, Air Force-Secret

29 Jun 77, Air Force-Secret   22 Nov 80, Air Force Top Secret
13 Nov 80, Air Force Secret

DEFENSE INVESTIGATIVE SERVICE INVESTIGATIONS AND
ARMY AND AIR FORCE ADJUDICATIONS IN THE DCII

May 1984

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Report 84-2

DEFENSE INVESTIGATIVE SERVICE INVESTIGATIONS AND ARMY AND AIR FORCE ADJUDICATIONS CONTAINED IN THE DCII (AS OF OCTOBER 1983)

Subfile Development

An earlier report described the complexities involved when attempting to deal with a DCII subfile consisting of all subject investigation and adjudication segments. Based on the findings discussed in that document, further manipulations were accomplished. The resulting DCII extract, known as the "2 most recent segments" subfile is the subject of this paper. Documentation of the characteristics of this extract is important, because this file serves as the DCII input into a series of cohort and inventory matching studies now underway. Their results will be reported separately, but require a familiarity with the information to be presented here.

The initial DCII subfile described in the first report in this series consisted of 9.9 million segments within 8.4 million records. The "2 most recent segments" subfile contains 4.5 million segments within 3.9 million records. What was discarded along the way will be discussed next, followed by a description of the relevant characteristics of what remains.

The intent in creating the "2 most recent segments" subfile was to simplify the original subfile by eliminating non-DIS investigation segments, multiple records per subject, and records without valid SSNs. It was recognized that a small price would be paid to accomplish these objectives; that price being the loss of some unique DIS and clearance segments. The subfile manipulations consisted of three main steps: 1) reducing each record to (at most) the most recent DIS investigation segment and the most recent Army or Air Force adjudication segment, 2) deletion of records without valid SSNs, and 3) concatenation of records sharing the same SSN into a single record with only the most recent DIS investigation and/or adjudication segments. Table 1 summarizes the status of the subfile at each step. The total loss of DIS segments represents 1.9% of those in the full DCII, while the dropped adjudication segments represent 3.0% of the DCII adjudication segments.

TABLE 1 - DCII Subfile Characteristics

Stage	Records	DIS Segments	DIS Segments Dropped	Adjudication Segments	Adjudication Segments Dropped
Initial subfile	8,439,458	1,847,130	None	2,793,089	None
Within record concatenation	4,059,812	1,835,672	11,458	2,781,827	11,262
Deletion of invalid SSNs	4,055,072	1,831,698	3,974	2,780,576	1,251
Elimination of duplicate SSNs	3,926,455	1,812,575	19,123	2,710,303	70,273
TOTAL			34,555		82,786

As predicted in the earlier report, only a small number of records without valid SSNs contained DIS investigation or adjudication segments. Only 4,740 such records were identified. Of this number, 143 did not appear to be meaningful DCII records, as indicated by numeric data in the fields reserved for names or such "names" as--Test Record Deletion, Input Test DCII, and Input Test Saturday. Also, 174 instances of two or more records per individual were readily identified, some with unique DIS and/or adjudication segments and others with duplicate segments.

Examination of the DIS case categories for the 3,974 segments without valid SSNs reveals over 70% to be civilian investigations, while few are military EIs and SBIs, which are of greatest interest. Most of the 1,251 clearance segments are either at the secret level or reflect no clearance being issued. Relatively few are of the more analytically interesting top secret, SCI, revoked or denied varieties.

Most of the segments that were dropped were excluded in the final step of the process, when duplicate SSNs were eliminated. A 200 case sample of duplicate SSNs was examined to estimate the relative proportions of unique and duplicate segments that would be dropped when the duplicate SSN records were combined. Analyses of these cases yields estimates of only about 20% of the eliminated DIS segments being unique, while about 90% of the eliminated adjudication segments are estimated to be unique. Recall that the methodology adopted, in cases where a unique segment required deletion, always retained the most recent segment.

Examination of the reasons for duplicate SSN records for this 200 case sample revealed three dominant causes. In 68% of the cases, the middle name differed. Mostly, this involved one record with only a middle initial and the other with a full middle name. A second major cause of record duplication was differing last names. This was found in 28% of the sample cases and mostly appeared as a result from women changing from maiden to married names. Finally, place of birth differences were noted in 18% of the 200 cases sampled. Here the typical situation found one record with a place of birth and the other with none recorded.

DIS Investigations

The 1.8 million DIS segments in the "2 most recent segments" subfile consist of 350 different DIS case category codes. However, most of the segments fall within a relatively small number of these codes. Table 2 presents the 20 most frequent case category codes, the number of segments containing those codes or their related added coverage code, and the cumulative percent of the total DIS segments in the subfile. Note that these codes account for over 90% of the DIS segments. The additional 21 codes in Appendix A bring the cumulative percent up to 98.5% and leave only 27,414 segments to be found among 272 other DIS case category codes.

In addition to the case category code, several other attributes of DIS type 0 DCII segments in the "2 most recent segments" subfile were reviewed; these included year of file, retention, context, and status code. Year of file and retention are cross-tabulated in Table 3. Virtually all DIS segments are retained for 15 years. Only for those segments added in 1983 is this near uniformity not the case, with nearly a quarter of the DIS segments having an unspecified retention period.

TABLE 2 - Most Frequent DIS Case Category Codes

Case Category Code	Description	Number	Cumulative Percent
1A1	Military BI	326,754	18.0
1A2	Military SBI	255,668	32.1
1G1	Military (Entrance) File NAC	220,031	44.3
1G2	Military (Standard) File NAC	168,497	53.6
1K1	Military (Entrance) ENAC	121,438	60.3
1A7	Military SBI, Supplemental	70,120	64.1
1C1	Industrial BI	69,473	68.0
1J2	Industrial File NAC	51,548	70.8
1C2	Industrial SBI	49,054	73.5
1A3	Military IBI	46,857	76.1
1B2	Civilian SBI	39,456	78.3
1D5	Military SBI-PR (Limited)	36,355	80.3
1M2	Industrial ENAC	32,718	82.1
1B1	Civilian BI	30,821	83.8
IV9	Industrial ENAC, Suitability	26,855	85.3
1K2	Military (Standard) ENAC	23,392	86.6
1E5	Civilian SBI-PR (Limited)	22,273	87.8
1C3	Industrial IBI	20,756	88.9
1XX	Other Agency Investigations	19,111	90.0
1P3	Military SBI, Suitability	17,132	90.9

TABLE 3 - Retention of DIS Segments by Year of File

	1972 %	1973 %	1974 %	1975 %	1976 %	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %	1983 %	Total N %
1-10 years	-	-	-	-	-	-	.1	-	-	.5	1.3	1.3	5,405 .3
15 years	99.7	99.7	98.7	99.6	99.3	98.2	99.3	99.5	99.4	98.5	97.8	75.5	1,754,526 96.8
25-30 years	.1	.3	1.3	.4	.1	1.0	.6	.5	.6	1.0	.9	.3	11,003 .6
Unspecified	.2	-	-	-	.6	.8	-	-	-	-	-	22.9	41,640 2.3
TOTAL N	89,458	156,102	168,560	146,318	122,170	135,510	137,945	158,611	184,633	168,772	173,152	171,343	1,812,574*
%	4.9	8.6	9.3	8.1	6.7	7.5	7.6	8.8	10.2	9.3	9.6	9.5	100%

*Excludes one segment with year of file coded as 89 and retention as 25 years.

TABLE 4 - Status of DIS Segments by Year of File

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	Total
Tracings	20.6	39.9	44.0	56.1	65.9	71.6	77.4	80.4	81.4	80.3	79.6	61.4	1,177,355* 65.0
Open Cases	-	-	-	-	.4	.5	-	-	-	-	-	20.3	36,222 2.0
Unspecified	79.4	60.1	56.0	43.9	33.7	27.9	22.6	19.6	18.6	19.7	20.4	18.3	598,997 33.0

*Excludes one tracing segment with year of file coded as 89.

Documentation of the context codes indicated that "s" subject and blank were the only valid codes other than "x"-cross reference and "v" victim, the latter two which had been purposefully excluded in the initial subfile development phase. Of the 1.3 million DIS segments in the "2 most recent segments" subfile, only 115 had blank context codes, with most of these (58) showing in 1980 segments.

Status code documentation defined two types of segments, tracings and open cases. As Table 4 shows, a third (unspecified) code was also encountered. The table indicates an increasing percentage of "tracing" codes between 1972 and 1978, from 20% to about 30%. That latter figure held steady until 1983, when 20% of the status codes indicate open cases. That year is the only one in which more than a negligible number of open cases was found.

Because of the large number of different DIS case category codes and the similarities of many to each other, a new data element was created. Termed consolidated case category, it will simplify future use of the subfile. Table 5 presents the totals and percentages within the primary aggregations of DIS segments in the consolidated categories. The percentages are computed against the total number of DIS segments in the "2 most recent segments" subfile. This table shows that most of the DIS investigations in this DCII subfile (81.4%) are military or industrial BIs, SBIs, or HACs.

TABLE 5- Consolidated Case Categories

	Military	%	Civilian	%	Industrial	%	Total	%
BI	344,121	19.0	32,515	1.8	74,595	4.1	451,431	24.9
BI-PR	17,943	1.0	4,135	.2	4,949	.3	27,033	1.5
SBI	43,139	18.9	52,540	2.9	54,431	3.5	460,250	25.4
SBI-PR	35,932	2.0	22,531	1.2	3,301	.5	57,914	3.7
IBI	52,200	2.9	910	.1	27,750	1.5	80,350	4.5
PR	9,133	.5	5,041	.3	15,400	.9	29,723	1.5
HAC	35,518	29.5	7,517	.4	113,549	5.3	655,534	36.2
Other	2,503	.1	349	.1	14,373	.8	17,330	1.0

Subtotal	1,312,575 98.9
Miscellaneous	20,331 1.1

Clearances

The "2 most recent segments" subfile contains 1.3 million Army and 1.4 milion Air Force adjudication segments. The major types of clearance sttus and the year of adjudication are given on Table 6. For the Army segments in this subfile, the predominant clearance status is "secret". Most (80%) of the Army segments were adjudicated since 1980, while less than 1% were adjudicated prior to 1975. The Air Force adjudication segments are similar in that most (74%) are "secret". However, they differ in that a sizeable portion (23%) were adjudicated before 1975.

In addition to the clearance status and adjudication date, DCII clearance segments contain the basis for the clearance and the date of the reviewed investigation. Army segments also indicate the reason for the adjudication action. Table 7 summarizes the subfile contents with regard to the basis for clearance as a function of clearance status. While the DCII documentation lists 23 valid codes for clearance basis, the five specified in Table 7 account for all but a few percent of the segments in the subfile.

Over 90% of the Army's "secret" clearances were based on an NAC or ENTAC, while virtualy all "top secrets" were based on a BI and "SCIs" on an SBI. Almost all "secret" Air Force clearances resulted from an NAC, ENTAC, or NACI. Two-thirds of the remainder resulting from SBIs. Virtually all SCI eligibility was based on an SBI.

Additional analyses involved the dates of investigation and adjudication. The year of investigation was subtracted from the year of adjudication to establish the approximate delay between the two events. A result of zero would occur if the adjudication occurred in the same year as the investigation. The larger the computed difference, the greater time elapsed between investigation and adjudication. The findings from this analysis are presented by clearance status on table 8.

In the Army, most adjudications occur within a year of the security investigation, with 5% at six years or beyond. Differences are noted by clearance status. For SCT and revocation/denial actions, over 90% fall in the same or one year difference categories and only 1% at six years or beyond. The top secret clearance categories were noteworthy for having the hightest percentages at six years or beyond, 28% and 11% respectively.

Overall, in comparison with the Army, the Air Force had a higher percentage (90% vs. 82%) within the first two difference categories and about the same (4% vs. 5%) at six years or beyond. The only major Air Force clearance category to differ substantially from the others was the one indicating adjudication of an unfavorable investigation terminated with no clearance issued.

TABLE 6 - Clearance Status and Year of Adjudication

Army

							Clearance Status								
Year of Adjudication	Secret/AR50/5 (PRP, Surety)		Secret/Denied Surety		SCI		Top Secret/Denied Surety		Top Secret/AR50-5 (PRP, Surety)		Revoked/ Denied		Other		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1983	90,076	13.7	24,004	6.4	16,517	14.8	5,628	12.6	6,304	18.9	4,412	14.0	18,275	98.9	165,216	13.0
1982	195,929	29.8	26,011	6.9	15,777	14.1	6,560	14.7	7,056	21.2	6,223	19.7	297	1.4	257,853	20.2
1981	236,888	36.0	22,315	6.0	13,950	12.5	4,944	11.1	7,308	22.0	6,065	19.2	97	.5	291,567	22.9
1980	129,624	19.7	143,406	38.2	14,144	12.6	5,224	11.7	6,217	18.7	4,098	13.0	1,139	5.4	303,852	23.8
1975-1979	5,798	.9	159,184	42.5	44,031	39.4	21,104	47.3	6,390	19.2	10,732	34.0	1,219	5.8	248,458	19.5
Other	200	-	54	-	7,433	6.6	1,158	2.6	1	-	1	-	1	-	8,848	.7
Total N	658,515		374,974		111,852		44,618		33,276		31,531		21,028		1,275,794	
%	51.6		29.4		8.8		3.5		2.6		2.5		1.6		100.0	

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TABLE 6 - Clearance Status and Year of Adjudication (Continued)

Air Force

Clearance Status

Year of Adjudication	Secret N	%	Top Secret N	%	Top Secret/ SCI Eligible N	%	Favorable/No Clearance N	%	Unfavorable/ No Clearance N	%	Other N	%	Total N	%
1983	108,365	10.2	21,533	8.4	12,652	18.3	2,955	16.3	4,490	32.5	5,243	36.4	155,238	10.8
1982	140,364	13.2	25,306	9.9	14,811	21.4	3,278	18.1	4,180	30.3	4,286	29.8	192,225	13.4
1981	146,711	13.8	22,028	8.6	13,679	19.8	3,894	21.5	2,802	20.3	1,595	11.1	190,709	13.3
1980	123,870	11.7	22,422	8.7	12,756	18.5	3,070	16.9	1,107	8.0	2,243	15.6	165,468	11.5
1975-1979	301,328	28.4	79,654	31.0	15,012	21.7	4,756	26.2	1,228	8.9	1,006	7.0	402,984	28.1
Other	241,726	22.7	85,797	33.4	181	.3	168	.9	-	-	13	.1	327,885	22.9
Total N %	1,062,364 74.1		256,740 17.9		69,091 4.8		18,121 1.3		13,807 1.0		14,386 1.0		1,434,509 100.0	

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TABLE 7 - Clearance Status by Basis for Clearance

Army

Basis	Secret/AR 50-5 (PRP, Surety)		Secret/Denied Surety		SCI		Top Secret/ Denied Surety		Top Secret/AR 50-5 (PRP, Surety)		Revoked/ Denied		Other		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
ENTNAC	483,618	73.4	234,426	62.5	19	-	17	-	5	-	1,201	3.8	255	1.2	719,541	56.4
NAC	128,185	19.5	117,020	31.2	54	-	124	.3	15	-	873	2.8	207	1.0	246,478	19.3
NACI	46,101	7.0	21,222	5.7	1	-	6	-	2	-	21	.1	569	2.7	67,922	5.3
BI	602	.1	1,711	.5	108	.1	38,727	86.8	32,733	98.4	521	1.7	488	2.3	74,890	5.9
SBI	3	-	454	.1	111,569	99.7	5,125	11.5	485	1.5	1,245	3.9	343	1.6	119,224	9.3
Other	6	-	141	-	101	.1	619	1.4	36	.1	27,670	87.8	19,166	91.1	47,739	3.7

TABLE 7 - (Continued)

Air Force

Basis	Secret N	%	Top Secret N	%	Top Secret/SCI Eligible N	%	Favorable/No Clearance N	%	Unfavorable/No Clearance N	%	Other N	%	Total N	%
ENTNAC	516,581	48.6	8	-	1	-	6,640	36.6	6,409	46.4	2,236	15.5	531,875	37.1
NAC	322,679	30.4	64	-	2	-	7,471	41.2	1,948	14.1	3,016	21.0	335,180	23.4
NACI	213,707	20.1	6	-	-	-	104	.6	1,125	8.1	3,457	24.0	218,399	15.2
BI	2,650	.2	172,948	67.4	4	-	294	1.6	1,732	12.5	2,158	15.0	179,786	12.5
SBI	69	-	75,673	29.5	67,935	98.3	3,375	18.6	1,806	13.1	3,067	21.3	151,925	10.6
Other	6,678	.6	8,041	3.1	1,149	1.7	237	1.3	787	5.7	452	3.1	17,344	1.2

TABLE 8— DIFFERENCE BETWEEN YEARS OF INVESTIGATION
AND ADJUDICATION BY CLEARANCE STATUS

Army

Difference In Years	Secret/AR50-5 (FDP Surety)	Secret/Denied Surety	SCI	Top Secret/Denied Surety	Top Secret/AR50-5 FDP, Surety	Revoked/Denied	Other	Total
Same	79.6%	58.7%	70.7%	49.0%	76.1%	65.5%	96.5%	72.2%
1	7.3	14.3	12.1	10.1	5.7	26.2	1.5	10.2
2	3.1	8.6	2.4	3.7	1.7	3.6	.5	4.6
3-5	5.8	12.1	4.7	9.6	5.6	3.4	.9	7.6
6-10	3.1	4.8	1.0	15.3	5.3	.9	.3	3.9
11-15	.6	1.0	-	9.1	4.0	.2	.2	1.0
16 or more	.4	.4	-	3.2	1.6	-	.1	.5
Total	99.9%	99.9%	99.9%	100.0%	100.0%	99.8%	100.0%	100.0%

TABLE 8- DIFFERENCE BETWEEN YEARS OF INVESTIGATION
AND ADJUDICATION BY CLEARANCE STATUS

Air Force

Difference In Years	Secret	Top Secret	Top Secret/ SCI Eligible	Favorable No Clearance	Unfavorable No Clearance	Other	Total
Same	86.6%	85.6%	73.8%	80.1%	16.4%	42.1%	84.6%
1	5.0	3.8	13.7	11.4	21.5	18.7	5.6
2	1.7	1.2	4.1	2.8	18.7	9.1	2.0
3- 5	3.1	3.3	6.7	3.7	32.9	13.0	3.7
6-10	2.0	3.5	1.6	1.2	7.9	6.5	2.4
11-15	.3	1.6	—	.2	1.6	3.1	1.0
16 or more	.7	.9	—	.5	1.0	7.5	.8
Total	99.9%	99.9%	99.9%	99.9%	100.0%	100.0%	100.0%

ARMY AND AIR FORCE ADJUDICATIONS DURING FY83 AND DIS
INVESTIGATION AND CLEARANCE STATUS OF DOD PERSONNEL AS OF
THE END OF FY83

June 1984

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Report 84-3

ARMY AND AIR FORCE ADJUDICATIONS DURING FY 83
AND DIS INVESTIGATION AND CLEARANCE STATUS OF DOD PERSONNEL
AS OF THE END OF FY 83

This report summarizes the results of recent analytical stud-
ies of two automated data bases constructed in support of the DOD
Personnel Security Research Program. Information on FY 83 adjudi-
cations was obtained from an extract of the Defense Central Index
of Investigations (DCII) containing the most recent adjudication
and DIS "0" investigation segments carried as of October 1983.
Type "0" DIS segments include background investigations, special
background investigations, and periodic reviews. Also included
are those NACs and ENTNACs which contain unfavorable information,
whether or not the investigation was expanded. Other national
agency checks, which do not contain unfavorable information are
carried in the DCII as type "1" and "2" segments and are not con-
sidered in this report.

Investigation and clearance data analysis for DOD personnel
utilized a series of files developed from a matching of the just
described DCII extract with the end of September 1983 DOD person-
nel master files maintained by the Defense Manpower Data Center
(DMDC). A previous report in this series documents the develop-
ment and content of the DCII extract utilized in this study.
Navy and Marine Corps adjudications are not currently input into
the DCII.

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FY 83 Army and Air Force Adjudications

The number and type of Army and Air Force adjudications enter-
ed into the DCII in FY 83 is shown on Table 1. For the Army, nine
different codes were used. The "M" and "S" secret level categor-
ies accounted for 73% of the 180 thousand entries, followed in
magnitude by the 10% of SCI level clearances. A total of 17 Air
Force codes were encountered with the "S" secret code found in
71% of the nearly 183 thousand Air Force adjudications. Also,
13% were coded top secret and 8% top secret/eligible for SCI.

Table 2 displays the types of investigations utilized to ar-
rive at the various clearance status codes during FY 83. In both
the Army and Air Force, secret clearance status was granted based
almost exclusively on the various types of national agency checks.
Virtually all SCI level clearances in each service resulted from
special background investigations. Most top secret clearances
were based on background investigations, although 12% of the Army
"T" clearances and 29% of the Air Force "T" top secret clearances
showed an SBI.

Army adjudicatons in the DCII contain a data element describ-
ing the reason for adjudicative action. Table 3 lists the reasons
for review under each clearance status. Most secret and top sec-
ret clearances showed "surety" as the reason for review. SCI
clearances were split about evenly between "surety" and "special
intelligence."

TABLE 1 - FY 83 CLEARANCE ACTIONS

Army

CODE	NUMBER	PERCENT	DESCRIPTION
M	102,321	56.8	Secret/AR50-5 (PRP-Surety)
S	28,698	15.9	Secret
V	18,537	10.3	SCI
X	10,807	6.0	Pending Action at CCF
N	7,635	4.2	Top Secret/AR50-5 (PRP-Surety)
T	6,805	3.8	Top Secret
R	5,343	3.0	Revoked/Denied
F	31	0.0	Favorable/No clearance requested
C	13	0.0	Confidential
Total	**180,190**	**100.0%**	

Air Force

CODE	NUMBER	PERCENT	DESCRIPTION
S	129,390	70.8	Secret
T	24,530	13.4	Top Secret
V	15,132	8.3	Top Secret/Eligible for SCI
Z	4,711	2.6	Terminated/No clearance issued/ unfavorable investigation
Y	3,547	1.9	Pending adjudication
F	3,340	1.8	Favorable/No clearance authorized
L	512	0.3	Restricted to nonsensitive position
O	443	0.2	Terminated/No clearance issued/ favorable investigation
W	304	0.2	Top Secret/Ineligible for SCI
A	298	0.2	Investigation reopened
U	130	0.1	Top Secret/Interim access to SCI granted
R	129	0.1	Clearance revoked
C	81	0.0	None
I	61	0.0	Investigation initiated
D	22	0.0	Clearance denied
X	11	0.0	Terminated while pending adjudication
E	1	0.0	Top Secret/Ineligible for SIOP
Total	**182,642**	**99.9%**	

TABLE 2 – FACTS FOR CLEARANCE BY CLEARANCE STATUS

ARMY – Clearance Status

Basis	P		S		V		X		T		R		Total*	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
ETTMC	57,506	55.2	15,303	53.6	--	--	--	--	--	--	157	2.9	72,056	40.0
PMC	30,512	29.8	10,856	37.?	--	--	--	--	--	--	90	1.7	41,458	23.0
MMCT	15,177	14.8	2,206	8.0	--	--	--	--	--	--	9	.2	17,482	9.7
PT	126	.1	137	.5	--	--	7,433	97.4	5,993	88.1	171	3.3	13,863	7.7
ST	--	--	16	.1	18,523	100.0	201	2.6	802	11.8	435	2.1	19,883	11.1
Other	--	--	--	--	--	--	10,807	100.0	--	--	4,461	23.5	15,268	8.5
Misc.	--	--	--	--	0	--	1	--	10	.1	17	.3	36	--
Total N	103,321		28,698		18,537		10,807		7,535		6,905		5,343		180,146

*Excludes 31 units with "M" status (30 MMCT and 1 PT) and 12 with "C" status (10 ETTMC, 1 PMC, 1 MMCT, and 1 ST).

Air Force – Clearance Status

Basis	C		T		V		Z		Y		F		Other		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
ETTMC	72,792	59.5	--	--	--	--	2,519	53.5	1,183	33.4	1,251	38.4	119	6.0	72,994	40.5
PMC	34,547	28.7	--	--	--	--	577	12.0	640	18.0	996	29.5	356	17.9	37,092	20.3
MMCT	25,794	10.0	--	--	--	--	424	9.0	338	9.5	21	.6	853	42.3	77,430	15.0
PT	90	.1	15,?31	90.5	14,004	92.7	527	11.2	624	17.6	100	3.0	164	8.2	17,326	9.5
ST	12	--	6,?82	29.1	1,077	7.1	598	12.7	749	21.1	896	26.8	407	20.4	22,579	12.9
SPT/PU	168	.1	63	.3	21	.?	30	1.7	1	--	53	1.6	--	--	1,214	.7
Misc.	--	.1	--	7.0	--	.?	--	--	12	.3	3	.1	93	4.7	2,107	1.2
Total N	122,380		1,724		15,122		4,711		3,547		3,340		1,992		182,012

TABLE 3 - Reason For Adjudicative Action By Clearance Status

Army -- Clearance Status

Reason For Review	:		S		V		X		N		T		P		Total*	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Surety Review	102,299	100.0	22,174	98.2	9,008	46.1	10,807	100.0	7,248	94.0	5,722	94.2	–	–	152,551	84.7
Special Rec'd	20	–	50	.2	50	.3	–	–	–	–	–	–	1,418	26.5	12,345	6.9
Intelligence	–	–	147	.6	8,976	47.9	–	–	81	1.1	393	5.8	817	15.3	10,314	5.7
Clearance	–	–	–	–	–	–	–	–	–	–	–	–	3,046	57.0	3,046	1.7
Revalidation	–	–	210	1.1	70	.4	–	–	229	3.0	640	9.4	4	.1	1,033	.6
White Paper	–	–	–	–	21	.1	–	–	28	–	28	.4	–	–	332	.2
Other	2	–	17	.1	412	2.2	–	–	17	.2	12	.2	56	1.0	517	.3
Total N	102,321		22,608		19,537		10,807		7,635		6,805		5,343		180,146	

*Excludes 21 with "P" status and "L" loyalty code; and 12 with "C" status and "P" surety code.

DCII adjudication records contain dates for both the adjudication and the investigation on which it is based. An analysis was done to determine the period between these dates. Table 4 presents the results of this analysis for the FY 83 Army and Air Force clearance actions. Review of the cumulative percentage columns on this table shows the Air Force to have a much higher percentage of adjudications within a very short (at 1 month 72% vs. 40%) period after the investigation. This gap is mostly made up by the 11 month period where it is only 80% vs 73% and it disappears at the 10 year point, where both services show a cumulative value of 97%.

TABLE 4 — Period Between Adjudication Date and
Date Of Investigation On Which Clearance
Action Is Based

Army				Air Force		
Number	Percent	Cumulative Percent	Period	Number	Percent	Cumulative Percent
31,000	17.7	17.7	Same Month	130,170	74.0	54.0
36,486	21.0	38.6	1 Month	31,113	17.0	71.0
23,160	12.9	52.4	2 Months	3,500	1.0	72.0
9,274	5.5	57.9	3 Months	1,670	0.0	74.7
26,024	15.0	73.0	4–11 Months	9,510	5.0	79.0
9,200	5.2	78.0	1–2 Years	7,200	4.0	83.0
19,901	11.1	89.1	2–5 Years	13,000	7.0	91.0
14,300	8.1	97.2	5–10 Years	9,010	5.1	96.0
4,000	2.8	100.0	Over 10 Years	5,607	3.1	100.0
170,100	100.1%		Total	170,600*	99.9%	

*Excludes 13 cases in which investigation date follows (instead of precedes) adjudication date.

Clearance Status of Army and Air Force Personnel (End of FY 83)

Analyses were done to determine how many and what kind of
clearances were issued to Army and Air Force personnel on board
at the end of FY 83. Table 5 summarizes the findings for offi-
cers, enlisted, and civilian personnel. The DCII-master file
matching revealed a clearance entry for half of the Army person-
nel and all but 2% of Air Force personnel. In both cases the per-
centages with clearances were higher among the military than the
civilians.

Also, in both services, officers had a far higher percentage
of SCI clearances than their enlisted and civilian counterparts.
Most enlisted and civilian personnel with clearances had secret
rather than top secret or SCI adjudication codes, while more of-
ficers had top secret or SCI clearances than secret.

Small percentages of Navy and Marine Corps personnel were
found with Army and Air Force clearances. The figures were 2%
each for civilians, 1% each for enlisted, and 1% for Navy officers
and 1% for Marine Corps officers.

TABLE 5 - Clearance Status Of Army And Air Force Personnel

Code	Army Description	Officer N	%	Enlisted N	%	Civilian N	%	Total N	%
-	Not in DCII	42,252	39.9	254,365	39.0	274,049	76.0	570,666	50.2
M	Secret/AR50-5(PRP-Surety)	12,261	11.6	230,360	34.5	43,252	12.0	296,373	25.2
S	Secret	11,208	10.7	111,056	16.7	22,932	6.6	147,196	13.0
V	SCI	22,705	21.4	31,914	4.8	9,044	2.5	63,563	5.6
T	Top Secret	6,415	6.1	14,753	2.2	4,693	1.3	25,961	2.3
N	Top Secret/AR50-5 (PRP-Surety)	9,733	9.2	9,748	1.5	3,672	1.0	23,153	2.0
Y	Pending Action at CCF	1,094	1.0	10,388	1.6	1,027	0.3	12,509	1.1
R	Revoked/Denied	77	0.1	4,816	0.7	290	0.1	5,183	0.5
-	Other Codes	113	0.1	507	0.1	701	0.2	1,321	0.1
Total		105,948	100%	660,312	100%	360,555	100%	1,135,815	100%

Code	Air Force Description	Officer N	%	Enlisted N	%	Civilian N	%	Total N	%
-	Not In DCII	477	0.5	2,864	0.6	14,226	6.8	17,567	2.1
S	Secret	35,025	33.4	351,742	72.9	191,988	70.9	578,755	70.1
T	Top Secret	51,235	48.9	84,277	17.5	25,258	10.6	160,070	19.5
V	Top Secret/Eligible For SCI	17,306	16.5	34,710	7.2	3,668	1.5	55,774	6.8
F	Favorable/No Clearance Authorized	148	0.1	4,371	0.9	76	0.0	4,605	0.6
Y	Pending Adjudication	230	0.2	3,047	0.6	579	0.2	3,856	0.5
-	Other Codes	368	0.4	2,332	0.5	1,508	0.7	4,208	0.5
Total		104,770	100%	483,443	100%	237,493	100%	825,725	100%

DIS Investigation Status of DOD Personnel (End of FY 83)

Table 5 displays the overall results of analyses on the type "O" DIS investigations conducted on enlisted, officer, and civilian personnel in the Department of Defense. It shows that at the DOD level, about half the officers, 20% of the enlisted personnel and 10% of the civilian employees have one of the 350 DIS case category codes found in the DCII. Fortunately, for the sake of exposition, most have one of a relatively small number of these case category codes. As shown on Table 6, predominant among the DIS investigations are military PI's and SBI's for the officers and enlisted personnel, and civilian PI's and SBI's for the civilian DOD employees.

Among the services, the Air Force was found to have the greatest percentage of officer (56%), enlisted (26%), and civilian (10%) personnel with DIS type "O" investigations, while the Marine Corps had the smallest. Comparable Marine Corps figures were 42% (officers), 12% (enlisted), and 4% (civilians). The Army and Navy fell within these ranges for each of the three types of personnel.

Table 6 - Types of DIS Investigation by Service

Enlisted

DIS Codes	Description	Army N	Army %	Navy N	Navy %	Marine Corps N	Marine Corps %	Air Force N	Air Force %	DOD N	DOD %
1M/A	Military PT	20,306	3.0	28,182	5.0	5,936	3.3	40,150	8.3	94,474	5.2
1M/B	Military STI	27,906	4.2	16,475	3.4	3,731	2.1	41,574	8.6	89,689	5.0
1B/C	Military STI/PR	5,991	.9	8,550	1.8	1,066	1.1	7,595	1.7	24,474	1.4
1M/E	Military STI, supplemental	4,374	.7	4,296	.9	514	.3	9,283	1.9	18,467	1.0
1S/E	Military STI, PR (limited)	2,367	.4	3,074	.6	298	.2	4,653	1.0	10,392	.6
1P/C	Military STI, suitability	4,353	.7	2,023	.4	409	.2	3,382	.7	10,167	.6
1Q/C	Military PT, suitability	2,147	.3	2,251	.5	943	.2	1,935	.4	6,676	.4
1D/C	Military PR	1,098	.2	707	.1	101	.1	2,084	.4	3,990	.2
1Q	Military (standard) file PAC	25,023	3.7	11,151	2.3	2,041	1.2	5,321	1.1	43,546	2.4
1T/A	Military (entrance) PAC	11,222	1.7	9,590	2.0	2,943	1.7	3,586	.7	27,451	1.5
1U	Military (entrance) file PAC	8,326	1.2	8,553	1.8	1,954	1.1	2,894	.6	21,757	1.2
—	Other DIS type "Q" investigations	6,245	.9	4,953	1.0	976	.5	5,244	1.1	17,318	1.0
—	No DIS type "Q" investigations	510,871	82.2	303,601	70.4	154,040	88.0	332,332	73.5	1,412,043	79.7
	Total Number	660,212		403,525		175,064		483,443		1,811,344	

Officer

DIS Codes	Description	Army N	Army %	Navy N	Navy %	Marine Corps N	Marine Corps %	Air Force N	Air Force %	DOD N	DOD %
1M/A	Military PT	14,170	13.4	12,992	19.0	3,541	17.7	16,406	15.7	47,109	15.8
1M/B	Military STI	13,202	12.5	7,625	11.1	1,605	8.0	18,547	17.7	41,000	13.7
1T/C	Military STI, supplemental	8,172	7.7	7,232	10.6	1,249	6.3	10,674	10.2	27,388	9.1
1B/C	Military STI/PR	2,530	2.4	3,426	5.0	577	4.4	3,967	3.8	10,859	3.6
1S/E	Military STI, PR (limited)	2,846	2.3	2,093	3.1	247	1.2	3,390	3.2	8,172	2.7
1D/C	Military PR	1,224	1.3	708	1.0	75	.4	1,291	1.2	3,371	1.1
1M/F	Military PT, supplemental	567	.3	335	.5	59	.3	705	.7	1,366	.5
1S/A	Military PT, PR	370	.3	291	.4	51	.3	570	.5	1,275	.4
1P/C	Military STI, suitability	448	.4	278	.4	60	.3	433	.4	1,239	.4
1Q/F	Military PT, PR (special coverage)	158	.5	123	.2	15	.1	300	.3	916	.3
1B/C	Military PT, suitability	208	.3	222	.3	50	.3	249	.2	304	.3
1Q	Military (standard) file PAC	2,152	2.0	797	1.2	263	1.3	735	.7	3,946	1.3
—	Other DIS type "Q" investigations	1,305	1.2	741	1.1	217	1.1	1,725	1.7	3,988	1.3
—	No DIS type "Q" investigations	58,617	55.3	31,592	46.1	11,674	58.4	45,824	43.7	147,724	49.4
	Total Number	105,948		68,516		19,983		104,979		299,326	

Table 6 — (Continued)

	Civilian	Army		Navy		Marine Corps		Air Force		Other		DOD	
DIS Codes	Description	N	%	N	%	N	%	N	%	N	%	N	%
171/A	Civilian PT	6,015	1.7	4,955	1.6	301	1.1	5,028	2.1	2,751	3.3	19,014	1.9
172/C	Civilian ST	4,222	1.2	4,299	1.4	49	.3	3,879	1.5	6,097	7.3	18,526	1.8
181/A	Military PT	3,022	.9	2,602	.9	114	.6	3,279	1.4	477	.6	9,725	1.0
182/C	Civilian ST, PP (limited)	1,387	.4	1,012	.5	12	.1	1,715	.7	3,946	4.4	8,772	.8
191/C	Civilian ST, supplemental	1,755	.5	1,304	.5	15	.1	951	.4	1,934	2.2	5,959	.6
192/C	Military PT	1,774	.5	1,452	.5	62	.3	1,752	.7	591	.7	5,754	.6
192/C	Civilian PP	1,849	.3	776	.3	0	.0	916	.3	558	.6	3,199	.3
192/C	Military ST, supplemental	599	.2	195	.1	20	.1	434	.2	247	.3	1,705	.2
193/C	Civilian ST, autobility	395	.1	209	.1	5	.0	144	.1	408	.5	1,770	.1
193	Military (standard) file PIC	3,702	1.0	1,484	.5	92	.5	1,562	.7	202	.4	7,044	.7
101	Military (entrance) file PIC	501	.2	742	.2	47	.2	300	.2	91	.1	1,951	.2
117	Other agency investigation	313	.2	599	.2	36	.2	1,419	.6	125	.2	2,971	.3
—	Other DIS type investigations	4,857	1.3	4,930	1.6	118	.6	3,236	1.4	1,677	2.0	14,658	1.5
—	No DIS type investigations	330,012	91.5	282,126	91.6	18,023	95.2	212,721	89.6	64,730	77.4	907,722	90.1
	Total Number	360,555		307,560		18,803		237,403		83,650		1,007,880	

INVESTIGATION AND CLEARANCE STATUS OF THOSE IN
ARMY PERSONNEL SECURITY SCREENING PROGRAM OCCUPATIONS

July 1984

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DoD Personnel Security Research Program

Report 84-4

Investigation And Clearance Status Of Those In Army
Personnel Security Screening Program Occupations

The Army currently operates a Personnel Security Screening
Program (PSSP) which screens recruits for positions requiring
background investigations and high level security clearances.
Key personnel in this program are security interviewers working
at the MEPS to screen applicants and military intelligence
interviewers at the basic training sites, who interview certain
recruits before their DIS investigations are requested. The
PSSP currently screens for 17 enlisted occupational specialties
involving intelligence or nuclear work. The purpose of the
analyses reported here was to ascertain the DCII status of personnel
in the PSSP occupations at the beginning of FY 84, with regard
to their most recent DIS investigation and current Army clearance
eligibility.

Table 1 shows the types of DIS investigations found in
the specialties covered by the PSSP. The first ten occupations
(05D-98J) require SCI eligibility. Most incumbents in each
of these specialties show an SBI type case category code, the
percentages ranging from 83% (72G) to 94% (98C). Relatively
few instances were identified with no DIS dossier; the percentage
ranging between 1% (05K) and 4% (72G).

The remaining seven specialties on table 1 require secret
or top secret eligibility based on a BI level investigation.
Among the latter four (12E-55G), BI/IPI type investigations
predominate; the percentages ranging from 71% (55D) to 95% (12E).

TABLE 1. DIS Investigations On Personnel In Army PSSP Occupations

MOS	Description	Initial SBI (1A2/B)	Other SBI	Initial BI/IBI (1A1/A, 1A3/C)	Other BI/IBI	Periodic Review (1D3/C)	Other
05D	EW/SIGINT Emitter Identifier/Locator	77.7%	17.0%	.0%	.1%	1.4%	3.0%
05G	Signal Security	68.4	24.1	.5	.1	4.6	2.1
05H	EW/SIGINT Morse Interceptor	68.7	22.8	.4	.2	4.8	3.1
05K	EW/SIGINT Non-Morse Interceptor	72.8	19.7	.1	.2	5.3	1.9
33S	EW/Intercept Systems Repairer	67.1	23.9	.4	.2	5.5	3.0
72G	Data Communications Switching Center	48.2	34.6	9.2	1.9	1.6	4.4
97B	Counterintelligence Agent	61.3	32.2	.4	.2	2.3	3.6
98C	EW/SIGINT Analyst	74.1	19.6	.2	.1	3.3	2.6
98G	EW/SIGINT Voice Interceptor	69.9	23.4	.5	.3	3.2	2.7
98J	EW/SIGINT Noncommunications Interceptor	73.0	16.2	.3	.2	6.5	4.0
96B	Intelligence Analyst	33.5	24.1	28.0	4.2	1.9	8.4
96D	Image Interpreter	44.5	24.7	16.9	1.8	3.8	8.4
36L	Electronics Switching Systems Repairer	28.0	10.4	19.4	1.1	.0	41.2
12E	Atomic Demolition Munitions	.0	.0	96.0	8.8	.0	4.9
35F	Nuclear Weapons Electronics	2.2	.0	77.4	11.9	.0	8.6
55D	Explosive Ordnance Disposal	4.5	.9	65.4	5.9	.8	22.4
55G	Nuclear Weapons Maintenance	2.7	.4	79.9	11.3	.7	5.8

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The only other noteworthy finding among these four occupations was that 20% of the explosive ordnance disposal specialists (55D) did not have a DIS dossier.

Those in the other PSSP occupations showed considerable variability in the types of DIS investigations they have had. For MOS 96B, 58% had SBIs and 32% BI/IPIs. Among image interpreters (96D), 69% had SBIs and 18% BI/IPIs. Seven percent in each of these ocupations did not have a DIS dossier. In MOS 36L, 38% had SBIs, 20% BI/IPIs, and 38% no DIS dossiers.

Table 2 presents the DCII clearance status of the Army enlisted personnel in the 17 PSSP occupations at the beginning of FY 84. The first ten (05D-98J) require SCI eligibility and table 2 shows that most personnel in each MOS have it. This figure ranges from 76% (72G) to 89% (05G), while the percentage with no DCII clearance entry goes from 1% (05K) to 4% (72G and 97E) for these ten occupations.

While only requiring top secret eligibility, a majority of those with MOS's 96B (50%) and 96D (64%) have SCI eligibility. MOS 36L requires only a secret clearance, yet 27% have higher eligibility, while 23% have no DCII clearance entry.

The four remaining occupations on table 2 also require secret clearances, but a majority in each have top secret eligibility ranging from 61% (55D) to 84% (12E). Finally, 29% of the explosive ordinance disposal specialists (55D) have no DCII clearance entry.

TABLE 2. Clearance Status Of Personnel In Army PSSP Occupations

MOS	Description	SCI	Top Secret	Secret	Revoked/ Denied	Pending Adjudication	Not in DCII
05D	EW/SIGINT Emitter Identifier/Locator	84.9%	.1%	.4%	.1%	11.4%	3.0%
05G	Signal Security Specialist	89.1	2.0	.0	.7	5.6	2.5
05H	EW/SIGINT Morse Interceptor	84.8	.5	.3	.6	12.1	1.6
05K	EW/SIGINT Non-Morse Interceptor	88.5	.7	.2	.7	8.6	1.3
33S	EW/Intercept Systems Repairer	86.7	.6	.5	.6	9.7	2.0
72G	Data Communications Switching Center	75.6	6.0	.9	1.5	12.3	3.8
97B	Counterintelligence Agent	87.5	4.3	.4	.4	3.5	3.8
98C	EW/SIGINT Analyst	87.1	.3	.6	.4	10.0	1.6
98G	EW/SIGINT Voice Interceptor	87.6	.4	.4	.5	9.6	1.5
98J	EW/SIGINT Noncommunications Interceptor	84.4	.3	.7	.4	12.1	2.1
96B	Intelligence Analyst	50.5	31.9	4.3	.7	7.4	5.2
96D	Image Interpreter	63.7	19.2	3.6	1.2	5.6	6.7
36L	Electronics Switching Systems Repairer	21.5	5.7	30.5	1.1	18.6	22.6
12E	Atomic Demolition Munitions	.3	84.3	4.8	.7	2.9	6.9
35F	Nuclear Weapons Electronics	2.7	82.8	6.5	.0	2.2	5.9
55D	Explosive Ordnance Disposal	4.2	60.9	4.4	.1	1.8	28.6
55G	Nuclear Weapons Maintenance	2.2	82.2	2.2	1.2	2.6	9.7

IDENTIFICATION OF ARMY TOP SECRET AND SCI ELIGIBLES
NOT INCLUDED IN DCII CLEARANCES

July 1984

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Identification Of Army Top Secret And SCI Eligibles
Not Included In DCII Clearances

A recent study reported that over 50% of active Army personnel did not have a clearance segment in the DCII at the end of FY 83. Discussions with Army clearance officials indicated that the DCII does not contain information on Army clearances issued before 1978. The following analyses were conducted to determine how many of these personnel might have or be eligible for top secret or SCI clearance.

The procedure utilized was to determine the DIS case category code (if any) for those without clearance segments. While the results will not be proof of clearance status, they will in general, set limits to the level of clearance eligibility one might have. For example, an individual with no record of a DIS investigation beyond a NAC history, file NAC or expanded NAC would at best be eligible for a Secret clearance. However, someone with a PI could qualify for a Top Secret and an individual with an SPI may have SCI eligibility.

Table 1 shows the Army officer, enlisted and civilian inventories in three classifications: those with a DCII clearance segment (whose clearance status was reported earlier), those with no DCII clearance segment and no DIS dossier segment (and therefore no DIS PI or SBI), and finally those with no DCII clearance segment, but having a DIS case category code (and possibly Top Secret or SCI status). Note that relatively few

of those without DCII clearance segments have a DIS dossier
segment.

TABLE 1. DCII Clearance And DIS Dossier Status

(End of FY 33 Active Army Personnel)

DCII Status		Enlisted		Officer		Civilian		Total	
Clearance	DIS Dossier	N	%	N	%	N	%	N	%
Yes	NA	414,947	62.0	63,696	60.1	96,506	24.0	565,149	49.8
No	No	224,446	33.5	35,075	33.1	263,969	73.2	523,490	46.1
No	Yes	29,919	4.5	7,177	6.3	10,080	2.8	47,176	4.1
Total		669,312	100.0	105,948	100.0	360,555	100.0	1,135,815	100.0

Tables 2 and 3 present the types of DIS investigations
most prevalent among those with a DIS dossier segment, but no
DCII clearance segment. Many of these individuals would not
be eligible for a Top Secret or SCI clearance because their
DIS dossier reflects only a NAC or ENTNAC.

TABLE 2. DIS Dossier Types For Army Military Personnel

With No DCII Clearance Entry

DIS Code	Description	Enlisted		Officer	
		N	%	N	%
1G2	Standard File NAC	9,536	31.9	947	13.2
1K1/A	Expanded ENTNAC	6,720	22.5	22	.3
1G1	File ENTNAC	4,282	14.3	78	1.1
1K2/B	Standard Expanded NAC	1,035	3.5	116	1.6
1A1/A	BI, initial	4,838	16.2	3,504	48.8
1A3/C	IBI, initial	642	2.1	364	5.1
1D1/A	BI-PR	120	.4	102	1.4
1D2/B	BI-PR, special coverage	96	.3	258	3.6
1B7/G	(Industrial) IBI, security	152	.5	27	.4
1B3/C	BI, suitability issues	124	.4	15	.2
1A2/B	SBI, initial	1,356	4.5	1,127	15.7
1A7/G	SBI, supplemental	212	.7	302	4.2
1D5/E	SBI-PR (limited)	117	.4	85	1.2
1P3/C	SBI, suitability issues	178	.6	17	.2
—	Other DIS Codes	521	1.7	213	3.0
	Total	29,919	100.0	7,177	100.0

TABLE 3. DIS Dossier Types For Army Civilian Personnel

With No DCII Clearance Entry

DIS Code	Description	N	%
1C2	Standard File NAC (military)	1,937	19.2
1C1	File ENTNAC (military)	521	5.2
1N2	File NAC (civilian)	470	4.7
1N1	Expanded ENTNAC (military)	184	1.8
1N2/P	Standard Expanded NAC (military)	165	1.6
1J2	File NAC (industrial)	143	1.4
1B1/A	BI (civilian)	2,250	22.3
1A1/A	BI (military)	1,400	14.0
1B3	PR (civilian)	104	1.0
1B2/P	SBI (civilian)	756	7.5
1A2/P	SBI (military)	441	4.4
1B7/G	SBI, supplemental (civilian)	128	1.3
—	Other DIS Codes	1,572	15.6
	Total	10,000	100.0

In summary, these analyses have determined that in addition to the number of Top Secret and SCI Army clearances previously reported for the September 1983 active duty inventory, up to about 9 thousand enlisted personnel, 6 thousand officers, and 7 thousand civilians may also have or be eligible for such high level clearances. Furthermore, should it be decided to supplement the DCII clearance data, DMDC could make individual identifications by name, rank, SSN and unit identification code available to the Army for purposes of clearance status verification at the unit level.

NAVY SECURITY CLEARANCES

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NAVY SECURITY CLEARANCES

Navy does not input security clearance data into the DCII. However, DMDC currently receives quarterly data submissions from NMPC which include level of clearance, type of investigation, investigating agency, and the date on which the security investigation was completed. These data are available for active duty officers and enlisted personnel.

The attached tables examine the content of data elements from the December 1983 files, which are potentially useful to the DOD Personnel Security Research Program. Table 1 shows the type of clearance and identifies two major limitations of this data base. First, there are no clearance data at all for many individuals - 19% of the enlisted personnel and 4% of the officers. Secondly, for many others the level of clearance is not recorded. Only the type of investigation is available. This is true for 21% of the enlisted personnel and 38% of the officers. In sum, the clearance status of 40% of the enlisted personnel and 42% of the officers is not available from this data base.

TABLE 1- <u>Clearance Eligibility Of Active Duty</u>
<u>Navy Personnel As Of December 1983</u>

	Enlisted		Officer	
<u>Clearance Status</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Top Secret	38,971	8.1	24,426	34.8
Secret	179,795	37.2	15,916	22.7
Other	593	.1	13	.0
None	71,796	14.9	52	.1
Unknown (BI/SBI)	8,057	1.7	8,463	12.1
Unknown (NAC/ENTNAC)	93,894	19.4	18,328	26.1
<u>Not Processed/No Record</u>	<u>90,016</u>	<u>18.6</u>	<u>2,905</u>	<u>4.1</u>
Total	483,122	100.0%	70,103	99.9%

While disappointing, this finding for the Navy is quite similar to that previously discussed for the Army, a DCII contributor. In the case of the Army, no DCII clearance information was available for 38% of the enlistees and 40% of the officers.

To more closely examine the Navy data, clearance eligibility distributions were obtained by paygrade and are displayed on table 2. These figures exclude those for whom no information was available. Note that for enlisted and officer personnel, as paygrade increases, the percent with top secret and the percent with unknown eligibility, but a BI or SBI also increases. At E1 the combined figure is 1%, while at E9 it is 35%. At the O1 level it is 17%, rising to 97% at O7 and above. Also noteworthy for enlisted personnel is the decrease in the percentage with no clearance as paygrade increases.

TABLE 2- Clearance Eligibility By Paygrade

Pay Grade	Top Secret	Secret	Other	None	Unknown (BI/SBI)	Unknown (NAC/ENTNAC)
Enlisted	%	%	%	%	%	%
E1	.7	29.3	.2	55.6	.1	14.0
E2	1.6	32.3	.1	57.6	.0	8.3
E3	4.5	43.7	.1	35.1	.1	16.5
E4	7.2	52.4	.1	14.7	.2	25.3
E5	12.3	51.7	.1	4.1	1.3	30.5
E6	17.5	44.6	.3	.6	5.3	31.6
E7	21.7	41.4	.3	.2	9.4	26.9
E8	22.7	40.0	.2	.2	11.1	25.8
E9	22.5	38.5	.4	.0	12.4	26.3
Warrant						
W2-W4	30.8	29.7	.1	.0	12.5	26.8
Officer						
O1	13.8	39.6	.0	.0	3.5	43.1
O2	29.0	41.8	.0	.0	2.9	26.3
O3	36.1	22.5	.0	.0	8.4	32.9
O4	45.5	13.6	.0	.1	18.6	22.1
O5	50.8	8.9	.0	.3	26.1	13.8
O6	48.1	8.8	.0	.1	30.2	12.9
O7-O11	62.1	.4	.0	.0	34.8	2.7

Table 3 shows the type of investigation, with ENTNAC and NAC most numerous, followed by BI and SBI, in that order. Note that this information is not available for many individuals. While this is true for the NMPC data base, it would be possible to determine for whom there is a DIS dossier, by linking this data base with the DCII-inventory extract currently in use.

TABLE 3 - Type Of Investigation: Active Duty Navy Personnel (12/83)

Type of Investigation	Enlisted		Officer	
	N	%	N	%
SBI	15,086	3.1	11,215	16.0
BI	32,012	6.6	21,509	30.7
ENTNAC/NAC	345,589	71.5	34,464	49.2
Other	419	.1	10	.0
Not Processed/No Record	90,016	18.6	2,905	4.1
Total	483,122	99.9%	70,103	100.0 %

Table 4 examines the type of investigation by paygrade. It shows an increase in the percentage of SBIs and BIs along with a corresponding decrease in NACs and ENTNACs as paygrade increases. Thus while less than 1% of the E1s show an SBI, 9% of the E9s have it. And while 3% of the O1s have an SBI code, the comparable figure at O7 and above is 82%.

TABLE 4- Type of Investigation By Paygrade

Pay Grade	SBI	BI	ENI/NAC/NAC	Other
Enlisted	%	%	%	%
E1	.1	.8	98.9	.2
E2	.4	1.2	98.3	.1
E3	1.3	3.3	95.3	.1
E4	2.5	5.0	92.4	.1
E5	4.9	8.7	86.3	.1
E6	7.5	15.4	76.9	.2
E7	8.8	22.1	68.8	.3
E8	9.2	24.2	66.4	.2
E9	9.2	25.3	65.1	.4
Warrant				
W2-W4	11.1	31.6	57.3	.0
Officer				
O1	2.9	14.4	82.7	.0
O2	7.0	24.8	68.3	.0
O3	12.4	32.0	55.5	.0
O4	22.0	41.8	36.2	.0
O5	33.6	42.9	23.5	.0
O6	42.2	35.3	22.6	.0
O7-O11	82.0	13.3	4.7	.0

Table 5 presents the source of investigation for those with BIs and SBIs. Virtually all SBIs are attributed to DIS. Most BIs for those with top secret clearances were also done by DIS. In contrast, slightly more than half of the BIs with unknown clearance status have NIS codes.

TABLE 5- Source Of BI and SBI Investigations

Type	Source	Enlisted				Officer			
		Top Secret		Unknown		Top Secret		Unknown	
		N	%	N	%	N	%	N	%
SBI	DIS	13,127	99.7	1,879	99.4	8,447	99.5	2,674	98.5
	NIS	45	.3	12	.6	43	.5	41	1.5
	Other/Unknown	-	-	-	-	2	.0	1	.0
	Total	13,172	100.0	1,891	100.0	8,492	100.0	2,716	100.0
BI	DIS	22,151	86.3	2,648	42.9	11,943	75.8	2,582	44.9
	NIS	3,508	13.7	3,243	52.6	3,813	24.2	3,156	54.9
	Other/Unknown	-	-	275	4.5	6	.0	9	.2
	Total	25,659	100.0	6,166	100.0	15,762	100.0	5,747	100.0

In summary, the NMPC data input to DMDC provides a continuing source of personnel security information on current active enlisted and officer Naval personnel. Data are available on clearance status, type of investigation, and investigating agency. Coverage on the key item - clearance status - is far from complete, but no worse than is the case for Army DCII records. Over the next several years, the coverage should substantially improve for both services. Starting with October 1984 DCII analyses, Navy clearance information will be incorporated.

PROJECTIONS OF MILITARY PERIODIC REVIEW REQUIREMENTS

August 1984

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Projections of Military Periodic Review Requirements

Linkage of the DCII with current personnel inventory data
bases permits analyses to determine the numbers of investigations
due, under various periodic review requirements. Current standards
call for reinvestigation after five years. However, DIS resource
constraints now limit the services to quotas, resulting in a
backlog of overdue investigations. These analyses were performed
to determine the size of the backlog and to project the number
of individuals, who would become eligible for periodic review
during FY84 and FY85. Such information is important to the
formulation of policy and investigatory staffing alternatives
over the next few years.

The primary findings were that:

...About 11? thousand military personnel had
DIS BI/SBI type investigations exceeding the
5 year limit at the end of FY83,

...Over 38 thousand individuals with top secret
and SCI clearance status were due to hit the
5 year limit in FY84, and

...An additional 51 thousand with such clearances
were projected to reach the 5 year limit during
FY85.

Of the 2.1 million active duty military personnel at the
end of FY83, 520 thousand were found to have DIS dossiers.
Nearly 20% of these dossiers reflected expanded or file NACs
rather than background investigations. The 423 thousand remaining
DIS investigations served as the point of departure for the

analyses reported here. Nearly 97% of these were included among the dozen types of DIS investigations listed on table 1. Initial BI and SBI codes alone account for 272 thousand investigations.

Table 1 indicates the fiscal year in which the investigations turn(ed) 5 years old. Two hundred thousand of these will not hit the 5 year mark until FY86 or later. Since many of these individuals may leave the military through attrition or separation after completing their initial enlistment commitment, no meaningful projections of periodic review requirements can presently be made for this group. Of the remaining investigations on table 1, 113 thousand had already hit the 5 year trigger point by the end of FY 83. However, it is not implied here that all were overdue for a periodic review. In projecting periodic review requirements it was assumed that not only a 5 year old BI/SBI was necessary, but also a high level (top secret or SCI) clearance status. This assumption made projections of the backlog unfeasible since Army clearance data prior to 1979 is far from complete and there are no Navy or USMC clearance data in the DCII.

Because of the considerations just described, it was decided that projections could best be made for FY84 and FY85. Periodic review requirement projections for these two years were made separately for those with SCI and top secret status as follows. For each type of investigation the numbers of Army and Air Force individuals with SCI (then top secret) status were determined along with the fraction of individuals having that status. These fractions were averaged and applied to the Navy and USMC

totals with each type of investigation. These discounted figures were added to the Army and Air Force actual figures to arrive at the projections. The computations were done separately for officers and enlisted personnel since the fractions awarded SCI and top secret status varied.

For a simplified example, assume for a particular fiscal year all 100 (100%) Army enlisted personnel with a particular type investigation have SCI status as do 80 of 100 (80%) Air Force personnel. Further assume totals of 100 Navy and 20 Marine Corps personnel with the same type investigation. The average of the Army and Air Force percentages (90%) would be applied to yield a Navy projection of 90 and a Marine Corps projection of 18. These results would be added to the 100 Army and 80 Air Force personnel to yield an enlisted SCI estimate of 288 for that type of investigation in that fiscal year. The enlisted estimate would be combined with the officer estimate for that type of investigation, and the enlisted and officer estimates for the other 11 types of investigations, to produce the SCI periodic review requirement estimate for a particular fiscal year. The results on table 2 were derived in this manner.

Sizeable as these projections are, they may understate the situation. Related analyses reveal that about 10% of the Army personnel and 20% of the Air Force members with top secret status in the DCII had no DIS dossier shown. To the extent that certain of these cases reflect background investigations that become 5 years old in FY84 or FY85, the projections on table 2 should be higher.

Refinements on the current projections and expansion beyond two years into the future could be made. The two major circumstances necessary for such improvements would be the inclusion of Navy clearance data into the DCII and the development of continuation estimates for those with background investigations. With respect to Navy clearances, a service-wide automated source is presently providing DMDC with periodic input that can be merged with DCII extract files to link Navy investigations and clearance data. The initial merge is planned for October 1984.

Development of continuation estimates could be accomplished by utilizing the enlisted cohort file developed at DMDC, which covers non-prior service accessions from FY74 through FY83. Service specific analyses could be made of the continuation behavior of those in certain occupations or with certain types of DIS investigations. From such analyses continuation rates would be determined that would be used in the periodic review projection procedure.

TABLE 1 - Most Frequent DIS Background Investigations

Fiscal Year Investigation Becomes 5 Years Old

Most Recent DIS Investigation		FY 82 or before	FY 83	FY 84	FY 85	FY 86 or after
1A1/A	BI, initial	44,240	14,601	16,775	21,833	44,215
1A2/B	SBI, initial	22,355	8,505	11,666	18,194	70,039
1A7/G	SBI, supplemental	7,365	4,106	5,726	5,358	23,300
1A3/C	IBI, initial	1,254	0	0	0	34,079
1D5/E	SBI, bring up	3,282	3,017	3,890	4,911	3,470
1P3/C	SBI, suitability issues	68	592	912	1,624	8,210
1N3/C	BI, suitability issues	72	713	934	1,862	3,899
1D3/C	Periodic review	60	0	0	0	7,301
1R3/C	IBI, suitability issues	3	0	0	0	3,075
1D1/A	BI, bring up	823	410	532	645	524
1A6/F	BI, supplemental	148	70	101	197	2,377
1D2/B	BI, bring up	1,694	4	5	0	0
	Totals	81,364	32,018	40,541	54,624	200,489

TABLE 2 - Projected Periodic Review Requirements

Clearance Status	FY 84	FY 85
SCI	16,572	24,108
Top Secret	21,897	27,393
Totals	38,469	51,501

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SECURITY CLEARANCES AMONG ARMY AND AIR FORCE RESERVE
COMPONENT PERSONNEL

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DoD Personnel Security Research Program

Report 84-8

SECURITY CLEARANCES AMONG ARMY AND AIR FORCE
RESERVE COMPONENT PERSONNEL

A previous report in this series presented overall clearance information for active duty military personnel and DOD civilian employees. This paper contains similar information for military reservists. As in the earlier study, the point in time depicted is the beginning of FY 84. The statistics reported here were derived from an SSN matching between the DCII maintained by the Defense Investigative Service and the reserve components personnel inventory of the Defense Manpower Data Center. Data are shown for components in those services which input adjudicative actions to the DCII, namely the Army Reserve, Army National Guard, Air Force Reserve, and Air National Guard.

Overall clearance code distributions for the four components considered are presented on table 1. It shows that for most Army personnel (75% of the reservists and 62% of the guardsmen) there was no DCII clearance entry. Relatively few in the Army components had top secret or SCI codes. In contrast, the Air Force components, particularly the Air National Guard had lower percentages not found in the DCII (5%) and much higher percentages with top secret or SCI codes (17%).

In view of the varied composition of the reserve components, more detailed analyses were performed to examine possible differences due to such factors as the officer-enlisted distinction and the several reserve component categories. Reservists are categorized into three basic groups- ready, standby, and retired reserve. The Army National Guard and Air National Guard consist only of ready reservists.

Separate clearance code distributions for officers and enlisted personnel in each of the three reserve categories are shown on table 2. In the Army Reserve, the percent not found in the DCII was highest for retired members. The few standby Army Reservists had higher percents with SCI and top secret codes than the other categories while the highest percent with secret codes were in the ready reserve.

Most of the ready reservists comprising the Army National Guard did not have a clearance entry in the DCII. As was the case in the Army Ready Reserve, more Army National Guard officers (8%) than enlisted personnel (1%) had SCI or top secret codes.

TABLE-1

Reserve Component

DCII Clearance Code	Army Reserve		Army National Guard		Air Force Reserve		Air National Guard	
	N	%	N	%	N	%	N	%
SCI	18,060	1.9	1,710	.4	6,331	1.8	447	.4
Top Secret	15,398	1.6	5,054	1.2	39,533	11.0	17,107	16.7
Secret	197,400	20.9	154,608	36.2	118,305	32.8	78,947	77.3
Other	5,981	.6	1,074	.3	3,372	.9	707	.7
Not In DCII	705,589	74.9	264,793	62.0	192,873	53.5	4,981	4.9
Total	942,428	99.9	427,239	100.1	360,414	100.0	102,189	100.0

TABLE-2

DCII Clearance Code

Component	Status		SCI N	SCI %	Top Secret N	Top Secret %	Secret N	Secret %	Other N	Other %	Not In DCII N	Not In DCII %	Total Personnel N	%
Army Reserve	Enlisted	Ready	8,434	2.0	5,014	1.2	173,185	41.5	4,920	1.2	225,900	54.1	417,453	100.0
		Standby	4	7.3	1	1.8	17	30.9	1	1.8	32	58.2	55	100.0
		Retired	2,361	.9	3,152	1.3	7,867	3.1	528	.2	236,381	94.4	250,289	99.9
	Officer	Ready	5,148	5.4	5,507	5.8	14,575	15.3	395	.4	69,471	73.1	95,096	100.0
		Standby	15	7.3	29	14.1	9	4.4	2	1.0	151	73.3	206	100.1
		Retired	2,098	1.2	1,695	.9	1,747	1.0	135	.1	173,654	96.8	179,329	100.0
Army National Guard	Enlisted	Ready	921	.2	2,368	.6	141,098	36.7	995	.3	239,569	62.2	384,951	100.0
	Officer	Ready	789	1.9	2,686	6.4	13,510	31.9	79	.2	25,224	59.6	42,288	100.0
Air Force Reserve	Enlisted	Ready	2,039	2.4	7,526	8.7	69,665	80.9	1,622	1.9	5,299	6.2	86,151	100.1
		Standby	6	1.2	45	8.9	385	76.1	6	1.2	64	12.6	506	100.0
		Retired	2,121	1.9	16,315	14.6	25,886	23.2	947	.9	66,107	59.4	111,376	100.0
	Officer	Ready	1,347	5.6	6,989	29.2	14,090	58.9	313	1.3	1,202	5.0	23,941	100.0
		Standby	317	1.1	4,181	14.7	4,699	16.5	229	.8	19,001	66.8	28,427	99.9
		Retired	501	.5	4,477	4.1	3,580	3.2	255	.2	101,200	92.0	110,013	100.0
Air National Guard	Enlisted	Ready	222	.2	10,119	11.3	73,632	82.3	664	.7	4,882	5.5	89,519	100.0
	Officer	Ready	225	1.8	6,988	55.2	5,315	41.9	43	.3	99	.8	12,670	100.0

With regard to the Air Force Reserve, most retired members and officers with standby status had no clearance information in the DCII. Most ready reservists had secret clearances, wh. e a greater fraction of officers (35%) than enlisted personnel (11%) had SCI or top secret codes. Table 2 shows the latter to also be true in the Air National Guard where 57% of the officers had SCI or top secret status compared to only 12% of the enlisted personnel.

Within the ready reserve there are six major categories of personnel. These are selected reserve unit members, full-time support (active Guard/Reservists), military technicians, individual reservists in the selected reserve, individual reservists in the non-selected reserve, and personnel in the so-called training pipeline. See Appendix A for definitions of these categories. Tables 3-6 contain clearance code distributions for each ready reserve category by officer-enlisted status within component.

Table 3 covers the Army Reserve and shows the highest percentages without DCII clearance entries to be military technicians (74% and 83%) and the enlisted training pipeline (75%). The category with the greatest percentage of secret codes is enlisted non-selected individual reservists (48%). Individual reservists in the selected reserve had the highest enlisted (15%) and officer (27%) rates of SCI or top secret codes.

Army National Guard findings are shown on table 4. The enlisted full-time support (active Guard/Reserve) personnel were notable for having the highest percent with secret codes (59%) and the lowest percent found without DCII clearance codes (3%). In each category a higher proportion of officers than enlisted personnel had SCI and top secret codes. Highest rate of SCI or top secret codes was found for full-time support (active Guard/Reserve) officers (16%).

In the Air Force Ready Reserve (table 5), the only category with a substantial fraction of personnel without DCII adjudicative information was the training pipeline (47%). Highest percentage, among enlisted personnel, with SCI or top secret codes was found for the individual reservists in the selected reserve (32%). Among officers the highest comparable figures were found among full-time support personnel (active Guard/Reserve-79% and military technicians-65%).

Again in the Air National Guard (table 6), the training pipeline was the only category with a high rate (47%) found without DCII clearance data. Air National Guard officers showed far higher rates with SCI or top secret

TABLE 3- Army Reserve: Ready Reserve Categories

DCII Clearance Code

	SCI		Top Secret		Secret		Other		Not In DCII		Total Personnel	
	N	%	N	%	N	%	N	%	N	%	N	%
Enlisted Categories												
Selected Reserve Unit	3,356	1.9	2,241	1.2	66,949	37.0	984	.5	107,356	59.4	180,886	100.0
Full-Time Support (Active Guard/Reserve)	89	1.8	140	2.9	1,534	31.3	30	.6	3,111	63.4	4,904	100.0
Full-Time Support (Military Technician)	56	2.0	61	2.2	584	21.1	6	.2	2,058	74.4	2,765	99.9
Individual Reservists (Selected Reserve)	53	8.3	46	7.2	174	27.1	10	1.6	359	55.9	642	100.1
Individual Reservists (Non-Selected Reserve)	4,765	2.4	2,490	1.2	97,144	48.5	3,863	1.9	91,940	45.9	200,202	99.9
Training Pipeline	115	.4	36	.1	6,800	24.2	27	.1	21,076	75.1	28,054	99.9
Officer Categories												
Selected Reserve Unit	2,186	5.6	2,261	5.8	7,715	19.6	162	.4	26,944	68.6	39,268	100.0
Full-Time Support (Active Guard/Reserve)	162	7.6	283	13.3	216	10.1	14	.7	1,454	68.3	2,129	100.0
Full-Time Support (Military Technician)	39	3.6	40	3.7	105	9.6	3	.3	904	82.9	1,091	100.1
Individual Reservists (Selected Reserve)	1,075	14.4	916	12.2	585	7.8	73	1.0	4,833	64.6	7,482	100.0
Individual Reservists (Non-Selected Reserve)	1,686	3.7	2,007	4.4	5,954	13.2	143	.3	35,336	78.3	45,126	99.9

TABLE 4— Army National Guard: Ready Reserve Categories

DCII Clearance Code

	SCI		Top Secret		Secret		Other		Not In DCII		Total Personnel	
	N	%	N	%	N	%	N	%	N	%	N	%
Enlisted Categories												
Selected Reserve Unit	826	.3	1,810	.6	121,032	38.3	887	.3	191,338	60.6	315,893	100.1
Full-Time Support (Active Guard/Reserve)	40	.4	259	2.4	6,352	59.3	31	.3	4,034	37.6	10,716	100.0
Full-Time Support (Military Technician)	24	.2	227	1.5	3,827	26.0	17	.1	10,642	72.2	14,737	100.0
Individual Reservists (Non-Selected Reserve)	27	.3	63	.7	2,647	30.0	29	.3	6,072	68.7	8,838	100.0
Training Pipeline	4	.0	9	.0	7,240	20.8	31	.1	27,483	79.0	34,767	99.9
Officer Categories												
Selected Reserve Unit	650	1.9	2,012	5.9	12,812	37.5	61	.2	18,629	54.5	34,164	100.0
Full Time Support (Active Guard/Reserve)	57	3.5	206	12.6	165	10.1	5	.3	1,202	73.5	1,635	100.0
Full-Time Support (Military Technician)	80	1.4	450	7.7	411	7.0	13	.2	4,925	83.8	5,879	100.1
Individual Reservists (Non-Selected Reserve)	2	.3	18	3.0	122	20.0	0	-	468	76.7	610	100.0

TABLE 5— Air Force Reserve: Ready Reserve Categories

DCII Clearance Code

	SCI		Top Secret		Secret		Other		Not In DCII		Total Personnel	
	N	%	N	%	N	%	N	%	N	%	N	%
Enlisted Categories	173	.4	2,222	5.6	34,420	86.0	777	1.9	2,437	6.1	40,029	100.0
Selected Reserve Unit	173	.4	2,222	5.6	34,420	86.0	777	1.9	2,437	6.1	40,029	100.0
Full-Time Support (Active Guard/Reserve)	3	.9	38	11.7	272	83.7	2	.6	10	3.1	325	100.0
Full-Time Support (Military Technician)	5	.1	442	6.6	6,223	92.4	40	.6	22	.3	6,732	100.0
Individual Reservists (Selected Reserve)	613	15.4	661	16.6	2,279	57.3	64	1.6	358	9.0	3,975	99.9
Individual Reservists (Non-Selected Reserve)	1,245	3.8	4,156	12.6	25,404	76.9	709	2.1	1,509	4.6	33,023	100.0
Training Pipeline	0	–	7	.3	1,067	51.6	30	1.5	963	46.6	2,067	100.0
Officer Categories												
Selected Reserve Unit	44	.7	2,263	35.3	3,879	60.6	70	1.1	150	2.3	6,406	100.0
Full-Time Support (Active Guard/Reserve)	12	8.6	95	67.9	33	23.6	0	–	0	–	140	100.1
Full-Time Support (Military Technician)	22	3.0	454	61.9	255	34.8	0	–	2	.3	733	100.0
Individual Reservists (Selected Reserve)	1,101	15.4	2,724	38.2	2,976	41.7	89	1.2	248	3.5	7,138	100.0
Individual Reservists (Non-Selected Reserve)	168	1.8	1,453	15.3	6,947	72.9	154	1.6	802	8.4	9,524	100.0

codes than their enlisted counterparts. Highest were observed among full-time support officers (active Guard/Reserve-73% and military technicians-74%).

The utility of the detailed analyses presented in tables 3-6 is apparent if comparisons are made with the overall distributions of table 1. For example, table 1 showed 1.9% of Army Reserve members with SCI codes. By reviewing the detailed SCI figures on table 3 it is obvious that the 1.9% value camouflages a range of results from .4% for the enlisted training pipeline to 14.4% of the officers in the selected individual ready reserve. Again refering to table 1, 4.9% of the Air National Guardsman were found without DCII clearance information. Table 6 reveals that this average includes extremes of .1% of the officer technicians and 40.4% of the enlisted training pipeline. Identification of such significant variation across differing types of personnel is critical to pinpoint possible problem areas and spotlight foci of future study.

TABLE 6— Air National Guard: Ready Reserve Categories

DCII Clearance Code

	SCI		Top Secret		Secret		Other		Not In DCII		Total Personnel	
	N	%	N	%	N	%	N	%	N	%	N	%
Enlisted Categories												
Selected Reserve Unit	212	.3	6,838	10.8	52,516	82.7	600	.9	3,370	5.3	63,536	100.0
Full-Time Support (Active Guard/Reserve)	1	.0	389	9.8	3,476	88.0	11	.3	75	1.9	3,952	100.0
Full-Time Support (Military Technician)	5	.0	2,723	14.3	16,051	84.4	25	.1	225	1.2	19,029	100.0
Training Pipeline	4	.1	169	5.6	1,589	52.9	28	.9	1,212	40.4	3,002	99.9
Officer Categories												
Selected Reserve Unit	137	1.4	5,049	50.8	4,613	46.5	41	.4	89	.9	9,929	100.0
Full-Time Support (Active Guard/Reserve)	19	2.6	516	70.3	191	26.0	0	-	8	1.1	734	100.0
Full-Time Support (Military Technician)	69	3.4	1,423	70.9	511	25.5	2	.1	2	.1	2,007	100.0

APPENDIX A

Ready Reserve Category Definitions

Selected Reserve Unit: Selected
Reservists who have completed
training and are assigned to a
unit.

Full-Time Support (Active Guard/
Reserve): Selected Reservists
who have completed training and
are on active duty to provide
unit or individual support. This
includes all members classified
as Active Guard/Reserve (AGR) and
excludes Military Technicians.

Full-Time Support (Military
Technician): Trained Selected
Reservists who are also federal
employees of a Military Department
and occupy a technician position in
the reserve component they support.

Pretrained Individual Reservists
(Selected Reserve): Individual
Mobilization Augmentees who have
completed training and are pre-
assigned to augment the active force
upon mobilization.

Pretrained Individual Reservists
(Non-Selected Reserve): Inactive
National Guardsmen and Individual
Ready Reservists who are not mem-
bers of the Selected Reserve.

Training Pipeline: Ready Reserve
personnel in one of the following
programs:

(1) Undergoing Initial Active Duty
Training (IADT)

(2) Awaiting to complete IADT and
drilling

(3) Awaiting training without pay

COMPARISON OF INVESTIGATIONS AND ADJUDICATIONS DURING FY83
AND THE FIRST HALF OF FY84

September 1984

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Report 84-9

Comparison Of Investigations And Adjudications
During FY 83 and The First Half Of FY 84

This paper presents statistics on personnel security investigations and adjudications during the first six months of FY 84. It also contains comparisons of these figures with complete FY 83 data. The source for these analyses is the DMDC extract of the DCII. This extract identifies the most recent DIS investigative segment and the most recent Army or Air Force adjudicative segment on an individual.

DIS Investigations

Table 1 provides information on the 20 types of DIS investigative dossiers which were found most frequently between October 1982 and March 1984. Figures for each type include cases where added coverage was provided. In all, over 150 DIS case category codes were found during this period. Note that the mid-FY 84 total is half as large as the complete FY 83 total.

The totals only include segments with codes reflecting a closed case. In addition, there were 306 FY 83 and 17,162 FY 84 cases with no completion code. Most of the cases referred to on table 1 have a completion code indicating a finished investigation (94%). The remainder show a change of category at closing (2%), a closing because of a prior investigation (1%) or a cancellation (3%).

TABLE 1- DIS Case Category Codes
(October 1982-March 1984)

DIS Codes	Description	FY 83		FY 84	
		Number	Percent	Number	Percent
1A3/C	Non-issue IBI, military	31,707	16.9	14,744	15.7
1A2/B	Non-issue SBI, military	31,269	16.7	15,234	16.2
1C3/C	Non-issue IBI, industrial	15,711	8.4	8,129	8.7
1G2	File NAC, military	14,934	8.0	5,866	6.2
1K1/A	Expanded ENTNAC, military	12,403	6.6	4,794	5.1
1C2/B	Non-issue SBI, industrial	7,178	3.8	4,235	4.5
1V9/I	Expanded NAC (suitability), industrial	6,637	3.5	3,673	3.9
1A7/G	Supplemental SBI, military	6,251	3.3	0	.0
1D3/C	Periodic review, military	6,219	3.3	7,832	8.3
1M2/B	Expanded NAC, industrial	5,817	3.1	3,647	3.9
1J2	File NAC, industrial	5,717	3.1	3,074	3.3
1G1	File ENTNAC, military	5,257	2.8	2,162	2.3
1B2/B	Non-issue SBI, civilian	4,908	2.6	3,469	3.7
1P3/C	SBI (suitability), military	3,663	2.0	1,016	1.1
1B1/A	Non-issue BI, civilian	3,348	1.8	2,096	2.2
1R3/C	IBI (suitability), military	3,225	1.7	890	.9
1K2/B	Expanded NAC, military	3,157	1.7	1,509	1.6
1F3/C	Periodic review, industrial	2,832	1.5	2,619	2.8
1E3/C	Periodic review, civilian	2,740	1.5	3,458	3.7
1XX	Completion of other agency investigation	1,813	1.0	923	1.0
	All Other Codes	12,543	6.7	4,531	4.8
	Totals	187,329	100.0	93,901	99.9

No single type of DIS investigation, other than those listed
on table 1, constituted as much as 1% of the total in either
fiscal year. Non-issue, initial military IBIs and SBIs account
for about a third of the DIS investigative segments in both
time periods. Comparing the percentages on table 1 reveals
some noteworthy shifts between the first half of this fiscal
year and FY 83. Fiscal year comparisons were made with respect
to both absolute and relative percentage changes.

Increases were found in military, civilian and industrial
periodic reviews. The other increase of note was in non-issue,
initial civilian SBIs. Compensating for these increases were
the total disappearance of DIS codes reflecting supplemental
SBIs and IBIs. Also worthy of mention were decreases in military
file NACs, expanded ENTNACs, and IBIs and SBIs with unsuitability
issues.

Army Adjudications

The DCII shows nearly 178 thousand individuals with Army
adjudications during the first half of FY 84. The mix of clearance
status codes during this period closely resembles the distribution
for FY 83, as table 2 shows.

TABLE 2- Army Clearance Status Designations
(October 1982-March 1984)

Code	Description	FY 83		FY 84	
		Number	Percent	Number	Percent
M	Secret/Surety	102,321	56.8	65,522	50.7
S	Secret	28,698	15.9	12,920	12.0
V	SCI	18,537	10.3	11,208	11.4
X	Pending CCF action	10,807	6.0	8,685	8.0
N	Top Secret/Surety	7,635	4.2	3,695	3.4
T	Top Secret	6,805	3.8	3,214	3.0
R	Revoked/Denied	5,343	3.0	2,688	2.5
F	Favorable	31	.0	10	.0
C	Confidential	13	.0	1	.0
	Total	180,190	100.0	177,992	100.0
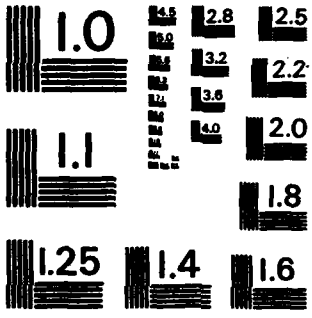
MICROCOPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS-1963-A

A more detailed analysis of FY 84 Army adjudications was done, involving not only the status code but also the codes indicating the investigative basis and the reason for the review. In combination, these codes define an individual's status within the personnel security program. In all, 76 unique combinations of these three codes were found. Table 3 lists the dozen most frequent, which collectively account for 97% of the total.

Most of the actions (61%) involve a secret (M) clearance based on some variant of a national agency check (ENTNAC, NAC, NACI) which did not develop credible derogatory information. The table also shows that 12% received a secret clearance in spite of a national agency check containing credible derogatory information. Note as well that SCI access was authorized, based on SBIs containing derogatory information (6%), more often than when no such negative information was found (4%). With regard to top secret status, table 3 shows it awarded more frequently on the basis of "clean" (3.3%) than derogatory (2.3%) BIs. In sum, this table reflects the award of over 21,000 clearances to personnel with credible derogatory information in the first half of FY 84.

TABLE 3- Army Clearance Actions
(October 1983-March 1984)

Status	Investigation	Reason For Review	Number	Percent
Secret (M)	ENTNAC, NAC, NACI	Surety	65,440	60.6
Secret (S)	ENTNAC, NAC, NACI	Surety	12,492*	11.6
At CCF (X)	Other	Review Required	8,685	8.0
SCI (V)	SBI	Special Intelligence	6,520*	6.0
SCI (V)	SBI	Surety	4,358	4.0
Top Secret (N)	BI	Surety	3,529	3.3
Top Secret (T)	BI	Surety	2,450*	2.3
Denial/Revocation (R)	Other	Clearance	1,201	1.1
All Other Combinations	–	–	3,317	3.1
Total	–	–	107,992	100.0

* Indicates "credible derogatory information"

Air Force Adjudications

Table 4 presents the FY 83 - 84 comparisons of individuals cleared by the Air Force. As in the Army, comparisons of the clearance code distributions revealed only minor differences between FY 83 and the first six months of FY 84. A total of 16 unique Air Force clearance codes were used thus far in FY 84.

TABLE 4- Air Force Clearance Status Designations
(October 1982 - March 1984)

Code	Description	FY 83		FY 84	
		Number	Percent	Number	Percent
S	Secret	129,390	70.8	58,534	66.0
T	Top Secret	24,530	13.4	13,167	14.8
V	Top Secret-Eligible for SCI	15,132	8.3	9,428	10.6
Z	Terminated-No Clearance				
	Unfavorable Investigation	4,711*	2.6	2,829*	3.2
Y	Pending Adjudication	3,547	1.9	1,925	2.2
F	Favorable-No Clearance	3,340	1.8	2,045	2.3
—	Other	1,992	1.1	778	.9
	Total	182,642	99.9	88,706	100.0

* Indicates "unfavorable investigation"

Unlike the Army, DCII Air Force clearance data does not include a code indicating the reason for review, however, table 5 presents the most frequent of the status-basis combinations found for the FY 84 Air Force clearance actions. In all, 77 different combinations occurred.

Table 5 shows two-thirds (66%) of the FY 84 adjudications to be secret clearances based on a national agency check. All SCI clearances (11%) were based on SBIs. More than twice as many top secrets (10%) were based on BIs than SBIs (4%).

TABLE 5- Air Force Clearance Actions
(October 1983-March 1984)

Status	Investigation	Number	Percent
Secret (S)	ENTNAC, NAC, NACI	58,415	65.9
SCI (V)	SBI	9,425	10.6
Top Secret (T)	BI	8,487	9.6
Top Secret (T)	SBI	3,553	4.0
Terminated (Z)	ENTNAC, NAC, NACI	2,102*	2.4
Pending (Y)	ENTNAC, NAC, NACI	1,231	1.4
Favorable (F)	SBI	1,023	1.2
Favorable (F)	ENTNAC, NAC, NACI	979	1.1
Pending (Y)	SBI	377	.4
Terminated (Z)	SBI	370*	.4
Terminated (Z)	BI	347*	.4
Pending (Y)	BI	313	.4
Other Combinations	—	2,084	2.3
Total		88,706	100.1

* Indicates "unfavorable investigation"

A-9-7

DIS INVESTIGATIONS AND CLEARANCE ELIGIBILITY OF AIR FORCE ENLISTEES REQUIRING BIS AND SBIS

October 1984

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DIS Investigations and Clearance Eligibility Of Air Force
Enlistees Requiring BIs and SBIs

Air Force entry security screening currently covers 30
AFSCs. Screening is conducted during basic training by the
3507th Airman Classification Squadron at Lackland Air Force
Base, Texas. Background investigation (BI) requests are submitted
to DIS for those surviving screening for 13 AFSCs, while SBIs
are required for those entering 17 other AFSCs. Within these
specialties, analyses were performed to determine what types
of DIS investigations had most recently been conducted and what
clearance levels were reflected on the DCII, for those on board
at the beginning of FY 84.

SBI Specialties

Table 1 presents results for occupations requiring SBIs.
The SBI column includes those with DIS case category codes indicating
initial SBIs (1A2/B), supplemental investigations (1A7/G),
SBIs with suitability issues (1B3/C), and bring- ups (1D5/E).
The BI/IBI category includes initial investigations (1A1/A and
1A3/C), supplemental investigations (1A6/F and 1A8/H), suitability
issue cases (1W3/C and 1R3/C), and bring-ups (1D1/A and 1D2/B).
"Periodic review" refers to the newer 1D3/C type investigations.
Table 1 shows most personnel in each of these AFSCs as having
an SBI. In all but two of these specialties, over 80% had one
of the specified SBI codes. Only in these two AFSC's (307X0
and 328X5) did more than 15% show BI/IBI codes or more than
5% have no DIS investigative dossier.

More detailed analysis, by skill level within AFSC, found
more non-SBI codes at the higher skill levels. For the
telecommunications systems control specialists (307X0), virtually
all at the first two skill levels have an SBI code. At the
higher skill levels however, many personnel show a BI/IBI or
no DIS investigative dossier. Similar findings are evident
for the airborne command post communications equipment specialists

TABLE-1 Most Recent DIS Investigative Dossiers
For Personnel In Specialties Requiring SBIs

AFSC	Description	SBI	BI/ IBI	Periodic Review	Other	None
111X0	Defensive Aerial Gunner	93.0%	3.9%	.4%	.4%	2.5%
201X0	Intelligence Operations	88.2	4.8	4.6	1.3	1.1
201X1	Target Intelligence	94.7	1.7	1.1	1.1	1.3
202X0	Radio Communications Analysis	84.7	.5	12.7	1.3	.8
205X0	Electronic Intelligence Operations	88.9	1.0	7.2	1.1	1.8
206X0	Imagery Interpreter	91.8	1.2	4.2	.5	2.3
207X1	Morse Systems	92.8	.5	5.6	.5	.6
207X2	Printer Systems	89.8	.7	7.9	.9	.7
208XX	Cryptologic Linguist	91.7	.3	6.4	.9	.7
209X0	Defensive C3CM Specialist	89.6	1.7	6.6	1.6	.5
233X0	Continuous Photoprocessing	83.4	8.9	1.9	.8	5.0
291X0	Telecommunications Operations	83.9	10.3	1.8	.9	3.1
306X0	Electronic Communications and Cryptographic Equipment Systems	82.0	12.0	2.8	1.1	1.9
306X1	Electronic-Mechanical Communications and Cryptographic Equipment Systems	83.0	12.3	.7	1.5	2.5
306X2	Telecommunications Systems/ Equipment Maintenance	81.8	11.0	2.1	1.5	3.6
307X0	Telecommunications Systems Control	68.4	22.2	.8	1.5	7.1
328X5	Airborne Command Post Communications Equipment	67.8	17.7	1.4	1.4	11.7

(328X5). At the 7 skill level in that AFSC, more than a third show BI/IBI codes and 23% no DIS dossier.

Clearance eligibility in the SBI specialties is shown on table 2. A majority in 14 of the 17 AFSCs were found with SCI eligibility (code V), while the remainder in these specialties primarily had top secret (code T) status. Virtually all defensive aerial gunners (111X0) had top secret eligibility, as did a large percentage of those in the two specialties discussed earlier (307X0 and 328X5). Also, airborne command post communications equipment specialists (328X5) had the largest percentage of any of those AFSCs with only a secret (code S) eligibility status.

Analysis by skill level found little variance for the defensive aerial gunners. Most telecommunications systems control specialists in the lower skill levels have SCI eligibility, while most at skill level 7 and above show top secret status. For the airborne command post communications equipment specialists, more at skill level 1 had SCI status, while relatively high percentages at skill levels 1 and 7 only had secret eligibility.

BI Specialties

With regard to Air Force specialties requiring BIs, there was much more variability found than was the case with SBI specialties. As table 3 shows, the majority in 17 of the 18 AFSCs had BI or IBI type DIS investigations. This majority ranged from just over 57% of the scientific measurement technicians to 82% of the missile electronic equipment specialists. In contrast, under 3% of the liquid fuel systems maintenance specialists showed a BI/IBI code. While in most of these specialties the percentage with SBIs was minimal, it accounted for over half of the command and control specialists.

Also of note on table 3 are the high percentages of personnel with no DIS investigation beyond a NAC or ENTNAC. While this figure did not exceed 12% in any of the SCI specialties, it was under 12% in only one of the AFSCs requiring BI coverage. DIS code distributions were analyzed by skill level for those occupations in which the lack of an investigation was most

TABLE 2- Clearance Eligibility of Personnel In Specialties Requiring SBIs

AFSC	Description	SCI	Top Secret	Secret	Other
111X0	Defensive Aerial Gunner	2.5%	95.9%	1.4%	.2%
201X0	Intelligence Operations	73.3%	22.3	1.2	3.3
201X1	Target Intelligence	66.0	28.1	2.5	3.4
202X0	Radio Communications Analysis	89.1	7.0	1.9	2.0
205X0	Electronic Intelligence Operations	89.6	5.9	2.6	1.9
206X0	Imagery Interpreter	82.1	13.0	2.7	2.2
207X1	Morse Systems	86.0	8.9	3.5	1.6
207X2	Printer Systems	86.6	6.9	3.1	3.5
208XX	Cryptologic Linguist	85.8	6.9	5.7	1.6
209X0	Defensive C3CM Specialist	86.3	7.1	2.7	3.9
233X0	Continuous Photoprocessing	59.8	28.7	7.7	3.8
291X0	Telecommunications Operations	64.8	29.5	2.2	3.5
306X0	Electronic Communications and Cryptographic Equipment Systems	70.5	22.9	3.2	3.4
306X1	Electronic-Mechanical Communications and Cryptographic Equipment Systems	66.9	29.9	1.3	1.9
306X2	Telecommunications Systems/ Equipment Maintenance	71.4	24.2	2.0	2.4
307X0	Telecommunications Systems Control	47.0	48.5	2.7	1.8
328X5	Airborne Command Post Communications Equipment	16.3	69.9	12.9	.9

TABLE 3- Most Recent DIS Investigative Dossiers
For Personnel In Specialties Requiring BIs

AFSC	Description	SBI	BI/ IBI	Periodic Review	Other	None
274X0	Command and Control	52.8%	39.9%	.8%	1.5%	5.0%
316X0	Missile Systems Analyst	3.3	81.9	.2	.9	13.8
316X2	Missile Electronic Equipment	2.1	82.1	.0	1.0	14.7
316X3	Instrumentation Specialist	5.5	47.8	.3	1.8	44.7
341X7	Missile Trainer	1.6	74.5	1.5	.8	21.8
443X0	Missile Maintenance	1.2	80.7	.1	1.1	16.8
445X0	Missile Facilities	2.3	63.3	.0	1.8	32.6
462X0	Aircraft Armament Systems	1.5	71.8	.2	1.8	24.7
463X0	Nuclear Weapons	1.9	75.8	.0	.9	21.4
464X0	Explosive Ordnance Disposal	2.7	63.0	.1	.9	33.3
545X1	Liquid Fuel Systems Maintenance	1.1	2.8	.0	2.8	93.1
99105	Scientific Measurement Technician	24.9	50.2	1.2	.8	22.9
99106	Scientific Laboratory Technician	15.4	63.1	1.3	.4	19.7

noticeable. For instrumentation specialists (316X3) and explosive ordnance disposal specialists (464X0), very high percentages without background investigations were found at the entry and upper (7 and above) skill levels, while most at the 3 and 5 levels had a BI or IBI. Most missile facilities specialists (445X0) at the 1 and 3 skill levels showed no background investigation. Most at the 5 and 7 levels had a code indicating a BI or IBI. In the liquid fuel systems maintenance specialty (545X1) the situation shows little skill level variance. Hardly anyone with this AFSC had a DIS background investigation.

Table 4 presents the findings on clearance eligibility for the BI specialties. Most personnel, in all but the liquid fuel systems maintenance specialty, held top secret (code T) eligibility. These percentages ranged from 63% of the instrumentation specialists to 94% of the missile systems analysts. Almost all of the liquid fuel systems maintenance specialists had secret (code S) status. Other AFSCs with relatively high percentages with secret eligibility were instrumentation specialists (35%), missile facilities specialists (31%), aircraft armament systems specialists (21%), and explosive ordnance disposal specialists (22%).

Skill level distributions of clearance status were examined for those specialties with the greatest variability. Different patterns are evident. Most entry level instrumentation specialists (316X3) had secret status, while the majority at the 3 and 5 skill levels possessed top secret. About equal percentages of those at the 7 level had top secret and secret eligibility.

Most missile facilities (445X0) and aircraft armament systems specialists (462X0) at the 1 and 3 skill levels had secret status, while most above those levels had top secret. Most entry level explosive ordnance disposal specialists (464X0) had secret eligibility and virtually all others in this specialty had top secret status.

In only three of the BI specialties did more than a few percent of personnel have SCI eligibility. These were command and control specialists (14%) and scientific measurement (15%)

TABLE 4- Clearance Eligibility Of Personnel
In Specialties Requiring BIs

AFSC	Description	SCI	Top Secret	Secret	Other
274X0	Command and Control	14.1%	83.5%	.9%	1.5%
316X0	Missile Systems Analyst	2.3	94.1	3.1	.5
316X2	Missile Electronic Equipment	1.0	90.0	7.6	1.3
316X3	Instrumentation Specialist	1.8	63.4	34.6	.1
341X7	Missile Trainer	1.5	91.0	5.3	2.3
443X0	Missile Maintenance	.2	87.2	11.2	1.3
445X0	Missile Facilities	1.3	66.6	31.0	1.1
462X0	Aircraft Armament Systems	.5	77.5	21.2	.8
463X0	Nuclear Weapons	.9	93.1	4.8	1.2
464X0	Explosive Ordnance Disposal	1.2	75.9	22.3	.6
545X1	Liquid Fuel Systems Maintenance	.2	3.1	94.8	1.9
99105	Scientific Measurement Technician	14.9	83.5	1.6	.0
99106	Scientific Laboratory Technician	6.1	93.4	.0	.4

and laboratory (6%) technicians.

In summary, these analyses have shown that there are sizeable differences among Air Force specialties which currently require BI and SBI coverage. Differences were noted both across specialties and between skill levels within specialty. They are reflected both in the type of DIS investigation and the Air Force clearance eligibility recorded on the DCII.

THE DOD PERSONNEL SECURITY RESEARCH PROGRAM:
INITIAL USAF FINDINGS AND FUTURE AREAS OF STUDY

November 1984

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THE DOD PERSONNEL SECURITY RESEARCH PROGRAM:

Initial Air Force Findings and Future Areas of Study

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Worldwide Information Security Workshop
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THE DOD PERSONNEL SECURITY RESEARCH PROGRAM:

Initial Air Force Findings and Future Areas of Study

The project about which I will be speaking today is, in
effect, a response to a 1982 select panel report to the Deputy
Under Secretary of Defense for Policy. The panel's review of
the DOD Personnel Security Program was made to determine how
the program might be strengthened. Three major points from
that report lead to my discussion of the Personnel Security
Research Program. They are the finding that little data were
available for program evaluation use; the call for research
in the use of psychological techniques during pre-screening
and investigation; and lastly, the need for study of the adjudicative
process.

The DOD Personnel Security Research Program began operation
about a year ago under the sponsorship of Bill Fedor and Pete
Nelson in OSD. Housed in Monterey, California at the Naval
Postgraduate School, the project is a joint effort of the school's
Manpower Research Center, the Defense Manpower Data Center,
and a consulting firm, BDM. The Naval Postgraduate School has
set up a research professorship and provides the office space;
the Defense Manpower Data Center, known as DMDC, contributes
programming and data processing support; while BDM has been
called on to assist with analytical, programming and clerical
assistance.

As alluded to earlier, the specified objectives of the
Personnel Security Research Program are linked to the select
panel's concerns. An initial research agenda of eight study
areas was developed and serves as the framework for the program.
Resource constraints and flexible adaptation following the assessment
of early findings has produced somewhat uneven progress over
the agenda. One year into the project, we have progressed deeper
into some areas than anticipated at the price of not yet being
where we hoped to in others. Thus after briefly distinguishing
the eight study areas to you, more detailed presentations will

be divided into showings of findings for some and discussion of plans for others. If time permits, I hope to conclude with a participative discussion of some general issues in research on personnel security, as well as to answer your questions.

Within the notion of research on the use of psychological assessment techniques, three specific study areas have been identified. At this point none of them delve into such exotic topics as the polygraph, which is already receiving considerable scrutiny, or the use of inkblot tests to ferret out potential spies or security violators. Instead, we focus on more widely known psychological techniques generally used in personnel selection and placement and specifically utilized to greater or lesser extent in the services' personnel security programs. These are such tools as interviews and questionnaires, biographical data, personality measures, and references.

The first of these types of studies involves the evaluation of the services' pre-screening for sensitive positions. The objective is to identify, compare and contrast, and assess the various pre-screening efforts to determine how successful they are. Existence of differing programs across services invites questions such as—whose way is better—and—what features of theirs should and could we adopt.

A second effort under the "use of psychological techniques" heading will examine the Defense Investigative Service (DIS) subject interview. Now a key component of the background investigation, the relative effectiveness of different DIS agents and various techniques will be studied. Through observation and survey methods, these studies will develop materials to enhance the general guidance contained in the DIS manual and the brief treatment given the subject interview in agent training at the Defense Security Institute. Interviewing has received much study within the field of personnel psychology. If the interview is, as a leading scholar has described, a search for negative information, then the IBI subject interview can surely be thought of as the ultimate search for negative information.

The final aspect of the psychological assessment procedures

type studies in the Personnel Security Research Program involves the development and validation of new psychological tests. A first priority here will be to adapt a screening instrument now under development by the Navy, acting as DOD executive agent. The intent is to blend the types of information currently used by each service, as well as private employers, into a DOD-wide enlistment screening test. In addition, findings from other studies within the program may imply additional types of psychological assessments which could improve the Personnel Security Program.

Study of the adjudication process comprises the second major area of research. Our agenda specifies three types of investigation under this heading. The first of these would seek to improve adjudicative interpretability of information developed during the background investigation. It would do so by converting qualitative BI results into quantitative indices and linking these data with subsequent behavior patterns. The resulting statistical analyses will provide indicators of the risk of unsuitable military behavior associated with various levels of severity and combinations of types of derogatory information detected in the course of the background investigation.

A follow on project would combine the information developed in the study just described with actual adjudicator decisions and present the adjudicators with relevant probability tables to use in adjusting future decisions. After a time, follow-up analyses would be conducted to determine if the valididty of adjudicative decisions had improved. This would provide an empirical basis for adjustment of adjudication guidelines.

A second follow on would use the data described in the background investigation study, along with individual adjudicator decisions, to study the consistency of individual adjudicators, over time and the reliability across adjudicators of decisions on cases with equivalent derogatory content. In personnel psychology this is closely related to mathematical policy capturing models. Much of the developmental work on this analytic technique was done by Air Force researchers at the Human Resources Laboratory

in San Antonio. The results of such studies will reveal how various adjudicators subjectively interpret their guidelines and therefore which guidelines may require more clarity.

Basically, the six types of studies I have just described cover the major attributes of the DOD personnel security system. They include service pre-screening, DIS investigations, and service controlled adjudication. They involve collecting new data and reconfiguring existing qualitative information into more analytically useful quantitative formats. In contrast, the two remaining items on our research agenda really just involve looking at what we already routinely have in the way of quantitative data relevant to personnel security. For just that reason, because its already available, and because proper scientific analysis and evaluation dictates an understanding of what is, before contemplating what changes could or should be made, we have to date, concentrated on the latter two types of studies.

Both involve the linking and analyses of various automated data bases. The primary data bases in this area are the DCII, maintained by DIS and the personnel files maintained by DMDC, especially the periodic master and loss files and AVF enlisted cohort files. Personnel files are available to the Personnel Security Research Program through DMDC's role as the DOD automated personnel data archive. Access to the DCII was made possible by a memorandum of understanding between DIS and DMDC, which provides for quarterly submission of an automated copy of the complete DCII in return for storage as a disaster back-up and utilization in research studies.

Through the creative linking and design of analyses on these files, it is possible to provide DOD personnel security management with previously unavailable or difficult to obtain basic management information and program evaluation materials, as well as needed input for the kinds of studies I have already described.

The distinction between the latter two types of studies is one of cross-sectional versus longitudinal analysis. By cross-sectional I am referring to point-in-time snapshots of

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selected populations and variables. Such questions as-what percentage of E3 nuclear weapons specialists have had BIs-or-how many colonels are eligible for SCI access-can be answered by these analyses.

Longitudinal studies are more complex. They usually involve more variables and typically select a cohort of individuals, alike in some relevant dimension, to track over time. An analysis of this type might address the differential unsuitability attrition loss rates from security sensitive occupations of members with more vs. less extensive reported drug use histories.

That covers the various types of studies envisioned by the Personnel Security Research Program. Now for some findings. To preface this discussion, it will be useful to talk a bit about the DCII. I have spent a good part of the past year (far more than I had bargained for) learning about the intricacies of this vast storehouse of personnel security information. To most users, the DCII is simple enough. Enter a subject's name and find out about his clearance status or which investigations have been conducted. However, to work with the DCII analytically and link it with other data bases has proven to be a difficult assignment.

The problem starts with size. By vast storehouse, I am refering to a data set with 22 million segments of information within 15 million records. The segments are coded representations of investigations, NACs, adjudications, and alternate subject names. Physically, the DCII requires 9 tapes. Table 1 shows how many of the records contained the various types of segments in May of this year. Each record contains from 1 to 11 segments, most one or two.

TABLE 1

Type of Segment	Number of Records*
National Agency Check	6,927,000
Investigation	7,434,000
Adjudication	2,929,000
Alternate Name	2,677,000

*Rounded to the nearest thousand, as of May 1984.

The investigation segments, which Table 1 shows to be most numerous, include service developed dossiers as well as over 350 types of DIS background investigation. Adjudications are limited to Army and Air Force presently, as the Navy does not input clearance information to the DCII. The May 1984 DCII included one and a half million Air Force clearances with 18 different eligibility codes. Of these 74% were secret, 18% top secret and 5% SCI.

But not only in terms of size did the DCII present a challenge. In order to develop management information and to link various data bases, individual level data are required. Each of the nearly 15 million DCII records do not necessarily represent complete data on an individual. In fact, about 650 thousand individuals were found with more than a single DCII record. In some cases duplicate segments were carried on an individual's multiple records, while in other instances, unique segments were found. All of these nuances had to be programmed around before the results I will now describe could be obtained.

One set of analyses was run after an adjusted DCII was matched against the service master files at the beginning of FY 84. For the Air Force, these analyses presented the clearance status of the members of each of the various components as shown on table 2.

TABLE 2

	Secret	Top Secret	SCI	Other
Air Force Civilian	81%	11%	2%	7%
Air Force Active Duty				
Enlisted	73	18	7	3
Officer	33	49	17	1
Air Force Reserve*				
Enlisted	81	9	2	8
Officer	59	29	6	6
Air National Guard				
Enlisted	82	11	0	6
Officer	42	55	2	1

*Ready reserve only. Excludes standby and retired reserve.

These figures document the extent to which higher percentages of officers than enlisted personnel have top secret and SCI status. The analyses also showed a high rate of current personnel matches with the DCII, over 99% for active duty personnel and Air National Guard officers and 94-95% for civilians, Air Force Reservists, and Air National Guard enlisted personnel.

Another analysis looked at the most recent type of DIS background investigation segment carried in the DCII for active military members. As table 3 shows, initial BIs and SBIs predominated for both officers and enlisted personnel. Far more enlisted personnel than officers showed no DIS investigation (other than a basic NAC). In percentage terms this works out to 74% of the enlisted personnel and 44% of the officers on board at the beginning of FY 84.

TABLE 3

Most Recent DIS Background Investigation	Enlisted	Officer
Initial SBI	41,574	18,547
Initial BI	40,150	16,486
Initial IBI/EBI	7,995	3,967
Supplemental SBI	9,293	10,674
SBI Periodic Review (limited)	4,653	3,390
Other	24,446	5,981
None	355,332	45,834

Another way of approaching the DCII is to identify a recent temporal period of interest and frame a query of the data. An example of this can be seen on table 4. Here, the clearance status and type of investigation were paired for the first half of FY 84 to study the relative frequencies of various types of actions during this period. Table 4 shows two-thirds of the Air Force clearance entries in the first half of the last fiscal year to be secret clearances based on some variant of a national agency check.

TABLE 4

Air Force Clearance Actions

(October 1983-March 1984)

Status	Investigation	Number	Percent
Secret	ENTNAC, NAC, NACI	58,415	65.9
SCI	SBI	9,425	10.6
Top Secret	BI	8,487	9.6
Top Secret	SBI	3,553	4.0
Terminated	ENTNAC, NAC, NACI	2,102	2.4
Pending	ENTNAC, NAC, NACI	1,231	1.4
Favorable	SBI	1,023	1.2
Favorable	ENTNAC, NAC, NACI	979	1.1
Other Combinations		3,491	3.9
Total		88,706	100.1%

A recently completed study of Air Force enlisted personnel started with those specialties which currently require security pre-screening during basic training at Lackland Air Force Base. Our effort focused on this group's investigation and clearance status as reflected in their DCII entries. Considerable variation was found as table 5 shows. It rank orders the specialties we were told require background investigation, with respect to the percentage of personnel with top secret or SCI status. These values can be seen to range from 3% of the liquid fuel systems maintenance specialists to 98% of the scientific measurement technicians and command and control specialists, and 99% of the scientific laboratory technicians.

TABLE 5
Percent With Top Secret Or SCI Clearance Eligibility
(October 1983)

AFSC Description	%
Scientific Laboratory Technician	99
Scientific Measurement Technician	98
Command and Control	98
Missile Systems Analyst	96
Nuclear Weapons	94
Missile Trainer	92
Missile Electronic Equipment	91
Missile Maintenance	87
Aircraft Armament Systems	78
Explosive Ordnance Disposal	77
Missile Facilities	68
Instrumentation Specialist	65
Liquid Fuel Systems Maintenance	3

Some of the other studies made possible due to our restructuring of the DCII and its linkage with the personnel files have produced unexpected glimpses at potential problem areas within the overall personnel security system. These include an ongoing study into

the extent of unnecessary investigation requests resulting from the non-mutual exclusivity of DCII records.

Another example is reflected on table 6. This table contains the numbers of former Air Force enlisted personnel who, although discharged for unsuitability over the past 10 years, still retain top secret or SCI status in the DCII. A cursory glance at the reasons for discharge indicates that many of these individuals should perhaps no longer be considered acceptable security risks. Yet the very existence of high level clearance eligibility on the DOD's major security data base may make them highly desireable employees of civilian or contractor organizations. We believe these findings may indicate the need for closer coordination between the personnel and security communities.

TABLE 6

Air Force Personnel With Continued Top Secret Or SCI Status In Spite Of Unsuitability Discharges (1974-1983)

Reason For Discharge	Number
Motivational Problems	1,722
Unsatisfactory Performance	1,196
Drugs or Alcoholism	1,043
Entry Level Performance and Conduct	840
Discreditable Incidents	660
Character or Behavior Disorder	553
Disciplinary Infractions	292
Civil Court Conviction or Courtmartial	203
Unsuitability or Misconduct	195
Homosexuality	118
Financial Irresponsibility	96
Good of the Service	85
Total	7,003

These figures also imply something else about those in jobs of concern to the Personnel Security Program. That is

the fact that a lot of people in sensitive jobs are being removed for reasons of unsuitability. Specifically, they are being lost in about the same high proportions that those in the general enlisted population are lost. A recent study of AVF era Air Force enlistees shows about half of the non-high school graduates and a quarter of the high school graduates failing to complete the first three years of their contract. Most of this attrition is due to the kinds of problems cited on Table 6. Therefore, such losses are not only a waste of financial resources and productivity from a purely personnel point of view. They are also of concern to the security community in that large numbers of individuals who "successfully", and I use the term in quotes, survived the current pre-screening and background investigation hurdles and were then certified as acceptable risks for positions of trust, are turning out to be not such good risks after all.

A look at some current data reinforces the point. These data are from an ongoing longitudinal study following a group of Air Force enlistees who received security pre-screening at Lackland. The data are not mature yet, so the attrition rates computed to date are not as high as the three year figures I cited awhile ago. But it is the comparative rates that are of most interest.

First of all, the nearly 15,000 recruits were divided analytically into three categories: those discharged during basic training (4%); those surviving basic training, but disqualified by the pre-screening (33%); and those surviving both basic training and the pre-screening hurdle (62%). I'll have nothing more to say about the basic training discharges except to note that a quarter of them qualified under the pre-screening criteria. Among the major reasons for pre-screening disqualifications for the basic training survivors were suitability factors such as drug and alcohol abuse (32%), legal histories (11%), unfavorable employment histories (5%), histories of irresponsibility (3%), character disorders (2%), peer ratings (2%), financial problems (3%), and unfavorable character references (1%).

The two groups of basic training survivors were subdivided based on whether they received background investigations or not. Ten percent of those disqualified by pre-screening were found to have had DIS background investigations, while two thirds of those qualified at Lackland, later were investigated by DIS.

Table 7 compares the background investigation and clearance situations of those qualified and disqualified by the Lackland pre-screening program. Note that most of those disqualified did not have a BI or SBI and showed only secret level eligibility. Qualified recruits generally fell into three situations; SCI eligibility based on an SBI, top secret status based on a BI, or a secret clearance without a BI or SBI.

TABLE 7
DIS Investigations and Air Force Clearances
For Basic Training Survivors

		Pre-Screening Outcome	
DIS Investigation	Air Force Clearance	Qualified	Disqualified
No BI or SBI	Secret	30%	88%
BI	Top Secret	24	2
SBI	SCI	35	4
SBI	Top Secret	4	2
SBI	Secret	1	1
SBI	Other	2	-
BI	Secret	2	-
BI	Other	1	-
No BI or SBI	Other	1	2

Before going on to examine the findings from this particular study, lets step away from the numbers and think about what we ideally expect from the personnel security process. Speaking very generally, I think we would want the service pre-screening and DIS background investigation to turn up any information relevant to a subject's suitability for a sensitive position. In turn we would expect the adjudication to correctly evaluate this information and only pass on those who will not pose a

threat to our security, either through willful action or irresponsible inaction. Who then are the failures of the system? Is it just those caught after the fact?

They are few in number, I am glad to say. But I don't think we can take pride in their paucity, both because of the tremendous damage even a single incident can cause and because I am left to speculate that the detected failures are only some unknown fraction of all the failures. In effect, we only find out about the more inept; those who get caught. This leads me to give up on the notion that our standard be the dichotomous yes-no of actual security breach since we do not even know about all such instances. Furthermore, to develop valid predictors from the relatively small number of detected failures I believe is unfeasible.

The alternative I do see as appropriate is to view security risk assessment in probabilistic terms rather than as a dichotomous classification problem. In doing so there would be much similarity with the task of those who set insurance rates. While some subjects may be totally uninsurable, at least to most companies, most can be accomodated. However, depending on statistically defensible grounds, not all pay the same premium. Some are judged to be higher risks of accident or death, depending on whether we are dealing with auto or life insurance, than others. This does not imply that all those in a certain risk category will have an accident or die. Rather it accepts the actuarial reality that based on some set of pre-existing circumstances, higher percentages of certain groups will end up filing a claim. The process operates successfully without having to worry about which specific individuals will become failures, that is claimants.

To shift back from the insurance to the personnel security business, this translates into using a criterion against which we can reliably assign all subjects. This requirement eliminates using failures, since during any given time period, we are not sure who all the failures are. The alternative which makes sense to me is one derived from the already available personnel data, namely attrition. As previously mentioned, most of the

reasons for not completing an enlistment contract fit under the general notion of unsuitability. If adapted slightly to eliminate those reasons not necessarily of concern from a security standpoint, such as medical problems and pregnancy, I believe the attrition measure can be a key concept in improving personnel security in DOD.

Assuming at least your tentative acceptance of the utility of attrition, lets see how the current process measures up by going back to the study of those recently pre-screened at Lackland. If the process were working perfectly we should expect differing attrition rates for the different categories. Those disqualified at Lackland and not investigated by DIS should have the highest attrition rates. In contrast, those qualified at Lackland, investigated by DIS, and placed in sensitive positions should have very low attrition. Ideally the rate should be nil, but assuming a point of diminishing returns in the search for the perfect predictors, I could see something in the 2 to 5% range as credible, given a base rate of 20-25%.

The interim attrition rates reveal only a small difference between basic training survivors who were qualified and those disqualified by the Lackland pre-screening. While 11% of those disqualified had attrited, 9% of those who passed the pre-screening had failed to survive to this point. This is not a large enough difference to allow complacency with the current system. I am not able to make a final judgement regarding this data base since another year or two must pass before the final attrition rates will be available and more detailed analyses need to be done. It would seem however, that the pre-screening process could stand some fine tuning. Unless the over 800 individuals qualified at Lackland, but failing to complete their term of service, do not present a problem to the personnel security community.

Now that you have heard about the program in general and have seen a sampling of the initial results, I would like to deal with some more general issues and invite your input. The first is the notion of what criteria of success make sense.
I have introduced the concept of attrition, which seems to be a broader measure than typically used in the personnel security field. I think its useful because of its high correlation with the notion of overall suitability for sensitive DOD positions and its ease of access from the personnel side of the house. But what other criteria can we be examining? Short of documented espionage cases, what sorts of data are you aware of that reflect failures in the system? I am thinking of such things as clearance revocations or disciplinary actions resulting from minor security breeches. What is available in the Air Force? At what levels are such events documented-service wide?- base level?

A second issue that follows from the concept of assuming that some cleared individuals will present higher risks than others is the importance of continued monitoring after initial clearance. Obviously there is the periodic review. But with a shortage of resources to conduct such formal investigations leading to very limited PR quotas, that's obviously not enough.

I have been told that commanders of personnel in sensitive positions have a general responsibility for insuring the continuing suitability of their troops. But I have also been told that how well this is accomplished varies considerably. That is not hard to understand. Between having to fight the daily fires and not wanting to intrude on the personal lives of others beyond what is appropriate, insuring continuing suitability is not easy.

Yet I think much more is called for in this area if we are to feel more comfortable with the personnel security of our organizations. You heard it mentioned yesterday by one of the speakers that most serious incidents don't occur early on anyway. What having identified early on as a higher risk group can do for a commander is to allow her or his attention to focus on the weaker links in the system. Good continous

monitoring can identify problem cases in their early stages, before a serious incident has occurred or enough repetitions of the types of behavior necessary to generate a separation action through the personnel system have been documented. After all, if these personnel really do need clearance, then our standards for them should be higher.

IDENTIFICATION OF UNNECESSARY BACKGROUND INVESTIGATIONS

December 1984

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IDENTIFICATION OF UNNECESSARY BACKGROUND INVESTIGATIONS

The Personnel Security Program in DOD is currently faced with severely limited investigatory resources. This occurs in a period when minimizing case completion times is a key system performance criterion and the importance of periodic review is increasingly becoming recognized. Quotas are in effect, limiting the volume of reinvestigations and administrative enhancements are urgently sought to reduce completion times for investigations. In such an environment there is no room for duplication in the form of unnecessary investigations. Yet recent incidents have led to the conclusion that a number of unnecessary background investigation requests may have been forwarded to DIS.

The stimulus for this suspicion and for the resulting analyses reported here was the detection of a request for background investigation only six months after one had been completed on the same individual. Current policy does not require/permit another such investigation for five years. It was determined that a routine search of the DCII did not reveal either the initial investigation or the resulting Army clearance and so the second investigation was initiated. A second specially requested search of the DCII also did not turn up the existence of the initial investigation. Therefore, in spite of the frustrations of both the special agent who recalled the initial investigation, and the subject, it appeared that the second investigation would have to be conducted.

In this instance, the duplication of effort was avoided only after a search of the SSN based research version of the DCII did in fact locate the initial record of investigation and clearance. Beyond the specific implications for this case, the incident documented the reality of what had only been speculation: that because of the way in which the DCII is structured, it is possible that a search may not fully reveal the complete file contents on an individual. Recent analytical work on the DCII has revealed over 600 thousand individuals

with more than one record in the data base. Some were noted to contain duplicate segments, others unique segments.

In view of the possibility and undesireability of unnecessary investigations, it was decided to more thoroughly explore those situations where more than a single DCII record was found for an individual. Specifically, by examining cases where more than a single DIS investigation was found, it would be possible to explore the extent to which unnecessary background investigations had been conducted. A total of 21,529 individual SSNs that had more than one unique DIS type 3 (investigation) segment, were identified from the May 1984 DCII. This represents about 1% of the almost two million records with a DIS investigation segment.

In this analysis "unique" was defined relative to the entire contents of the 27 segment positions. A difference in any position was considered to constitute a unique segment. Cases where two identical segments were located represent bookkeeping problems not of concern here. The 21,529 figure represents only the instances where more than one unique 27 position segment was found. These represent anomalies because routine procedure is designed to allow only the single most recent DIS investigation to reside in the DCII. Previous investigations are to be overwritten by a more recent segment.

This report will describe the results of the examination of the characteristics of the DIS investigations found among the 21,529 identified individuals. All but 476 of them had exactly two DIS segments, while 463 had three and thirteen had four unique segments. Those with more than two will be described separately later. Of specific interest here were military background investigations and special background investigations. Table 1 shows the frequencies with which other case category codes were found when one of the two segments was either an initial BI (1A1) or SBI (1A2).

TABLE 1- Multiple DIS Segments Including An Initial
BI or SBI

Initial BI (1A1) and			Initial SBI (1A2) and		
Other Investigation	N	%	Other Investigation	N	%
1A1	994	25.6	1A3	764	21.6
1A2	537	13.8	1A2	657	18.5
1G2	482	12.4	1A1	537	15.2
1G1	323	8.3	1G2	288	8.1
1A7	300	7.7	1G1	183	5.2
1K1	228	5.9	1D3	158	4.5
1AA	219	5.6	1A7	148	4.2
Others	804	20.7	Other	809	22.8
Total	3,887	100.0%	Total	3,544	100.1%

In the case of initial BIs the most common situation was
for both segments to be coded 1A1. Other frequent pairings
with an initial BI were added coverage BIs, initial and supplemental
SBIs, and file and expanded NACs. With regard to initial SBIs,
the most frequent pairings, in addition to a second 1A2, were
added coverage SBIs, supplemental SBIs, BIs, periodic reviews,
and file NACs.

While all of these instances reflect segments not intended
to be or remain in the DCII, not all of them identify unnecessary
investigations. There are situations where two different types
of DIS investigation within a five year period may be quite
proper. For example, a file NAC followed by a BI or an SBI
followed by a supplemental SBI can be legitimate. Therefore
our analytical focus was next put on individuals with either
two initial BI segments or two initial SBI segments. For such
cases, the completion codes were ascertained, since only if
two completed investigations were found within a short time
period (less than five years) would we have identified a potentially
unnecessary investigation. Completion codes are shown on Table
2 for those individuals with two initial BI or SBI segments.

TABLE 2- Completion Codes For Multiple Initial BI and SBI Segments

Multiple BI Segments			Multiple SBI Segments		
Codes	N	%	Codes	N	%
Completed/Completed	344	34.6	Completed/Completed	209	31.8
Incomplete/Completed	422	42.5	Incomplete/Completed	268	40.8
Cancelled/Completed	141	14.2	Cancelled/Completed	110	16.7
Suspended/Completed	68	6.8	Suspended/Completed	40	6.1
Other Combinations	19	1.9	Other Combinations	30	4.6
Total	994	100.0%	Total	657	100.0

For both those with two BI segments and those with two
SBI segments, the most frequent combination of completion codes
was for one segment to show an "F" or completed status and the
other to have no completion code. Individual examination of
such cases generally revealed both segments to refer to the
same investigation rather than two separate investigations.

In about a third of the cases depicted on Table 2, both
segments had an "F" completion status. It was these individuals'
records that were given further scrutiny. Table 3 shows the
results of investigation date comparisons for the 344 BI pairs
and the 209 SBI pairs.

TABLE 3- Differences Between Investigation Dates

Background Investigations			Special Background Investigations	
N	%	Difference In Dates	N	%
151	43.9	Same Date/Same Investigation	101	48.3
53	15.4	Same Year	33	15.8
47	13.7	One Year	30	14.4
21	6.1	Two Years	3	1.4
19	5.5	Three Years	2	1.0
12	3.5	Four Years	6	2.9
41	11.9	Five-Ten Years	34	16.3
344	100.0%	Totals	209	100.1%

With respect to the data on Table 3, three general
categorizations can be made. First are those, amounting to
nearly half the totals, for which the calendar year and julian
date was exactly the same, as well as the case control number.

In these instances the separate segments refer to exactly the same investigation. Curiously, many of these cases shared the date of 80284 which happened to be October 10, 1980. In all, 106 of the 151 BIs and 64 of the 101 SBIs showed this date. A second category of cases consists of those with five or more years between the completed investigations. While technically the more recent should have overwritten the earlier, the gap between dates removes these cases from concern over their justification.

Finally to be considered are those instances of two BIs or SBIs per subject within a five year period. It is these cases which may involve unnecessary investigations. Table 3 shows 152 such BIs and 74 SBIs.

As previously mentioned, a separate analysis was made for the 476 SSNs with more than two DIS type 0 investigation segments. A total of 74 of these cases included at least one BI (1A1) segment, while of the 74, only seven were found to have two BI segments with completion codes indicating finished investigations. Of these seven, all but one pair contained the same date and case control number. The exception was an SSN with two BIs conducted six years apart. Thus, this analysis did not add a single suspect case to the 152 BIs identified earlier.

With regard to SBIs, 63 of the 476 SSNs had at least one 1A2 segment, while 30 had two or more. Of this 30, a total of nine showed two completed 1A2 segments. Analysis of the dates showed five of these nine pairs to be non-unique investigations and another to reflect an eight year period between investigations. The other three showed separate SBIs less than three years apart. So the search for unnecessary SBIs yielded a total of 77 pair which had occurred less than five years apart.

In summary, the relatively small number of potentially unnecessary military BIs and SBIs identified by these analyses does not indicate a serious problem for the Personnel Security Program.

PERSONNEL SECURITY INVESTIGATIONS:
SERVICE DIFFERENCES FOR SIMILAR OCCUPATIONS

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PERSONNEL SECURITY INVESTIGATIONS:

SERVICE DIFFERENCES FOR SIMILAR OCCUPATIONS

Each Service has its own occupational coding system to best reflect its unique mission. However, analytic requirements of a variety of OSD manpower and personnel studies have resulted in the development of a consistent DOD-wide framework identifying similar military jobs. The common officer and enlisted occupational groups and subgroups defining this framework are described in the DOD Occupational Conversion Manual (DOD 1312.1-M). Allocation of specialties from each Service, with different titles and codes, was based on an analysis of the similarity of duties and responsibilities reflected in position descriptions and related documents.

This occupational system can be of use to managers of DOD's Personnel Security Program. Using this common occupational structure to view the Services' requirements for DIS investigations can reveal to what extent and in which types of positions different notions of security sensitivity may have evolved. The basic question of how do the Services differ occupationally in their personnel security investigation requirements can be addressed.

This report describes the major findings from such an analysis, using personnel on active duty at the beginning of FY 84 as the study population. DMDC master files were linked with relevant DCII data to determine which personnel had been investigated by DIS. In the context of this report, "investigated" implies the existence of the "type 0" DIS segment in the DCII. For the most part such segments reflect BI and SBI level investigations, although some file and expanded NACs are also included.

Enlisted Personnel

A total of 160 occupational subgroups were examined. Personnel were found in two or more Services in 132 of these subgroups. Appendix I lists these and for each Service, the percentage with DIS investigation codes. For each subgroup the maximum percentage discrepancy among Services was computed. This value could range from zero to 100. If the percentage with a DIS investigation was exactly the same in each Service then there would be no discrepancy. Alternately, if no one in one Service and everyone in another Service had a DIS investigation, then the computed discrepancy would be 100, reflecting the maximum possible difference between two Services.

Review of the discrepancy values on Appendix I shows considerable variance across occupational subgroups. In some, for example the medical related subgroups, the Services are quite similar. Yet in others the inter-Service differences

are dramatic. Summarizing the discrepancy values shows 76 (over half) of the subgroups with a maximum difference under 10%, indicating close agreement among Services. On the other extreme 14 subgroups were identified with greater than 50% differences between Services. Of the remaining 42 enlisted subgroups 30 had maximum discrepancies between 10% and 25%, and 12 had differences between 25% and 50%.

Table 1 shows the extreme Services for those subgroups with larger than 50% discrepancies. The Air Force is most notable as the Service with relatively high percentages of personnel with DIS investigations, while the Marine Corps stands out as having the least coverage.

Table 1- <u>Enlisted Occupations With Highest Inter-Service</u>

<u>Discrepancies In DIS Investigation Rates</u>

DOD Occupational Subgroup	Lowest % With DIS Investigations		Highest % With DIS Investigations	
121 Missile Guidance and Control	Marine Corps	6.5%	Air Force	67.1%
122 Missile Checkout Equipment Test Equipment and Calibration	Army	0.0%	Air Force	77.2%
150 ADP Computers, General	Marine Corps	0.5%	Air Force	76.3%
160 Teletype and Cryptographic Equipment General	Marine Corps	35.3%	Air Force	96.7%
201 Radio Code	Army	22.0%	Navy	91.3%
202 Non-Code Radio	Marine Corps	7.1%	Navy	87.5%
233 Electronic Countermeasures	Navy	19.7%	Air Force	93.4%
250 Combat Operations Control	Army	16.4%	Air Force	72.2%
260 Communications Center Operations	Marine Corps	42.7%	Navy/Air Force	96.5%
491 Physical Science Laboratory	Navy	10.2%	Air Force	30.3%
532 Data Processing Programmers	Marine Corps	13.0%	Air Force	65.5%
632 Missile Mechanic	Marine Corps	4.3%	Air Force	82.6%
645 Ammunition Repair	Marine Corps	10.4%	Air Force	63.6%
646 Aviation Ordnance	Army	10.0%	Air Force	77.6%

Officers

Representatives of two or more Services were found in 60 of 63 DOD officer occupation groups. Occupation descriptions, Service specific DIS investigation rates, and maximum discrepancies are listed on Appendix II. In 18 officer groups the maximum discrepancy was under 10%. In 21 others it was between 10% and 25%, while 16 occupations had maximum discrepancies between 25% and 50%. The five DOD officer occupation groups with discrepancies exceeding 50% are presented on Table 2. Again the Marine Corps tends to show up on the low end, while the Navy and Air Force have the more complete DIS coverage in these occupations.

Table 2- <u>Officer Occupations With Highest Inter-Service</u>

<u>Discrepancies In DIS Investigation Rates</u>

DOD Occupational Group	Lowest % With DIS Investigations		Highest % With DIS Investigations	
4F Missile Maintenance	Marine Corps	8.3%	Air Force	79.3%
5A Physical Scientists	Army	20.7%	Navy	75.0%
5B Meteorologists	Marine Corps	12.5%	Air Force	83.0%
7F Pictorial Administrators	Marine Corps	12.5%	Navy	72.6%
8G Supply, Procurement and Allied Officers (other)	Marine Corps	28.6%	Navy	83.3%

Conclusions

These analyses, while providing a needed starting point, raise more questions than they answer. The finding of major differences between Services in DIS investigation rates, for certain types of occupations, indicates a need for more detailed study. A key question to be answered is whether the jobs defined as similar in the DOD occupational coding structure are sufficiently alike with respect to personnel security considerations. Other methodological issues involve the notion of inter-service discrepancies and how they are best characterized. Is the maxium value, as used in this study, a good measure or should a more complex computation, involving a DOD average and Service deviations from that average, be used?

If the occupations are similar enough, a case could be made for more consistent investigation requirements. Then questions would be appropriately addressed to the individual services regarding the need for some investigations currently requested and the rationale for not now requesting background investigations in other jobs. In this way OSD would be exercising its management oversight responsibilities over the DOD Personnel Security Program. Such responsibilities certainly include seeking the difficult balance between minimizing both the use of limited investigatory resources and intrusion on personal privacy on the one hand, and on the other, insuring that personnel in all jobs of a security sensitive nature have had sufficient investigative attention.

APPENDIX I

Percent of Enlisted Personnel With DIS Investigations

DOD Occupational Subgroup	Army	Navy	Marine Corps	Air Force	Maximum Discrepancy
010 Infantry, General	11.8	-	11.8	-	0.0
012 Military Training Instructor	23.3	18.6	-	12.8	10.5
020 Armor and Amphibious, General	9.2	-	10.3	-	1.1
030 Combat Engineering, General	16.2	-	9.6	-	6.6
041 Artillery and Gunnery	19.0	22.6	16.6	-	6.0
050 Air Crew, General	-	-	12.9	38.6	25.7
062 Small Boat Operators	9.7	21.5	-	12.0	11.8
100 Radio/Radar, General	-	27.0	11.6	-	15.4
101 Communications Radio	30.5	41.0	9.5	42.0	32.5
102 Navigation, Communication and Countermeasure	43.1	36.0	6.6	16.4	36.5
103 Air Traffic Control Radar	-	18.1	7.4	12.9	10.7
104 Surveillance/Target Acquisition and Tracking Radar	11.4	18.6	6.9	13.2	11.7
111 Bomb-Navigation	-	7.8	-	7.9	0.1
112 Airborne Fire Control	-	9.4	-	9.2	0.2
113 Shipboard and Other Fire Control	12.1	36.1	-	-	24.0
121 Missile Guidance and Control	13.8	61.6	6.5	67.1	60.6
122 Missile Checkout Equipment, Test Equipment, and Calibration	0.0	-	-	77.2	77.2
140 Nuclear Weapons Equipment Repair, General	92.6	-	-	81.7	10.9
150 ADP Computers, General	43.3	23.5	9.5	76.3	66.8
160 Teletype and Cryptographic Equipment, General	60.2	65.8	35.3	96.7	61.4
191 Training Devices	-	14.9	29.3	29.9	15.0
198 Electronic Instruments	16.0	21.3	16.6	13.9	7.4
201 Radio Code	22.0	91.8	34.4	81.7	69.8
202 Non-Code Radio	10.6	87.5	7.1	-	80.4
221 Radar	17.5	17.9	9.2	33.3	24.1
222 Air Traffic Control	15.6	11.2	9.8	10.5	5.8
230 Signal Intelligence/Electronic Warfare, General	99.6	73.6	100.0	-	26.4
231 Intercept Operators (Code and Non-Code)	99.0	99.2	99.7	99.3	0.7
232 Analysis	98.8	99.4	98.1	99.3	1.3
233 Electronic Countermeasures	92.9	19.7	-	98.4	78.7
241 Language Interrogation/Interpretation	41.0	-	66.4	79.0	38.0
242 Image Interpretation	92.7	98.9	98.2	98.2	6.2
243 Operational Intelligence	93.0	98.7	93.5	98.6	5.6
244 Counterintelligence	96.5	-	99.2	-	2.7
250 Combat Operations Control, General	16.4	-	36.2	72.2	55.8

DOD Occupational Subgroup	Army	Navy	Marine Corps	Air Force	Maximum Discrepancy
260 Communications Center Operations, General	60.3	96.5	42.7	96.5	53.8
300 Medical Care and Treatment, General	10.4	8.2	-	8.4	2.2
301 Operating Room	8.3	6.6	-	7.1	1.7
302 Mental Care	10.3	9.0	-	11.9	2.9
303 Therapy	7.5	4.1	-	11.8	7.7
304 Orthopedic	9.5	8.6	-	5.4	4.1
311 Laboratory	9.2	5.1	-	7.0	4.1
312 Pharmacy	8.0	7.3	-	9.0	1.7
313 Radiology	9.0	6.5	-	8.5	2.5
321 Food Inspection and Veterinary Services	9.8	-	-	8.0	1.8
322 Preventive Medical Services	12.5	15.6	-	10.4	5.2
330 Dental Care, General	8.4	5.3	-	8.7	3.1
331 Dental Laboratory	9.2	4.2	-	6.3	5.0
400 Photography, General	24.3	22.4	17.3	56.7	39.4
411 Mapping	27.6	-	11.6	-	16.0
412 Surveying	18.3	12.4	13.2	18.2	5.9
413 Drafting	17.8	-	13.8	-	4.0
414 Illustrating	27.3	51.5	15.8	61.9	46.1
420 Weather, General	16.7	20.8	7.9	27.7	19.8
431 Ordnance Disposal and Diving, EOD/UDT	79.2	-	73.6	84.0	10.4
450 Musicians, General	18.5	28.1	29.2	21.2	10.7
491 Physical Science Laboratory	14.6	10.2	-	80.3	70.1
492 Memorial Activities and Embalming	11.3	0.0	-	-	11.3
493 Safety	-	21.4	-	23.4	2.0
494 Nuclear, Biological, and Chemical Warfare	20.0	-	22.0	37.3	17.3
495 Firefighting and Damage Control	11.9	-	9.2	8.0	3.9
496 Other Technical Specialists and Assistants	3.6	-	-	17.2	13.6
500 Personnel, General	17.3	21.7	-	22.0	4.7
501 Recruiting and Counseling	23.0	17.9	-	19.3	5.1
510 Administration, General	28.0	39.2	15.2	38.3	24.0
511 Stenography	37.2	83.0	-	-	45.8
512 Legal Administration	19.6	29.7	9.9	25.3	19.8
513 Medical Administration	12.0	-	-	14.2	2.2
521 First Sergeants, Sergeants Major, and Leading Chiefs	30.6	-	27.2	24.5	6.1
531 Data Processing Operators/ Analysts	39.3	46.6	12.2	56.8	43.6
532 Programmers	48.0	64.9	13.9	65.5	51.6
541 Auditing and Accounting	29.4	-	10.1	14.9	18.3
542 Disbursing	11.8	7.9	9.9	6.8	5.0
551 Supply Administration	11.6	14.3	11.8	16.3	4.7
553 Transportation	17.9	17.8	8.6	10.2	9.3
554 Postal	-	10.1	7.7	10.8	3.1

DOD	Occupational Subgroup	Army	Navy	Marine Corps	Air Force	Maximum Discrepancy
555	Aviation Maintenance Records and Reports	-	11.0	10.9	-	0.1
556	Flight Operations	13.9	-	17.7	28.1	14.2
561	Chaplain's Assistants	12.2	19.1	-	14.0	6.9
562	Recreation and Welfare	18.6	-	13.0	18.8	5.8
570	Information and Education General	21.1	19.9	19.5	24.3	4.8
600	Aircraft, General	11.7	9.6	10.7	10.2	2.1
601	Aircraft Engines	8.5	11.0	9.5	8.2	2.8
602	Aircraft Accessories	13.0	11.2	8.9	10.7	4.1
603	Aircraft Structures	10.4	9.9	8.8	7.8	2.6
604	Aircraft Launch Equipment	-	11.0	7.1	-	3.9
610	Automotive, General	9.3	-	7.9	9.6	1.7
611	Tracked Vehicles	9.5	-	8.8	-	0.7
612	Construction Equipment	9.3	9.7	6.0	7.3	3.7
621	Wire Communications, Linemen	12.2	21.2	8.7	28.2	19.5
622	Wire Communications, Central Office	35.0	42.1	7.6	29.7	34.5
623	Wire Communications, Interior	-	14.5	7.1	36.2	29.1
632	Missile Mechanic	15.9	-	4.3	82.6	78.3
633	Missile Launch and Support Facilities	-	50.4	-	64.9	14.5
640	Armament Maintenance, General	18.9	-	12.0	-	6.9
641	Small Arms Repair	6.8	-	7.8	18.2	11.4
642	Artillery Repair	7.1	-	7.0	-	0.1
643	Turret Repair	9.8	-	18.0	-	8.2
644	Nuclear Weapons Maintenance and Assembly	95.3	80.9	-	-	14.4
645	Ammunition Repair	20.7	-	10.4	68.6	58.2
646	Aviation Ordnance	10.9	13.5	12.6	77.6	66.7
652	Auxiliaries, Shipboard Propulsion	15.2	10.6	-	12.8	4.6
662	Electric Power	14.0	7.8	-	16.1	8.3
670	Precision Equipment, General	11.2	18.4	8.2	-	10.2
690	Other Mechanical and Electric Equipment, General	8.4	11.6	0.0	-	11.6
700	Metalworking, General	-	7.1	8.7	8.8	1.7
701	Welding	-	12.0	-	10.1	1.9
702	Machinists	11.0	10.0	8.8	18.7	9.9
703	Sheetmetal	-	14.7	-	9.8	4.9
704	Metal Body Repair	6.9	-	6.2	13.9	7.7
710	Construction, General	20.2	13.2	-	13.6	7.0
712	Woodworking	5.9	23.1	-	11.3	17.2
713	Construction Equipment Operation	8.1	8.7	8.6	9.9	1.8
720	Utilities, General	8.2	12.6	9.7	11.2	4.4
721	Electricians	10.0	15.8	6.2	15.0	9.6
740	Lithography, General	29.4	39.2	21.6	45.7	24.1
750	Industrial Gas and Fuel Production, General	-	6.1	8.0	-	1.9
760	Fabric, Leather, and Rubber, General	6.6	-	7.0	10.6	4.0

DOD Occupational Subgroup	Army	Navy	Marine Corps	Air Force	Maximum Discrepancy
800 Food Service, General	13.2	10.0	8.2	10.5	5.0
801 Stewards and Enlisted Aides	–	8.8	–	20.7	11.9
811 Motor Vehicle Operators	11.5	–	7.0	15.5	8.5
821 Missile Fuel and Petroleum	8.6	–	6.7	10.4	3.7
822 Warehousing and Equipment Handling	10.4	–	8.0	12.6	4.6
823 Sales Store	–	9.9	12.0	16.9	7.0
830 Law Enforcement, General	15.5	21.2	15.0	15.2	6.2
831 Corrections	9.2	–	14.6	–	5.4
832 Investigations	87.8	–	86.4	90.4	4.0
840 Laundry and Personal Service, General	8.0	10.3	6.5	–	3.8
860 Forward Area Equipment Support	12.2	10.9	9.8	10.2	2.4
911 Cadets and Other Officer Candidates	8.1	–	–	6.4	1.7
920 Undesignated Occupations, General	0.0	–	–	29.0	29.0
950 Not Occupationally Qualified, General	11.8	11.5	4.6	17.0	12.4

APPENDIX II

Percent Of Officers With DIS Investigations

DOD Occupational Group	Army	Navy	Marine Corps	Air Force	Maximum Discrepancy
1A General Officers and Executives, General and Flag	98.3	90.0	93.8	97.4	8.3
1B General Officers and Executives, Executives	61.5	66.7	82.4	75.1	20.9
2A Fixed-Wing Fighter and Bomber Pilots	-	88.4	71.4	86.1	17.3
2B Other Fixed-Wing Pilots	49.6	65.2	29.8	53.6	35.4
2C Helicopter Pilots	33.2	33.9	31.3	31.1	2.8
2D Aircraft Crews	-	84.1	74.0	84.3	10.3
2E Ground and Naval Arms	44.4	81.1	52.0	-	36.7
2F Missiles	-	79.0	-	96.8	17.8
2G Operations Staff	61.7	79.7	42.8	73.3	36.9
3A Intelligence, General	98.6	98.1	98.4	99.2	1.1
3B Communications Intelligence	98.3	99.4	100.0	99.3	1.7
3C Counterintelligence	98.6	97.2	98.7	93.6	5.1
4A Construction and Utilities	25.8	39.0	24.6	28.3	14.4
4B Electrical/Electronic	39.8	73.8	33.9	47.7	39.9
4C Communications and Radar	67.1	87.9	74.5	91.9	24.8
4D Aviation Maintenance and Allied	32.8	54.5	17.6	43.0	36.9
4E Ordnance	67.8	61.8	48.4	81.3	32.9
4F Missile Maintenance	39.7	44.0	8.3	79.3	71.0
4H Ship Machinery	21.5	67.1	-	-	45.6
4J Safety	-	66.3	-	61.0	5.3
4L Automotive and Allied	21.0	-	17.5	-	3.5
4M Surveying and Mapping	68.6	-	54.6	78.1	23.5
4N Other Engineering and Maintenance	35.4	47.9	-	58.5	23.1
5A Physical Scientists	20.7	75.0	-	56.8	54.3
5B Meteorologists	31.7	72.9	12.5	83.0	70.5
5C Biological Scientists	15.5	11.7	-	19.2	7.5
5D Social Scientists	-	79.6	-	89.1	9.5
5E Psychologists	14.4	22.8	-	24.4	10.0
5F Legal	27.7	29.7	20.0	31.5	11.5
5G Chaplain	17.6	14.0	-	26.1	12.1
5H Social Workers	7.9	23.1	-	15.2	15.2
5J Mathematicians and Statisticians	63.6	64.7	-	-	1.1
5K Educators and Instructors	-	70.8	-	46.4	24.4
5L Research and Development Coordinators	-	80.0	-	36.0	6.0
5M Community Activities Officers	-	69.3	-	43.4	25.9
6A Physicians	8.0	6.2	-	9.7	3.5
6C Dentists	6.7	4.0	-	4.7	2.7
6E General Nurses	6.0	3.1	-	2.9	3.1
6F Nursing Specialists	3.6	2.8	-	4.8	2.0
6G Veterinarians	13.8	-	-	11.9	1.9
6H Allied Medical	11.2	8.0	-	8.7	3.2
7A Administrators, General	-	69.6	51.4	51.9	18.2
7B Training Administrators	-	73.7	36.4	35.7	38.0

DOD Occupational Group	Army	Navy	Marine Corps	Air Force	Maximum Discrepancy
7C Manpower and Personnel	46.2	66.7	-	44.8	21.9
7D Comptrollers and Fiscal	35.0	32.4	17.2	35.2	18.0
7E Data Processing	50.5	68.7	33.0	64.3	35.7
7F Pictorial	-	72.6	12.5	57.0	60.1
7G Information	33.3	63.9	35.9	41.2	30.6
7H Police	49.2	65.7	35.1	63.4	30.6
7M Medical Administration	19.1	24.2	-	32.7	13.6
7N Morale and Welfare	20.0	48.1	29.4	29.7	28.1
8A Logistics, General	-	48.3	36.8	61.9	25.1
8B Supply	31.5	43.4	22.3	42.9	21.1
8C Transportation	39.0	53.2	18.5	37.9	34.7
8D Procurement and Production	46.7	42.3	33.3	39.4	13.4
8E Food Service	30.0	25.4	18.2	20.3	11.8
8F Exchange and Commissary	-	25.7	18.2	32.3	14.1
8G Other Supply, Procurement and Allied Officers	64.3	83.3	28.6	37.3	54.7
9B Students	11.1	44.0	6.6	18.9	37.4
9E Other Non-Occupational	11.4	-	17.7	-	6.3

MOST RECENT DIS INVESTIGATION AND CLEARANCE INFORMATION
IN THE DCII AT THE BEGINNING OF FISCAL YEAR 1985

March 1985

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Report 85-5

MOST RECENT DIS INVESTIGATION AND CLEARANCE INFORMATION

IN THE DCII

AT THE BEGINNING OF FISCAL YEAR 1985

Background

Previous reports in this Personnel Security Research Program series were based on end of FY83 and mid-FY84 versions of the DCII. This paper documents the edited contents of a more recent, end of FY84 version. Forthcoming reports will describe the results of linkages of this data base with other automated personnel files maintained by the Defense Manpower Data Center (DMDC) such as the master inventory files and enlisted accession cohort files.

This report presents the content of key DCII data elements and compares current distributions with those from the end of FY83. At both times, only the most recent DIS investigation segments (type 0) and Army and Air Force adjudication segments (type 3) with SSNs were considered. A further exclusion criterion eliminated DIS investigations with victim or cross-reference codes. Therefore the resulting edited DCII does not contain NAC history, pending NAC, AKA, or current name segments. Also, it does not contain any tracing segments (type 0) of investigative agencies other than DIS. The resulting file contains, at most, a single DIS investigation segment and a single Army or Air Force adjudication segment for each individual with identifying information.

DIS Investigations

The edited end of FY84 DCII contains a total of 1,957,997 DIS investigation segments with a total of 354 different case category codes. This is an increase of about 145,000 individuals from the previous fiscal year. A relatively small number of DIS case category codes accounted for most of the investigations, as Table 1 shows. The 20 most frequent types of investigation include over 90% of the DIS segments in this file. The most notable differences between this ordering of DIS investigations and that of one year ago are the increases in initial military IBIs (1A3/C - over 31,000), industrial IBIs (1C3/C - over 18,000), and military periodic reviews (1D3/C - over 16,000). To more fully contrast current DIS investigative activity with the cumulated data in Table 1, a distribution was obtained limited to investigations initiated during FY84. Table 2 lists the most frequent types of investigation for this time period. In comparison with the overall inventory of most recent DIS investigations, Table 2 shows initial military and industrial IBIs and military periodic reviews to be among the most frequent types of DIS investigations initiated during FY84. Other types of investigations that were far more prominent in FY84 than in previous years were expanded industrial NACs with suitability issues, expanded industrial NACs, and civilian and industrial periodic reviews.

Three other attributes of DIS investigations were examined. These were completion status, retention period, and year of investigation. Most segments (93.4%) show an 'F' code, indicating a completed investigation, while 2.6% had no completion code,

TABLE 1
Most Frequent DIS Investigations
(As of 1 October 1984)

Case Categories	Description	Subject	Number	Percent of Total	Cumulative Percent
1A1/A	Initial BI	Military	317,479	16.2	16.2
1A2/B	Initial SBI	Military	279,277	14.3	30.5
1G1/A	File NAC (entrance)	Military	222,865	11.4	41.9
1G2/B	File NAC (standard)	Military	176,598	9.0	50.9
1K1/A	Expanded NAC (entrance)	Military	129,271	6.6	57.5
1A3/C	Initial IBI	Military	78,354	4.0	61.5
1C1/A	Initial BI	Industrial	67,529	3.4	64.9
1A7/G	Supplemental SBI	Military	64,315	3.3	68.2
1C2/B	Initial SBI	Industrial	57,571	2.9	71.1
1J2/B	File NAC	Industrial	55,897	2.9	74.0
1B2/B	Initial SBI	Civilian	44,763	2.3	76.3
1M2/B	Expanded NAC	Industrial	39,630	2.0	78.3
1C3/C	Initial IBI	Industrial	39,513	2.0	80.3
1V9/I	Expanded NAC (suitability)	Industrial	36,127	1.8	82.1
1B1/A	Initial BI	Civilian	34,317	1.8	83.9
1D5/E	Limited SBI/PR	Military	30,793	1.6	85.5
1K2/B	Expanded NAC (standard)	Military	25,649	1.3	86.8
1D3/C	Periodic Review	Military	24,690	1.3	88.1
1E5/E	Limited SBI/PR	Civilian	19,737	1.0	89.1
1P3/C	SBI (suitability)	Military	19,292	1.0	90.1
---	All other DIS codes	---	194,280	9.9	100.0
Total			1,957,997	100.0	

TABLE 2
Most Frequent DIS Investigations Initiated During Fiscal Year 1984

Case Categories	Description	Subject	Number	Percent of Total	Cummulative Percent
1A2/B	Initial SBI	Military	38,608	17.0	17.0
1A3/C	Initial IBI	Military	36,054	15.9	32.9
1C3/C	Initial IBI	Industrial	21,414	9.4	42.3
1D3/C	Periodic Review	Military	18,059	8.0	50.3
1C2/B	Initial SBI	Industrial	11,953	5.3	55.6
1G2	File NAC (standard)	Military	11,790	5.2	60.8
1V9/I	Expanded NAC (suitability)	Industrial	11,104	4.9	65.6
1K1/A	Expanded NAC (entrance)	Military	10,083	4.4	70.1
1M2/B	Expanded NAC	Industrial	9,089	4.0	74.1
1B2/B	Initial SBI	Civilian	8,122	3.6	77.7
1E3/C	Periodic Review	Civilian	6,735	3.0	80.6
1J2	File NAC	Industrial	6,116	2.7	83.3
1F3/C	Periodic Review	Industrial	6,092	2.7	86.0
1B1/A	Initial BI	Civilian	4,310	2.1	88.1
1G1	File NAC (entrance)	Military	4,680	2.1	90.2
1K2/B	Expanded NAC (standard)	Military	3,293	1.5	91.7
1P3/C	SBI (suitability)	Military	2,628	1.2	92.8
1W9/I	Post Adjudication (suitability)	Industrial	2,458	1.1	93.9
1R3/C	IBI (suitability)	Military	2,372	1.0	94.9
1R9/I	IBI (suitability)	Industrial	1,809	0.8	95.7
1XX	Initiated by other agency	---	1,728	0.8	96.5
1H2	File NAC	Civilian	1,619	0.7	97.2
---	All other DIS codes	---	6,326	2.8	100.0
Total			226,942	100.0	

implying an open investigation. Most of the open cases were initiated during 1984. Of the remaining cases 2.1% were cancelled, 1.0% suspended, and 0.9% showed a changed case category code.

With regard to retention period, 96.2% of the segments are to be retained for 15 years. Another 0.8% have retention codes of 25 or 30 years while 0.4% have codes ranging from one to ten years. A total of 2.6% do not have a retention code, most of these being the open investigations.

Table 3 presents a frequency distribution of the years in which the most recent DIS investigations, currently on the DCII, were initiated. Other than 1972, DIS's initial year of operation, over 100,000 investigation segments remain from each year. Over half of these investigations date prior to 1980.

Security Clearance Adjudications

Only the Army and Air Force currently input adjudicative information into the DCII. At the end of FY84, the edited DCII contained over 1.4 million Army and 1.5 million Air Force segments. These figures represent increases of over 145,000 Army and 84,000 Air Force personnel since the end of FY83. Table 4 shows the clearance level distributions for these two Services. A major difference between Services is the Army's use of two separate Secret (S and M) and Top Secret (T and N) codes, while the Air Force uses single designations for its Secret and Top Secret adjudications. Most clearances in both Services are at the Secret level. The most notable differences are at the Top Secret level where a higher percentage of Air Force (17.4%) than Army

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TABLE 3
Year DIS Investigation Initiated
(As of 1 October 1984)

Year	Number	Percent of Total	Cumulative Percent
1972	88,620	4.5	4.5
1973	154,003	7.9	12.4
1974	165,875	8.5	20.9
1975	143,364	7.3	28.2
1976	116,907	6.0	34.2
1977	127,524	6.5	40.7
1978	127,956	6.5	47.2
1979	148,990	7.6	54.8
1980	180,521	9.2	64.0
1981	163,983	8.4	72.4
1982	167,449	8.6	81.0
1983	197,432	10.1	91.0
1984	175,371	9.0	100.0
Other	2	0.0	---
Total	1,957,997	100.0	

TABLE 4
Army and Air Force Clearance Adjudications
(As of 1 October 1984)

Clearance Level	Code	Army Number	Army Percent	Code	Air Force Number	Air Force Percent
Secret	S	388,647	27.4	S	1,120,963	73.8
	M	761,108	53.6			
Top Secret	T	48,747	3.4	T	263,756	17.4
	N	39,202	2.8			
SCI	V	123,873	8.7	V	81,318	5.4
Other	R	35,664	2.5	F	20,990	1.4
	X	21,737	1.5	Z	18,532	1.2
all other		2,063	0.1	all other	13,737	0.9
Total		1,421,041	100.0		1,519,296	100.0

TABLE 5
Army and Air Force Clearance Adjudications During Fiscal Year 1984

Clearance Level	Code	Army Number	Army Percent	Code	Air Force Number	Air Force Percent
Secret	S	29,477	13.1	S	112,334	64.6
	M	133,208	59.0			
Top Secret	T	7,015	3.1	T	26,614	15.2
	N	7,966	3.5			
SCI	V	22,327	9.9	V	20,538	11.8
Other	R	4,769	2.1	F	4,466	2.6
	X	20,868	9.2	Z	5,443	3.1
all other		13	0.0	all other	4,705	2.7
Total		225,643	100.0		174,600	100.0

(6.2%) segments are found and SCI, where more Army (8.7%) than Air Force (5.4%) segments are found. The most common other codes encountered among the Army segments were "revoked/denied", (R) and "pending adjudication", (X). In the Air Force they were "favorable", (F) and "terminated-unfavorable", (Z).

As with DIS investigations, a separate set of clearance status distributions were obtained for FY84 adjudications. The results are shown on Table 5. In the Army, major differences between FY84 and the overall file are seen with respect to more 'M' and fewer 'S' secret clearances in FY84 and the expected much higher rate of 'X' codes for FY84. For the Air Force, most notable is the higher frequency of SCI level clearances and lower rate of Secret clearances during FY84 relative to all Air Force adjudications in the DCII as FY85 began.

In addition to clearance status, several other adjudicative segment attributes were studied. The type of investigation adjudicated was one of these. As Tables 6A and 6B show, five investigation codes accounted for most clearance segments. In both Services virtually all Secret level clearances were based on ENTNACs, NACs, or NACIs. Most Top Secret clearances resulted from BI type investigations, while others resulted from SBIs. Virtually all SCI clearances were based on SBIs.

A major Service difference apparent on these tables is the higher percentage of NACIs in the Air Force (20.8%) than the Army (6.0% and 7.8%) for Secret level clearances. Also, with respect to Top Secret clearance, the Air Force shows a

TABLE 6A

Army Clearance Code by Basis for Clearance
(As of 1 October 1984)

Basis	Secret (S)		Secret (M)		Top Secret (T)		Top Secret (N)		SCI (V)		Revoked/ Denied (R)		Pending Adjudication (X)		Other		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
ENTNAC	240,605	61.9	542,344	71.3	16	0.0	4	0.0	16	0.0	1,298	3.6	3	0.0	242	11.7	784,528	55.2
NAC	122,582	31.5	158,486	20.8	117	0.2	14	0.0	52	0.0	967	2.7	2	0.0	198	9.6	282,418	19.9
NACI	23,121	6.0	59,610	7.8	5	0.0	2	0.0	1	0.0	29	0.1	0	—	565	27.4	83,333	5.9
BI	1,750	0.4	659	0.1	42,344	96.9	38,615	98.5	101	0.1	650	1.8	2	0.0	454	22.0	84,575	6.0
SBI	453	0.1	3	0.0	5,667	11.6	531	1.4	123,615	99.8	1,530	4.3	7	0.0	294	14.3	132,100	9.3
Other	136	0.0	6	0.0	598	1.2	36	0.1	88	0.1	31,190	87.5	21,723	99.9	310	15.0	54,087	3.8
Total	388,647	100.0	761,108	100.0	43,747	100.0	39,202	100.0	123,873	100.0	35,664	100.0	21,737	100.0	2,063	100.0	1,421,041	100.0

Air Force Clearance Code by Basis for Clearance
(As of 1 October 1984)

Basis	Secret (S) n	%	Top Secret (T) n	%	SCI (V) n	%	Favorable (F) n	%	Terminated – Unfavorable (Z) n	%	Other n	%	Total n	%
ENTNAC	546,976	48.8	8	0.0	1	0.0	6,725	32.0	8,989	48.5	2,079	15.1	564,778	37.2
NAC	332,272	29.6	48	0.0	2	0.0	8,328	39.7	2,564	13.8	2,594	18.9	345,808	22.8
NACI	232,612	20.8	4	0.0	0	—	126	0.6	1,464	7.9	3,904	28.4	238,110	15.7
BI	2,484	0.2	179,536	68.1	3	0.0	348	1.7	2,291	12.4	1,756	12.8	186,468	12.3
SBI	55	0.0	75,518	28.6	30,224	96.6	5,240	25.0	2,438	13.2	2,947	21.5	166,422	11.0
Other	6,564	0.6	8,592	3.3	1,088	3.3	223	1.1	786	4.2	457	3.3	17,710	1.2
Total	1,120,963	100.0	263,756	100.0	31,318	100.0	20,990	100.0	18,532	100.0	13,737	100.0	1,519,296	100.0

higher percentage with SBIs (28.6%) than the Army (11.6% and 1.4%).

Dates of adjudication and investigation were also studied. Tables 7A and 7B show the adjudication date findings for the various clearance codes. Most adjudications in the edited DCII have been accomplished since 1980. A much higher percentage of the Air Force adjudications (20.3%) show dates prior to 1975 than for the Army (0.6%). For the Army, far more of the ΄S΄ Secret (39.6%) and ΄T΄ Top Secret (43.6%) clearances were adjudicated prior to 1980 than was the case for those with codes ΄M΄ (0.7%) and ΄N΄ (15.7%).

Similar findings are displayed on Tables 8A and 8B for the dates of the investigation adjudicated. More of the Air Force (24.1%) than Army (5.2%) investigations were before 1975. Also, more of the investigations leading to Army ΄S΄ and ΄T΄ clearances occurred before 1980, than did those resulting in ΄M΄ and ΄N΄ clearances.

A final data element studied was the reason for review, which is coded only for Army adjudications. Results are shown for the various clearance codes on Table 9. Large differences are obvious. "Surety" was the reason for review for about two-thirds of those with ΄M΄ and ΄N΄ clearance codes, while most others with these clearances showed "nuclear" as the reason for review. For most of those with an ΄S΄ code "clearance" was the reason for review, while about a fourth were coded as "surety" adjudications. The three prominent review codes for segments with ΄T΄ clearances were "surety", "clearance", and "revalidation".

TABLE 7A

Army Clearance Code by Date of Adjudication
(As of 1 October 1984)

Year of Adjudication	Secret (S) n	%	Secret (M) n	%	Top Secret (T) n	%	Top Secret (N) n	%	SCI (V) n	%	Revoked/Denied (R) n	%	Pending Adjudication (X) n	%	Other n	%	Total n	%
1980 - 1984	234,694	60.4	755,281	99.2	27,538	56.5	33,049	84.3	77,822	62.8	24,979	70.0	21,661	99.7	1,011	49.0	1,176,035	82.8
1975 - 1979	153,901	39.6	5,630	0.7	20,064	41.2	6,152	15.7	38,707	31.2	10,684	30.0	76	0.3	1,050	50.9	236,264	16.6
1970 - 1974	10	0.0	6	0.0	621	1.3	0	—	7,110	5.7	1	0.0	0	—	0	—	7,748	0.5
Other	42	0.0	191	0.0	524	1.1	1	0.0	234	0.2	0	—	0	—	2	0.1	994	0.1
Total	388,647	100.0	761,108	100.0	43,747	100.0	39,202	100.0	123,873	100.0	35,664	100.0	21,737	100.0	2,063	100.0	1,421,041	100.0

TABLE 7B

Air Force Clearance Code by Date of Adjudication
(As of 1 October 1984)

Year of Adjudication	Secret (S)		Top Secret (T)		SCI (V)		Favorable (F)		Terminated - Unfavorable (Z)		Other		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1980 - 1984	596,423	53.2	109,101	41.4	70,275	86.4	16,393	78.1	17,313	93.4	12,890	93.8	822,395	54.1
1975 - 1979	290,536	25.9	73,369	27.8	10,874	13.4	4,447	21.2	1,219	6.6	831	6.0	381,276	25.1
1970 - 1974	98,651	8.8	37,264	14.1	167	0.2	144	0.7	0	—	6	0.0	136,232	9.0
Other	135,353	12.1	44,022	16.7	2	0.0	6	0.0	0	—	10	0.1	179,393	11.8
Total	1,120,963	100.0	263,756	100.0	81,318	100.0	20,990	100.0	18,532	100.0	13,737	100.0	1,519,296	100.0

TABLE 3A

Army Clearance Code by Date of Investigation
(As of 1 October 1984)

Year of Investigation	Secret (S) n	%	Secret (M) n	%	Top Secret (T) n	%	Top Secret (N) n	%	SCI (V) n	%	Revoked/ Denied (R) n	%	Pending Adjudication (X) n	%	Other n	%	Total n	%
1980 – 1984	168,216	43.3	662,596	87.1	18,971	38.9	27,471	70.1	71,436	57.7	22,804	63.9	21,649	99.6	591	28.6	993,734	69.9
1975 – 1979	195,856	50.4	78,965	10.4	14,810	30.4	8,510	21.7	42,830	34.6	12,293	34.5	87	0.4	1,346	65.2	354,697	25.0
1970 – 1974	18,561	4.8	13,232	1.7	7,160	14.7	1,781	4.5	9,291	7.5	446	1.3	1	0.0	69	3.3	50,543	3.6
Other	6,014	1.5	6,315	0.8	7,306	16.0	1,440	3.7	316	0.3	119	0.3	0	—	57	2.8	22,067	1.6
Total	388,647	100.0	761,108	100.0	43,747	100.0	39,202	100.0	123,873	100.0	35,664	100.0	21,737	100.0	2,063	100.0	1,421,041	100.0

TABLE 8B
Air Force Clearance Code by Date of Investigation
(As of 1 October 1984)

Year of Investigation	Secret (S)		Top Secret (T)		SCI (V)		Terminated – Favorable (F)		Terminated – Unfavorable (Z)		Other		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1980 – 1984	524,269	46.8	84,450	32.0	63,666	78.3	14,773	70.4	9,778	52.8	8,868	64.6	705,804	46.5
1975 – 1979	330,624	29.5	83,676	31.7	17,144	21.1	5,841	27.8	7,638	41.2	2,847	20.7	447,770	29.5
1970 – 1974	110,835	9.9	44,598	16.9	462	0.6	246	1.2	759	4.1	620	4.5	157,520	10.4
Other	155,235	13.8	51,032	19.3	46	0.1	130	0.6	357	1.9	1,402	10.2	208,202	13.7
Total	1,120,963	100.0	263,756	100.0	81,318	100.0	20,990	100.0	18,532	100.0	13,737	100.0	1,519,296	100.0

A-14-16

TABLE 9

Army Clearance Code by Reason for Review
(As of 1 October 1984)

Reason for Review	Secret (S) n	%	Secret (n) n	%	Top Secret (T) n	%	Top Secret (N) n	%	SCI (V) n	%	Revoked/ Denied (R) n	%	Pending Adjudication (X) n	%	Other n	%	Total n	%
Surety	95,735	24.6	488,710	64.2	19,567	40.1	26,394	67.3	31,212	25.2	0	—	0	—	57	2.8	661,675	46.6
Clearance	279,468	71.9	4,156	0.6	13,698	28.1	945	2.4	231	0.2	22,008	61.7	31	0.1	557	27.0	321,094	22.6
Nuclear	8,213	2.1	263,050	35.2	2,701	5.5	10,623	27.1	1,834	1.5	2	0.0	0	—	15	0.7	291,438	20.5
Special Intelligence	560	0.1	0	—	2,013	4.1	232	0.6	84,287	68.0	2,649	7.4	3	0.0	11	0.5	89,755	6.3
Review Required	255	0.1	150	0.0	6	0.0	0	—	258	0.2	9,974	28.0	21,601	99.4	4	0.2	32,248	2.3
Revalidation	3,809	1.0	3	0.0	9,256	19.0	21	0.0	675	0.5	356	1.0	0	—	5	0.2	14,125	1.0
Other	607	0.2	39	0.0	1,506	3.1	987	2.5	5,376	4.3	675	1.9	102	0.5	1,414	68.5	10,706	0.8
Total	388,647	100.0	761,108	100.0	43,747	100.0	39,202	100.0	123,873	100.0	35,664	100.0	21,737	100.0	2,063	100.0	1,421,041	100.0

A-14-17

Two-thirds of the segments with Army SCI clearance codes had "special intelligence" as the reason for review, while most others had "surety".

CONTINUED TOP SECRET AND SCI STATUS OF FORMER ARMY PERSONNEL
WITH UNSUITABILITY DISCHARGES

April 1985

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Report 85-6

<u>Continued Top Secret and SCI Status of</u>

<u>Former Army Personnel with Unsuitability Discharges</u>

Background

Recent computer analyses conducted at the Naval Postgraduate
School, as part of the Personnel Security Research Program,
have linked the Defense Central Index of Investigations (DCII),
the major DoD personnel security data base, with an enlisted
accession cohort file, containing longitudinal personnel information
on the nearly 4.2 million individuals who entered military service
between FY74 and FY84. This latter data base was developed
especially for personnel security applications at the Defense
Manpower Data Center. The focus of the present investigation
was to document the need for closer ties between the personnel
and security communities.

In comparing Army attrition data with clearance information
a paradox was discovered, in which thousands of individuals
who had been discharged over the last ten years for unsuitability
still retained DCII adjudication codes indicating top secret
and SCI clearance. Since those already investigated and cleared
are highly desirable new hires for DoD civilian and contractor
positions, there exists the possibility of inappropriate information
in DoD's security data base reflecting favorably on individuals
for whom just the opposite should be the case.

The following tables describe the 2,959 former Army enlisted personnel with top secret ('N' and 'T') and SCI ('V') clearance status codes remaining in the DCII as FY85 began, who had received unsuitablity discharges. The tables profile these personnel with respect to which MOSs they had entered with, what kinds of security investigation they were given, how long they stayed in the Army, how much time elapsed between favorable adjudication and being discharged from the Army, under what circumstances they left, and what occupation they were serving in when discharged.

Findings

Table 1 shows the enlistment MOSs of these personnel. Among those with top secret status the most frequent enlistment MOSs are seen to be atomic demolition munitions, intelligence analyst, telecommunications center operation, military police, and nuclear weapons. Most frequent individual enlistment MOSs for SCI personnel are EW/SIGINT voice interceptor, Morse interceptor, and analyst.

After entering the Army, Table 2 finds most with top secret 'N' clearance to have had initital BIs (74%) or IBIs (19%). More variability is evident among those with 'T' top secret codes. In addition to initial BI and IBIs, 17% had initial SBIs, while 10% had a BI with suitability issues and 8% had an

Table 1
Enlistment MOS

MOS	Description	Top Secret (N) n	Top Secret (N) %	Top Secret (T) n	Top Secret (T) %	SCI (V) n	SCI (V) %
05C	Radio Teletype Operator	2	0.7	4	0.8	81	3.8
05H	EW/SIGINT Morse Interceptor	0	---	27	5.1	184	8.5
05K	EW/SIGINT Non-Morse Interceptor	0	---	5	1.0	69	3.2
12E	Atomic Demolition Munitions	63	23.0	45	8.6	1	0.0
13B	Cannon Crewman	14	5.1	24	4.6	2	0.1
13E	Cannon Fire Direction	8	2.9	2	0.4	1	0.0
32D	Station Technical Controller	3	1.1	13	2.5	15	0.7
33S	EW/Intercept Tactical System Repairer	0	---	8	1.5	65	3.0
55G	Nuclear Weapons	16	5.8	18	3.4	0	---
72E	Telecommunications Center Operator	19	6.9	62	11.8	93	4.3
72G	Data Communications Switching Center	8	2.9	10	1.9	96	4.4
95B	Military Police	18	6.6	18	3.4	91	4.2
96B	Intelligence Analyst	27	9.9	21	4.0	12	0.6
96D	Image Interpreter	8	2.9	7	1.3	2	0.1
98C	EW/SIGINT Analyst	0	---	6	1.1	144	6.7
98G	EW/SIGINT Voice Interceptor	1	0.4	10	1.9	190	8.8
None	Not Indicated	20	7.3	85	16.2	483	22.4
Other	---	67	24.5	161	30.6	630	29.2
Total		274	100.0	526	100.0	2,159	100.0

Table 2
Type of DIS Investigation Shown in DCII

DIS Code	Description	Top Secret (N) n	Top Secret (N) %	Top Secret (T) n	Top Secret (T) %	SCI (V) n	SCI (V) %
1A1/A	BI, initial	204	74.5	272	51.7	23	1.1
1A2/B	SBI, initial	1	0.4	89	16.9	1,876	86.9
1A3/C	IBI, initial	52	19.0	35	6.7	8	0.4
1A7/G	SBI, supplemental	1	0.4	4	0.8	43	2.0
1N3/C	BI, suitability issues	4	1.5	52	9.9	6	0.3
1P3/C	SBI, suitability issues	1	0.4	42	8.0	88	4.1
Other	---	11	4.0	32	6.1	115	5.3
Total		274	100.0	526	100.0	2,159	100.0

SBI with suitability issues. Of those discharged for unsuitability and retaining SCI status, 87% had initial SBI codes in the DCII.

Table 3 indicates the wide dispersion in total months of service for those identified in this study. While some were discharged within the first three months of service, others served over six years before being discharged for unsuitability. Of the three clearance codes, those with SCI eligibility had the shortest service tenure, 50% serving a year or less and only 10% serving over four years.

Also computed was the period between adjudication and separation. This analysis revealed that in a small fraction of the cases, the clearance was granted well after military separation, based on a DIS code indicating that the subject was not in the military at the time of the investigation. However, as Table 4 and the military DIS codes on Table 2 confirm, in most cases, the investigation and adjudication occurred before separation. Thus the nature of the discharge is not reflected (as perhaps it should be) in the top secret or SCI eligibility indicated in the DCII. Table 4 finds the time period between adjudication and discharge to be between 1 and 24 months for a majority of those studied. For the top secret groups this figure was 65%, while it was 59% for the SCI group.

Table 3
Months of Military Service

Months	Top Secret (N) n	Top Secret (N) %	Top Secret (T) n	Top Secret (T) %	SCI (V) n	SCI (V) %
3 or less	31	11.3	24	4.6	282	13.1
4- 6	24	8.8	26	4.9	344	15.9
7- 12	39	14.2	64	12.2	459	21.3
13- 24	58	21.2	130	24.7	424	19.6
25- 36	38	13.9	111	21.1	286	13.2
37- 48	20	7.3	51	9.7	142	6.6
49- 72	39	14.2	61	11.6	120	5.6
73-127	25	9.1	59	11.2	102	4.7
Total	274	100.0	526	100.0	2,159	100.0

Table 4
Months Between Clearance Adjudication and Discharge

	Months	Top Secret (N) n	Top Secret (N) %	Top Secret (T) n	Top Secret (T) %	SCI (V) n	SCI (V) %
Adjudication prior to discharge by:	over 60	0	---	4	0.8	33	1.5
	49-60	6	2.2	8	1.5	36	1.7
	37-48	18	6.6	20	3.8	87	4.0
	25-36	31	11.3	49	9.3	199	9.2
	13-24	51	18.6	93	17.7	330	15.3
	7-12	45	16.4	94	17.9	307	14.2
	1- 6	81	29.6	156	29.7	631	29.2
	same	17	6.2	29	5.5	149	6.9
Adjudication after discharge by:	1- 6	11	4.0	46	8.7	322	14.9
	over 6	14	5.1	27	5.1	65	3.0
	Total	274	100.0	526	100.0	2,159	100.0

On Table 5 are the reasons for discharge. Perusal of the discharge descriptions reveals that each is related to the sort of suitability issues dealt with in prescreening and security investigations for sensitive positions requiring top secret and SCI clearances. Therefore, it is not unreasonable to believe that in at least some of these cases, review of the circumstances surrounding discharge would result in a revised adjudication of clearance status other than top secret or SCI. For those with top secret Army adjudications, the most frequent unsuitability discharge codes reflect unsatisfactory performance, performance and conduct problems, discharge in lieu of court martial and drugs. These codes account for 72% of those with 'N' and 70% with 'T' clearances. Among SCI personnel with unsuitability discharges, unsatisfactory performance, performance and conduct problems, and general unsuitability account for 72% of the 2,159 cases.

Duty occupation at separation was the final data item examined for these personnel. Table 6 lists the most frequently identified occupations, in which these individuals were performing at the time of their unsuitability discharges. Under the common DoD occupational coding system, the jobs with the most top secret personnel were combat engineering, artillery and gunnery, communications center operations, and law enforcement. Highest proportions of the SCI eligibles with unsuitability discharges were found

Table 5
Reason for Discharge

DoD Code	Description	Top Secret (N) n	%	Top Secret (T) n	%	SCI (V) n	%
60	Character or Behavior Disorder	14	5.1	21	4.0	61	2.8
61	Motivational Problems/Apathy	12	4.4	45	8.6	113	5.2
64	Alcoholism	8	2.9	9	1.7	9	0.4
65	Discreditable Incidents	2	0.7	11	2.1	9	0.4
67	Drugs	20	7.3	66	12.5	58	2.7
76	Homosexuality	5	1.8	8	1.5	46	2.1
78	In Lieu of Court Martial	28	10.2	58	11.0	144	6.7
82	Unsuitability	22	8.0	35	6.7	267	12.4
84	Basic Training Attrition	1	0.4	0	---	103	4.8
86	Unsatisfactory Performance	95	34.7	199	37.8	798	37.0
87	Performance and Conduct	53	19.3	48	9.1	493	22.8
Other	---	14	5.1	26	4.9	58	2.7
Total		274	100.0	526	100.0	2,159	100.0

Table 6
Duty Occupation Code at Separation

DoD Occupation Code	Description of Occupation	Top Secret (N) n	%	Top Secret (T) n	%	SCI (V) n	%
000	None	68	24.8	70	13.3	533	24.7
010	Infantry	10	3.6	18	3.4	31	1.4
030	Combat Engineering	43	15.7	44	8.4	7	0.3
041	Artillery and Gunnery	20	7.3	29	5.5	13	0.6
043	Missile Artillery, Operating Crew	9	3.3	5	1.0	8	0.4
201	Radio Code	7	2.6	11	2.1	49	2.3
231	Intercept Operators	0	---	2	0.4	209	9.7
232	Analysis	0	---	1	0.2	82	3.8
250	Combat Operations Control	10	3.6	8	1.5	9	0.4
260	Communications Center Operations	18	6.6	62	11.8	86	4.0
510	Administration	3	1.1	22	4.2	89	4.1
610	Automotive	1	0.4	11	2.1	59	2.7
644	Nuclear Weapons Maintenance/Assembly	8	2.9	9	1.7	2	0.1
830	Law Enforcement	17	6.2	19	3.6	57	2.6
950	Not Occupationally Qualified	11	4.0	56	10.6	533	24.7
Other	---	49	17.9	159	30.2	392	18.2
Total		274	100.0	526	100.0	2,159	100.0

in intercept operations, administration, communications center operations, and analysis.

Conclusions

The analyses in this study have identified a lack of consistency in Army personnel and security programs. Nearly 3,000 former enlisted personnel were identified, all of whom had been discharged for various types of unsuitability between 1974 and 1984, yet still retained Army top secret and SCI clearance codes in the primary DoD security data base, as FY85 began. Occupational, investigatory, and adjudicative data on these individuals were examined. Results indicated that many or most had enlisted *for and served in sensitive positions*, been investigated by the Defense Investigative Service and cleared by the Army, and discharged for the same types of reasons that investigators and adjudicators consider derogatory from a security standpoint. Yet no adjustment had been made in any of their clearance codes in the DCII, even though this would be one of the first places searched if these same "unsuitable" individuals seek DoD contractor or civilian employment. This indicates a need to review the circumstances of discharge for such people to determine if different clearance codes would be more appropriate.

CONTINUED TOP SECRET AND SCI STATUS OF FORMER AIR FORCE PERSONNEL
WITH UNSUITABILITY DISCHARGES

April 1985

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Report 85-7

Continued Top Secret and SCI Status of
Former Air Force Personnel with Unsuitability Discharges

Background

Recent computer analyses conducted at the Naval Postgraduate
School, as part of the Personnel Security Research Program,
have linked the Defense Central Index of Investigations (DCII),
the major DoD personnel security data base, with an enlisted
accession cohort file, containing longitudinal personnel information
on the nearly 4.2 million individuals who entered military service
between FY74 and FY84. This latter data base was developed
especially for personnel security applications at the Defense
Manpower Data Center. The focus of the present investigation
was to document the need for closer ties between the personnel
and security communities.

In comparing Air Force attrition data with clearance information
a paradox was discovered, in which thousands of individuals
who had been discharged over the last ten years for unsuitability
still retained DCII adjudication codes indicating top secret
and SCI clearance. Since those already investigated and cleared
are highly desirable new hires for DoD civilian and contractor
positions, there exists the possibility of inappropriate information
in DoD's security data base reflecting favorably on individuals
for whom just the opposite should be the case.

The following tables describe the 6,108 former Air Force enlisted personnel with top secret and 985 others with SCI clearance status codes remaining in the DCII as FY85 began, who had received unsuitablity discharges. The tables profile these personnel with respect to which AFSCs they had entered with, what kinds of security investigation they were given, how long they stayed in the Air Force, how much time elapsed between favorable adjudication and being discharged from the Air Force, under what circumstances they left, and what occupation they were serving in when discharged.

Findings

Table 1 shows the enlistment AFSCs of these personnel. While over 40% entered with a non-specific code, relatively high percentages were found who entered for jobs such as aircraft armament systems, munitions maintenance, or missile maintenance and ended up with a top secret clearance. Among those receiving SCI clear nces, many had come in for cryptology, Morse or printer systems, or telecommunications operations jobs.

After entering the Air Force, Table 2 finds 74% of the top secret group with initial DIS background investigations and another 15% with initial SBIs. Over 88% of the SCI group had inital SBI codes in the DCII. Note also in Table 2 that

Table 1
Enlistment AFSC

AFSC	Description	Top Secret n	Top Secret %	SCI n	SCI %
202XX	Radio Communications Analysis	34	0.6	24	2.4
206XX	Imagery Interpreter	14	0.2	23	2.3
207XX	Morse/Printer Systems	103	1.7	98	9.9
208XX	Cryptologic Linguist	91	1.5	140	14.2
291XX	Telecommunications Operations	148	2.4	66	6.7
306XX	Electronic Communications/Crytographic Equipment	49	0.8	33	3.4
307XX	Telecommunications Systems Control	36	0.6	18	1.8
316XX	Missile Electronic Maintenance	106	1.7	0	---
443XX	Missile Maintenance	259	4.2	0	---
461XX	Munitions Maintenance	528	8.6	0	---
462XX	Aircraft Armament Systems	1,205	19.7	2	0.2
811XX	Security Police	81	1.3	19	1.9
990XX	Basic Airman	2,445	40.0	430	43.7
None	Not indicated	298	4.9	19	1.9
Other	---	711	11.6	113	11.5
Total		6,108	100.0	985	100.0

Table 2
Type of DIS Investigation Shown in DCII

DIS Code	Description	Top Secret n	Top Secret %	SCI n	SCI %
1A1/A	BI, initial	4,542	74.4	21	2.1
1A2/B	SBI, initial	893	14.6	871	88.4
1A7/G	SBI, supplemental	98	1.6	36	3.7
1N3/C	BI, suitability issues	287	4.7	0	---
1P3/C	SBI, suitability issues	98	1.6	34	3.5
Other	---	190	3.1	23	2.3
Total		6,108	100.0	985	100.0

A-16-4

some individuals had BI and SBI suitablity issue cases, but still received top secret and SCI clearances.

Table 3 indicates the wide dispersion in total months of service for those identified in this study. While some were discharged within the first three months of service, others served over six years before being discharged for unsuitability. Most of the top secret (88%) and SCI (90%) personnel lasted between 4 months and 4 years.

Also computed was the period between adjudication and separation. This analysis revealed that in a small fraction of the cases, the clearance was granted well after military separation, based on a DIS code indicating that the subject was not in the military at the time of the investigation. However, as Table 4 and the military DIS codes on Table 2 confirm, in most cases the investigation and adjudication occurred before separation. Thus the nature of the discharge is not reflected (as perhaps it should) in the top secret or SCI eligibility indicated in the DCII. Table 4 finds the time period between adjudication and discharge to be between 1 and 24 months for most of those studied. For the top secret group this figure was 64%, while it was 70% for those with SCI eligiblity.

On Table 5 are the reasons for discharge. Perusal of the discharge descriptions reveals that each is related to the sort

Table 3
Months of Military Service

Months	Top Secret n	Top Secret %	SCI n	SCI %
3 or less	108	1.8	32	3.2
4- 6	578	9.5	128	13.0
7- 12	843	13.8	224	22.7
13- 24	1,919	31.4	286	29.0
25- 36	1,285	21.0	175	17.8
37- 48	736	12.0	72	7.3
49- 72	428	7.0	49	5.0
73-120	211	3.5	19	1.9
Total	6,108	100.0	985	100.0

Table 4
Months Between Clearance Adjudication
and Discharge

	Months	Top Secret n	Top Secret %	SCI n	SCI %
Adjudication prior to discharge by:	over 60	209	3.4	2	0.2
	37-60	630	10.3	42	4.3
	25-36	828	13.6	95	9.6
	13-24	1,647	27.0	219	22.2
	7-12	1,035	16.9	178	18.1
	1- 6	1,234	20.2	291	29.5
	same	225	3.7	56	5.7
Adjudication after discharge by:	1- 6	258	4.2	96	9.7
	over 6	42	0.7	6	0.6
	Total	6,108	100.0	985	100.0

of suitability issues dealt with in prescreening and security investigations for sensitive positions requiring top secret and SCI access. Therefore it is not unreasonable to believe that in at least some of these cases, review of the circumstances surrounding discharge would result in a revised clearance status other than top secret or SCI. For those with top secret Air Force adjudications the most frequent unsuitability discharge codes reflect motivational problems/apathy, unsatisfactory performance, drugs, performance and conduct, discreditable incidents, and character or behavior disorder. These codes account for 85% of the 6,108 former Air Force enlistees. Among SCI personnel with unsuitability discharges the same six codes account for 78% of the 985 cases.

Duty occupation at separation was the final data item examined for these personnel. Table 6 lists the most frequently found occupations in which these indviduals were performing at the time of their unsuitability discharges. Under the common DoD occupational coding system the jobs with the most top secret personnel were aviation ordnance, ammunition repair, administration, communications center operations, and missile mechanic. Highest proportions of the SCI group were found in communications center operations, analysis, administration, intercept operations, and teletype and cryptographic equipment.

Table 5
Reason for Discharge

DoD Code	Description	Top Secret n	Top Secret %	SCI n	SCI %
60	Character or Behavior Disorder	459	7.5	90	9.1
61	Motivational Problems/Apathy	1,565	25.6	142	14.4
64	Alcoholism	62	1.0	10	1.0
65	Discreditable Incidents	584	9.6	81	8.2
67	Drugs	878	14.4	80	8.1
68	Financial Irresponsibility	83	1.4	11	1.1
71	Civil Court Conviction	98	1.6	10	1.0
73	Court Martial	85	1.4	4	0.4
76	Homosexuality	82	1.3	37	3.8
78	In Lieu of Court Martial	71	1.2	13	1.3
80	Misconduct	117	1.9	37	3.8
83	Disciplinary Infractions	221	3.6	69	7.0
86	Unsatisfactory Performance	1,037	17.0	156	15.8
87	Performance and Conduct	652	10.7	220	22.3
Other	---	114	1.9	25	2.5
Total		6,108	100.0	985	100.0

Table 6
Duty Occupation Code at Separation

DoD Occupation Code	Description of Occupation	Top Secret n	Top Secret %	SCI n	SCI %
101	Radio Communications	172	2.8	29	2.9
122	Missile Checkout Equipment, Test Equipment, and Calibration	185	3.0	2	0.2
160	Teletype and Cryptographic Equipment	108	1.8	50	5.1
231	Intercept Operator	55	0.9	69	7.0
232	Analysis	40	0.7	109	11.1
242	Image Interpretation	24	0.4	26	2.6
260	Communications Center Operations	344	5.6	121	12.3
400	Photography	36	0.6	23	2.3
510	Administration	562	9.2	74	7.5
632	Missile Mechanic	315	5.2	0	---
633	Missile Launch and Support Facilities	161	2.6	3	0.3
645	Ammunition Repair	720	11.8	0	---
646	Aviation Ordnance	1,344	22.0	1	0.1
823	Sales Store	42	0.7	26	2.6
950	Not Occupationally Qualified	134	2.2	148	15.0
Other	---	1,866	30.0	304	30.9
Total		6,108	100.0	985	100.0

Conclusions

The analyses in this study have identified a lack of consistency in Air Force personnel and security programs. Over 7,000 former enlisted personnel were identified, all of whom had been discharged for various types of unsuitability between 1974 and 1984, yet still retained Air Force top secret and SCI clearance codes in the primary DoD security data base, as FY85 began. Occupational, investigatory, and adjudicative data on these individuals were examined. Results indicated that many or most had enlisted for and served in sensitive positions, been investigated by the Defense Investigative Service and cleared by the Air Force, and discharged for the same types of reasons that investigators and adjudicators consider derogatory from a security standpoint. Yet no adjustment had been made in any of their clearance codes in the DCII, even though this would be one of the first places searched if these same "unsuitable" individuals seek DoD contractor or civilian employment. This indicates a need to review the circumstances of discharge for such people to determine if different clearance codes would be more appropriate.

SECURITY INVESTIGATIONS AND CLEARANCES IN THE DCII AT THE END
OF FISCAL YEAR 1984: A PROFILE OF 2.1 MILLION ACTIVE DUTY
MILITARY PERSONNEL

May 1985

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DoD Personnel Security Research Program

Report 85-8

Security Investigations and Clearances in the DCII
at the End of Fiscal Year 1984:
A Profile of 2.1 Million Active Duty Military Personnel

A previous report in the Personnel Security Research Program
series described the investigation and clearance status of military
personnel on board at the end of FY83. This paper updates the
previous information by one year and compares the two sets of
results. It also provides greater detail by presenting paygrade
level, as well as overall Service distributions.

These analyses were conducted on an automated file which
combined an edited version of the DCII with end of FY84 DoD
master and loss personnel tapes. The edited DCII contained
the most recent DIS investigation (type '0') segment and Army
or Air Force clearance (type '3') segment for all individuals
identified by SSN. Clearance data were limited to these Services
because Navy and Marine Corps adjudications are not input into
the DCII. Note that the DIS investigations covered in this
study do not include National Agency Checks which did not produce
derogatory information, as such routine security inquiries are
found in the DCII as type '2' segments.

The end of FY84 investigative profile for the enlisted
force is shown by Service on Table 1. Actual numbers and percentages
of total figures are provided to facilitate comparisons. Overall,
20% were found with a DIS investigation (other than a non-derogatory

TABLE 1

Most Recent DIS Investigations Initiated on Current Enlisted Personnel (As of 1 October 1984)

DIS Codes	Description of Type 0 Investigation	ARMY n	%	NAVY n	%	MARINE CORPS n	%	AIR FORCE n	%	DoD n	%
	None	549,281	82.3	388,694	79.4	154,944	88.1	357,137	73.4	1,450,056	79.7
1A2/B	SBI, initial	29,239	4.4	17,569	3.6	3,892	2.2	42,972	8.8	93,672	5.1
1A7/G	SBI, supplemental	3,532	0.5	3,545	0.7	383	0.2	7,634	1.6	15,094	0.8
1D5/E	SBI, PR (limited)	1,668	0.2	2,228	0.4	181	0.1	2,908	0.6	6,985	0.4
1D3/C	Periodic Review	2,921	0.4	2,149	0.4	354	0.2	5,639	1.2	11,063	0.6
1P3/C	SBI, suitability	4,347	0.6	2,163	0.4	436	0.2	3,521	0.7	10,467	0.6
1A1/A	BI, initial	16,929	2.5	23,761	4.8	4,923	2.8	35,046	7.2	80,659	4.4
1A6/F	BI, supplemental	229	0.0	410	0.1	71	0.0	663	0.1	1,373	0.1
1D1/A	BI, PR	405	0.1	360	0.1	45	0.0	588	0.1	1,398	0.1
1R3/C	BI, suitability	1,736	0.3	1,802	0.4	273	0.2	1,624	0.3	5,435	0.3
1A3/C	IBI, initial	10,250	1.5	14,491	3.0	3,134	1.8	13,168	2.7	41,043	2.3
1R3/C	IBI, suitability	1,221	0.2	1,839	0.4	277	0.2	826	0.2	4,163	0.2
1G1/A	ENTNAC, file	7,358	1.1	8,234	1.7	1,774	1.0	2,718	0.6	20,084	1.1
1K1/A	ENTNAC, expanded	11,122	1.7	9,253	1.9	2,718	1.5	3,432	0.7	26,525	1.5
1G2/B	NAC, file	22,852	3.4	10,494	2.1	1,927	1.1	5,308	1.1	40,581	2.2
1K2/B	NAC, expanded	2,481	0.4	1,591	0.3	367	0.2	623	0.1	5,062	0.3
	Other	2,013	0.3	1,284	0.3	228	0.1	2,613	0.5	6,143	0.3
	Total	667,584		489,867		175,927		486,425		1,819,803	

NAC) in the DCII. This figure varied by Service, from 12% in the USMC to 27% in the Air Force. These findings are virtually identical with the situation at the end of FY83.

With regard to specific types of DIS investigations, Table 1 shows nearly 94 thousand inital SBIs, 81 thousand initial BIs and 41 thousand initial IBIs. The only other type with such a large number was the 41 thousand file NACs. These four types of DIS investigation were among the most numerous in each Service. Other relatively frequent investigations in specific branches of Service were expanded ENTNACs for Army and Marine Corps members and supplemental SBIs and periodic reviews of Air Force personnel. The only notable changes here, relative to the earlier report, involve the large increase in the number of personnel with inital IBIs and the decrease in those with inital BIs. This was to be expected as the IBI has replaced the BI as the type of investigation generally required for top secret clearance.

Table 2 shows distributions of DIS investigation codes by enlisted paygrades for each Service. Any type of DIS investigation (excluding non-derogatory NACs) found for at least 1% of those in any paygrade is included in this table. For each Service, Table 2 shows the percentage with no type '0' DIS investigations to drop substantially between grades E1 and E5 or E6 and to stabilize from that level through E9. Less than 10%

TABLE 2

Percentage Distributions of Enlisted
DIS Investigations by Paygrade
(As of 1 October 1984)

ARMY

DIS Codes	E1	E2	E3	E4	E5	E6	E7	E8	E9
1A2/B	1.4	2.4	3.3	4.4	6.8	5.4	4.4	4.4	4.4
1A7/G	---	---	0.0	0.2	0.6	1.2	1.8	2.4	2.9
1D5/E	0.0	---	0.0	0.0	0.1	0.5	1.5	1.8	1.5
1D3/C	---	---	0.0	0.0	0.4	1.2	1.7	2.2	2.3
1P3/C	0.1	0.2	0.4	0.7	1.1	0.9	0.6	0.4	0.4
1A1/A	0.0	0.0	0.1	0.8	2.9	6.4	8.6	10.3	9.9
1A3/C	0.6	1.0	1.2	1.4	1.9	2.1	2.0	2.2	2.1
1G1/A	0.6	0.9	0.7	1.0	1.5	1.9	1.0	0.2	0.4
1G2/B	0.1	0.2	0.4	1.5	4.0	8.7	11.2	8.7	6.0
1K1/A	2.2	2.7	2.4	2.2	1.2	0.4	0.1	0.0	---
Other	0.2	0.4	0.4	0.8	1.6	2.7	3.3	3.3	2.4
None	94.8	92.3	91.1	87.0	77.9	68.6	63.8	64.1	67.7
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	57,527	51,910	98,854	183,660	118,450	86,779	50,459	15,600	4,177

AIR FORCE

DIS Codes	E1	E2	E3	E4	E5	E6	E7	E8	E9
1A2/B	4.6	6.7	8.8	9.6	9.2	9.0	8.6	9.3	9.8
1A7/G	---	0.0	0.1	0.6	2.3	3.7	4.3	5.0	5.2
1D5/E	0.0	---	0.0	0.0	0.6	1.7	2.3	2.6	3.4
1D3/C	---	---	0.0	0.4	2.0	2.4	2.9	3.5	4.4
1A1/A	0.2	0.2	1.6	9.5	12.7	9.9	7.6	7.5	7.7
1A3/C	0.7	2.1	3.8	2.1	2.5	2.6	2.8	3.0	2.9
1G2/B	0.0	0.0	0.1	0.9	2.3	2.1	1.4	1.0	0.4
1K1/A	0.7	0.8	1.1	0.9	0.6	0.3	0.0	---	---
Other	0.7	1.4	1.5	2.9	3.7	4.0	3.5	3.7	3.3
None	93.1	88.8	83.0	73.1	64.1	64.3	66.6	64.4	62.9
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	20,835	22,022	124,652	102,760	108,860	56,262	36,523	9,667	4,844

TABLE 2
(Continued)

NAVY
DIS

Codes	E1	E2	E3	E4	E5	E6	E7	E8	E9
1A2/B	0.8	1.8	2.7	4.1	4.8	4.1	4.7	4.5	4.5
1A7/G	0.0	0.0	0.0	0.3	0.9	1.6	2.6	2.8	3.0
1D5/E	---	---	0.0	0.0	0.2	1.5	2.0	2.1	2.3
1D3/C	0.0	0.0	0.0	0.0	0.5	1.3	1.5	1.6	1.8
1A1/A	0.4	0.3	1.0	4.0	7.8	9.7	9.0	7.7	6.4
1A3/C	2.7	4.0	4.0	3.6	2.3	1.7	2.0	1.6	1.6
1G1/A	1.7	1.7	1.4	1.4	1.9	2.7	1.0	0.2	0.2
1G2/B	0.3	0.2	0.6	1.6	3.3	4.0	4.2	4.6	3.8
1K1/A	2.8	3.0	2.8	2.3	1.4	0.6	0.2	---	0.0
Other	0.9	1.0	1.2	1.7	2.5	2.9	3.3	3.7	2.5
None	90.4	88.0	86.3	81.0	74.4	69.9	69.5	71.0	73.9
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	35,709	37,367	98,688	104,223	97,344	72,993	30,716	8,802	4,025

MARINE CORPS
DIS

Codes	E1	E2	E3	E4	E5	E6	E7	E8	E9
1A2/B	0.3	0.9	2.0	2.5	3.6	3.6	2.8	3.3	3.0
1A7/G	---	0.0	0.0	0.0	0.3	0.7	1.3	1.4	1.2
1D5/E	---	0.0	---	---	0.0	0.4	0.7	0.9	1.0
1D3/C	---	---	0.0	0.0	0.1	0.8	1.2	1.6	2.5
1A1/A	0.0	0.1	0.2	1.2	5.4	10.0	11.8	9.7	8.4
1A3/C	0.1	0.3	1.5	2.9	2.8	2.3	2.6	2.6	1.7
1G1/A	0.8	0.7	0.6	0.9	1.5	2.8	1.2	0.1	0.1
1G2/B	0.1	0.2	0.2	0.7	2.1	2.9	3.9	4.3	3.6
1K1/A	1.6	1.9	1.9	1.6	1.3	1.5	0.4	---	---
Other	0.1	0.1	0.3	0.7	1.7	2.1	3.3	2.8	2.1
None	97.0	95.8	93.3	89.5	81.2	72.9	70.8	73.3	76.4
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	15,762	25,847	47,677	31,964	25,072	15,434	9,177	3,732	1,262

of the Els in each Service had a DIS code, while about a quarter
to a third of those in the senior grades were found with one.

Several findings with regard to specific investigation
codes also generalize across Service. Few in the lowest three
grades have initial BI (1A1/A) codes, while much higher percentages
were found in the higher grades. With respect to the IBI (1A3/C),
which recently replaced the BI, much less paygrade variation
is found. This indicates that many enlisted personnel did not
have their initial background investigation until reaching the
more advanced paygrades.

Percentages of inital SBIs (1A2/B) were higher at the upper
paygrades, while not being negligible at the lower grades.
Most supplemental SBIs (1A7/G) and periodic reviews (1D5/E and
1D3/C) were found in the upper five grades, with very few among
El to E4 personnel. With respect to derogatory national agency
checks, higher percentages of file NACs (1G2/B) appeared in
the upper paygrades, while expanded ENTNACs (1K1/A) were generally
more prevalent at El to E4 than the higher enlisted grades.

The officer profile is presented in Table 3. Over half
of the officers were found with a DIS type '0' investigation
in the DCII. More of those in the Air Force (58%) and Navy
(56%) had such DCII information than Marine Corps (44%) and
Army (46%) officers. Overall, the most frequent types of investi-

TABLE 3

Most Recent DIS Investigations Initiated on Current Officer Personnel
(As of 1 October 1984)

DIS Codes	Description of Type O Investigation	ARMY n	ARMY %	NAVY n	NAVY %	MARINE CORPS n	MARINE CORPS %	AIR FORCE n	AIR FORCE %	DoD n	DoD %
	None	58,867	54.4	30,491	44.3	11,428	56.1	44,734	42.1	145,520	47.9
1A2/B	SBI, initial	14,935	13.8	9,282	13.5	2,192	10.8	21,052	19.8	47,461	15.6
1A7/G	SBI, supplemental	6,777	6.3	5,943	8.6	1,012	5.0	9,040	8.5	22,772	7.5
1D5/E	SBI, PR (limited)	1,903	1.8	1,445	2.1	172	0.8	2,296	2.2	5,816	1.9
1D3/C	Periodic Review	3,421	3.2	2,331	3.4	370	1.8	3,014	2.8	9,136	3.0
1P3/C	SBI, suitability	538	0.5	317	0.5	77	0.4	483	0.4	1,415	0.5
1A1/A	BI, initial	12,197	11.3	10,840	15.7	3,029	14.9	14,752	13.9	40,818	13.4
1A6/F	BI, supplemental	222	0.2	276	0.4	47	0.2	619	0.6	1,164	0.4
1D1/A	BI, PR	306	0.3	229	0.3	45	0.2	466	0.4	1,046	0.3
1D2/B	BI, PR (special coverage)	342	0.3	81	0.1	13	0.1	217	0.2	653	0.2
1N3/C	BI, suitability	250	0.2	195	0.3	45	0.2	230	0.2	720	0.2
1A3/C	IBI, initial	4,796	4.4	5,879	8.5	1,420	7.0	6,907	6.5	19,002	6.3
1A8/H	IBI, supplemental	66	0.1	102	0.2	19	0.1	166	0.2	353	0.1
1R3/C	IBI, suitability	157	0.2	152	0.2	34	0.2	136	0.1	479	0.2
1G1/A	ENTNAC, file	173	0.2	39	0.1	33	0.2	22	0.0	267	0.1
1K1/A	ENTNAC, expanded	94	0.1	24	0.0	21	0.1	31	0.0	170	0.1
1G2/B	NAC, file	2,144	2.0	773	1.1	255	1.2	744	0.7	3,916	1.3
1K2/B	NAC, expanded	328	0.3	173	0.2	88	0.4	191	0.2	780	0.3
	Other	628	0.6	306	0.4	57	0.3	1,146	1.1	2,137	0.7
	Total	108,144		68,878		20,357		106,246		303,625	

gation included initial SBIs (47 thousand), BIs (41 thousand), and IBIs (19 thousand), along with supplemental SBIs (23 thousand). These four kinds of DIS investigation were also the ones most frequently found among officers in each Service. Compared to the end of FY83 findings, these figures reveal a 1-2 percent increase in each Service, of those with a DIS type '0' investigation. Also noteworthy, as was found for the enlisted personnel, is the drop in BIs and rise in IBIs.

Table 4 presents the paygrade level findings for officers by Service. As in Table 2, any DIS code was included that applied to 1% or more of those at any paygrade. Again there was a positive correlation between the percentage with DIS codes and paygrade level. This was true for the officers in each Service. In the Army for example, while 23% of the O1s had a DIS investigation code, over 98% at O7 and above were found with one.

In the Army and Marine Corps, initial SBIs (1A2/B) were most frequent in grades O4 to O6, while in the Air Force and Navy the percentage with initial SBIs was more uniform across all paygrades. As would be expected, a strong positive correlation was noted in all Services betweeen officer paygrade and the percentage with supplemental SBIs (1A7/G) and periodic reviews (1D5/E, and 1D3/C). In the Air Force, while 1% of the O1s had any of these codes, 80% of the O7s and above had them. Percentages

TABLE 4

Percentage Distributions of Officer
DIS Investigations by Paygrade
(As of 1 October 1984)

ARMY

DIS Codes	Warrant Officer	01	02	03	04	05	06	07 and above
1A2/B	8.0	9.0	10.7	10.9	23.0	24.6	17.9	10.4
1A7/G	3.5	0.2	0.6	2.1	10.9	20.7	24.9	27.9
1D5/E	2.5	0.1	0.1	0.9	1.7	4.2	6.7	28.9
1D3/C	3.2	0.2	0.3	2.1	3.6	8.2	10.6	28.9
1A1/A	7.0	1.1	10.4	19.9	12.4	4.9	2.4	0.2
1D2/B	0.1	0.0	---	0.0	0.1	1.7	2.1	0.5
1A3/C	1.3	9.1	9.3	4.2	3.6	1.5	1.2	0.5
1G2/B	6.6	1.6	1.9	1.4	0.8	0.6	0.6	0.2
Other	3.6	2.0	2.3	2.5	2.6	2.6	2.2	1.0
None	64.2	76.7	64.4	56.0	41.3	31.0	31.4	1.5
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	15,348	12,614	12,289	34,895	16,926	10,817	4,843	412

AIR FORCE

DIS Codes	01	02	03	04	05	06	07 and above
1A2/B	15.5	21.2	19.8	21.0	19.9	23.6	14.8
1A7/G	0.5	2.0	5.7	13.9	18.5	23.3	27.0
1D5/E	0.3	0.4	1.0	3.2	5.6	7.0	24.3
1D3/C	0.3	0.3	2.0	3.4	6.3	10.4	29.1
1P3/C	0.5	0.8	0.5	0.3	0.3	0.3	1.2
1A1/A	1.9	12.7	22.9	12.8	6.7	4.1	0.3
1A6/F	0.0	0.2	0.5	1.2	1.2	0.4	---
1D1/A	0.0	0.1	0.3	1.0	1.0	0.5	---
1A3/C	12.5	14.7	5.1	3.3	2.1	1.6	0.9
1G2/B	1.1	1.1	0.8	0.3	0.2	0.2	---
Other	1.5	1.5	2.1	2.3	2.3	1.8	1.2
None	65.9	45.0	39.3	37.3	35.9	26.8	1.2
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	14,316	14,400	39,613	19,521	12,551	5,508	337

TABLE 4
(Continued)

NAVY

DIS Codes	Warrant Officer	01	02	03	04	05	06	07 and above
1A2/B	6.7	9.1	15.1	13.0	15.0	17.0	15.7	16.8
1A7/G	4.0	0.6	3.0	6.8	13.4	19.0	18.7	25.6
1D5/E	3.3	0.2	0.5	0.6	2.6	5.3	8.8	24.4
1D3/C	2.5	0.2	0.4	1.6	4.7	8.8	12.8	19.1
1A1/A	11.6	3.5	13.2	26.7	19.5	6.3	3.2	1.9
1A6/F	0.6	0.0	0.2	0.2	0.8	1.0	0.4	---
1D2/B	0.2	---	---	0.1	0.2	0.2	0.6	1.9
1A3/C	4.3	20.5	20.6	5.1	2.9	2.0	2.0	0.8
1G2/B	4.2	1.4	1.4	1.3	0.6	0.2	0.2	---
Other	3.1	2.3	2.6	1.9	2.4	2.2	1.5	0.3
None	59.5	62.2	43.0	42.7	37.9	38.0	36.1	9.2
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	3,032	9,501	10,170	21,124	13,138	7,849	3,752	262

MARINE CORPS

DIS Codes	Warrant Officer	01	02	03	04	05	06	07 and above
1A2/B	3.9	1.5	4.1	11.3	20.8	24.6	23.8	18.2
1A7/G	1.9	---	0.4	2.1	8.3	22.4	31.3	31.8
1D5/E	1.1	0.0	0.2	0.3	0.9	2.4	6.2	31.8
1D3/C	2.5	0.1	0.4	1.2	2.6	5.0	11.3	6.1
1A1/A	14.7	1.2	7.4	25.5	25.0	9.3	2.1	---
1D2/B	---	---	---	0.0	0.1	0.3	0.5	3.0
1D1/A	---	---	0.1	0.2	0.5	0.8	0.5	4.6
1A3/C	5.0	5.0	12.0	7.6	5.7	2.7	---	---
1C2/B	4.4	1.4	1.4	1.2	0.3	0.1	---	---
1K2/B	0.6	1.2	0.5	0.3	0.0	0.1	---	---
Other	3.5	0.7	1.1	1.6	2.4	2.1	1.7	---
None	62.4	88.9	72.4	48.7	33.4	30.2	17.1	4.6
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,412	3,290	4,212	6,049	3,051	1,651	626	66

with BI (1A1/A) and IBI (1A3/C) codes were higher in grades
O1 to O4 than in the more senior officer paygrades.

DCII Army and Air Force clearance codes for end of FY84
active force members are displayed in Table 5. As at the end
of FY83, the clearance status of many Army personnel was not
found in the DCII at the end of FY84. While the Army rate of
unknowns rose from 38% to 40% for enlisted members, it dropped
from 40% to 32% of the officers. By far the most frequent clearance
among Army enlisted personnel was the secret 'M', which 34%
had at the end of FY84. This was followed in frequency by the
secret 'S' (15%) and SCI 'V' (5%) codes.

These figures represent no major changes from a year earlier.
For the officers, 22% had SCI 'V' codes, 18% secret 'M' codes,
17% each secret 'S' and top secret 'N' codes, and 6% the top
secret 'T' code. The only pronounced change here is a 6% increase
of officers with secret 'M' clearances.

DCII clearance coverage in the Air Force continues to be
virtually complete. Less than 1% of their officers and 2% of
their enlisted personnel were found without a clearance segment.
Most enlisted Air Force members (72%) had secret 'S' clearances.
Another 17% show top secret 'T' codes and 8% SCI 'V' codes.
These results closely parallel the end of FY83 findings.

TABLE 5

DCII Clearance Codes for Current
Army and Air Force Personnel
(As of 1 October 1984)

Adjudicating Branch	Clearance Code	Army Enlisted n	%	Officer n	%	Air Force Enlisted n	%	Officer n	%
---	None	266,349	39.9	34,794	32.2	7,715	1.6	569	0.5
Army	M	226,677	34.0	19,169	17.7	247	0.1	32	0.0
	S	97,688	14.6	10,797	10.0	28	0.0	8	0.0
	N	10,745	1.6	10,634	9.8	2	0.0	3	0.0
	T	15,485	2.3	6,369	5.9	6	0.0	4	0.0
	V	33,518	5.0	24,125	22.3	11	0.0	34	0.0
	X	10,690	1.6	1,771	1.6	2	0.0	17	0.0
	R	4,481	0.7	90	0.1	3	0.0	0	---
	Other	308	0.0	59	0.1	0	---	0	---
Air Force	S	1,493	0.2	258	0.2	350,834	72.1	36,604	34.5
	T	60	0.0	34	0.0	80,718	16.6	48,636	45.8
	V	8	0.0	17	0.0	38,355	7.9	19,760	18.6
	Y	0	---	0	---	2,275	0.5	192	0.2
	F	33	0.0	11	0.0	4,180	0.9	122	0.1
	W	0	---	0	---	968	0.2	59	0.1
	Other	49	0.0	16	0.0	1,081	0.2	206	0.2
	Total	667,584	100.0	108,144	100.0	486,425	100.0	106,246	100.0

Nearly 46% of Air Force officers had top secret 'T' codes in the DCII, while 34% were found with secret 'S' clearance and 19% SCI 'V' codes. These results represent a 2% SCI clearance increase and 3% top secret decrease from the end of FY83.

Paygrade level clearance distributions are shown on Table 6 for the enlisted personnel and Table 7 for the officers in the Army and Air Force. Enlisted personnel were found to differ substantially in clearance status as a function of paygrade. While the overall Army rate without a DCII code was 40%, it varied from a high of 77% of the E1s down to 21% of the E4s. The percentage with SCI codes rises with paygrade from less than 1% at E1 to 9% at E9. This was also true with respect to top secret (N or T) status, found for under 1% at E1 and 18% at E9. The percentage of Army enlisted personnel with secret (M or S) codes was highest among E4s (70%) and lowest among E9s (8%).

Air Force data in Table 6 show that only at the entry level, E1, did a large fraction of enlisted personnel (23%) lack a DCII clearance code. As in the Army, the highest percentage with SCI status was found at the E9 level (12%), while the lowest was the 1% of E1s. Also, while only 2% of the E1s had top secret status, 51% of the E9s had this level of clearance eligibility. E2 was the paygrade with the highest percentage of secret clearances (85%), and E9 the lowest (36%).
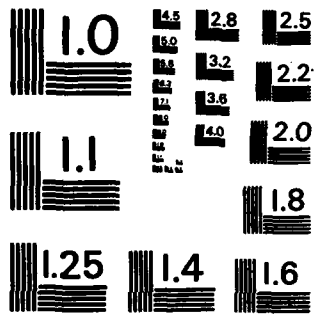
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE 6

Percentage Distribution of Enlisted
Clearance Status Codes by Paygrade
(As of 1 October 1984)

ARMY
Clearance

Code	E1	E2	E3	E4	E5	E6	E7	E8	E9
M	18.8	31.0	41.6	56.6	30.4	15.9	8.2	4.1	2.6
S	1.4	3.6	4.5	13.2	28.3	27.3	18.2	8.3	4.9
N	0.3	0.4	0.6	0.9	1.9	3.2	4.0	5.5	6.8
T	0.2	0.4	0.5	1.1	2.6	4.9	6.7	9.3	11.2
V	0.5	1.9	3.0	4.4	7.6	7.3	8.0	8.8	8.9
X	2.1	2.0	1.8	1.5	1.7	1.5	1.1	0.9	0.7
R	0.2	0.3	0.4	0.9	1.0	0.8	0.4	0.2	0.0
Other	---	0.1	---	---	---	0.1	0.1	0.1	0.4
None	76.6	60.3	47.6	21.4	26.5	39.0	53.3	62.8	64.5
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	57,527	51,910	98,854	183,660	118,450	86,779	50,459	15,600	4,177

AIR FORCE
Clearance

Code	E1	E2	E3	E4	E5	E6	E7	E8	E9
S	71.0	85.1	82.5	75.7	69.2	62.4	55.2	46.1	36.4
T	1.7	3.2	6.6	13.3	21.3	27.7	34.3	41.7	51.0
V	1.4	5.5	7.3	8.2	8.1	9.0	9.9	11.9	12.5
F	0.8	1.3	1.6	1.2	0.4	0.1	0.0	---	0.0
Y	1.6	0.7	0.5	0.5	0.4	0.3	0.2	0.1	0.1
Other	0.7	0.6	0.2	0.8	0.4	0.4	0.3	0.1	---
None	22.8	3.6	1.3	0.3	0.2	0.1	0.1	0.1	0.0
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	20,835	22,022	124,652	102,760	108,860	56,262	36,523	9,667	4,844

For Army officers, Table 7 shows 42% of warrant officers and O3s without DCII clearance codes, but only 1% of the O7s and above. Most of the generals (95%) showed SCI status, while O1 was the paygrade with the lowest percentage (8%) of officers with a 'V' code. Only 1% of the O7s and above had top secret (N or T) codes, while 21% of the O3s had one of these codes. The percentage of Army officers with secret DCII codes (M or S) ranged from none of the generals to 75% of the O1s.

Sizeable differences are also apparent in the Air Force officer figures in Table 7. The percentage with SCI status increases as paygrade increases. The range was from 7% (O1) to 86% (O7 and above). O4s had the greatest percentage of top secret (57%), O7s and above the lowest, 14%. The percentage of Air Force officers with secret level codes decreases with increasing paygrade. Seventy percent of the O1s had secret clearances and less than one percent of the generals had them.

TABLE 7

Percentage Distribution of Officer
Clearance Status Codes by Paygrade
(As of 1 October 1984)

ARMY

Clearance Code	Warrant Officer	01	02	03	04	05	06	07 and above
M	15.5	61.4	24.7	12.5	7.0	3.2	2.3	---
S	16.4	13.2	24.2	8.6	3.6	1.9	1.8	---
N	4.1	5.6	14.0	14.7	9.6	5.7	4.4	0.7
T	5.9	2.0	4.4	6.4	7.8	7.8	6.5	0.7
V	14.5	8.5	11.2	13.5	35.9	52.1	54.6	94.7
X	1.0	0.9	0.8	1.6	2.7	2.5	2.2	2.7
Other	0.2	---	0.3	0.2	0.2	0.1	---	0.2
None	42.4	8.4	20.4	42.5	33.2	26.7	28.2	1.0
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	15,348	12,614	12,289	34,895	16,926	10,817	4,843	412

AIR FORCE

Clearance Code	01	02	03	04	05	06	07 and above
S	70.2	47.2	36.9	17.7	9.7	9.0	0.3
T	21.2	41.3	48.8	57.4	55.3	39.1	13.6
V	6.7	10.4	13.3	23.9	34.3	51.5	86.1
Other	0.7	0.6	0.5	0.6	0.5	0.3	---
None	1.2	0.5	0.5	0.4	0.2	0.1	---
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	14,316	14,400	39,613	19,521	12,551	5,508	337

A CENSUS OF KEY DATA ELEMENTS IN THE DEFENSE CENTRAL INDEX
OF INVESTIGATIONS (AS OF 1 APRIL 1985)

June 1985

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A Census of Key Data Elements
In the Defense Central Index of Investigations
(As of 1 April 1985)

The Defense Central Index of Investigations (DCII) is currently
the largest automated DoD data base in the area of personnel
security. Its primary operational use is as a repository for
individual level security related information. The standard user
interface with the DCII is in the form of on-line name searches
of its contents. However, recent initiatives to provide personnel
security policy makers with data useful for management information
purposes and to support a personnel security research effort,
have identified an additional role for the DCII. In order to
insure that maximum yield is mined from this vast and valuable
data resource, a detailed examination of its aggregate contents
is necessary. This report presents the results of such an effort,
conducted on a recent (mid-FY85) copy of the constantly updated file.

To comprehend the size and scope of the DCII, it is necessary
to become familiar with the structure of the file. The DCII
contains nearly 15.5 million variable length records. Each
record consists of a master section and one or more content
segments. The most significant contents of the master section
are individual identification characteristics. These include
first, middle and last name, social security number, date of
birth and place of birth.

There are six types of content segments. These are known as
pending NAC, NAC history, tracing or dossier, clearance, current
name, and AKA segments. This report will explore the key data
elements of each segment type. In all, about 22.8 million segments
are now part of the DCII. While this is an average of about one
and a half segments per record, most records are found to have
only one or two segments while a few have as many as ten or more.

A further complicating factor, in addition to the variable
length nature of DCII records, is that over 4.7 million of them
contain overlapping and redundant individual level information.
Individuality, as inferred from uniqueness of social security
number (SSN), was assessed and while 8.4 million records were
found with SSNs occurring only once, some individuals were identified
with over 100 different records in the DCII. Some of these
contain identical segments and others different segments. Further
complicating management information and research uses of the DCII
is the finding that 2.3 million DCII records do not have valid
SSNs. This is a critical factor in linking DCII data with other
data bases.

Pending NAC Segments

As of 1 April 1985 the DCII contained just over 100 thousand
segments reflecting ongoing national agency checks. Table 1
shows the type of NAC as a function of the requesting agency.
These, along with the date of initiation, are the key data elements

in pending NAC segments. Most ongoing NACs requested by the
Services were ENTNACs, with most of the remainder being standard
military NACs. DIS requested NACs were equally spread among
military, civilian and industrial subjects. These reflect the NAC
component of more extensive background investigations. All of
the DISCO requests were for standard industrial NACs.

With regard to the initiation dates of ongoing NACs, Table 2
shows most (92%) to have been started since February 1985. Less
than one percent had been pending since before October 1984 and
less than a tenth of one percent since before August 1984.
Further analyses revealed 25% of the cases pending on April first
1985 to be more than 30 days old. Seven percent were over 60 days
old and under one percent over 180 days old.

NAC History Segments

The DCII segment describing completed NACs includes space
for the identities of up to 11 agency files that may have been
checked during a NAC. A total of 52 such files are described in
the DCII documentation. This type of segment also contains the
completion date and a status code indicating whether the segment
is a NAC history or an incomplete history. Almost 7.4 million of
these segments were encountered.

Table 3 summarizes an analysis of the agency identification
codes. It shows 24.2 million file checks, 3.3 per NAC history
segment. Most had only three: DCII, FBI-headquarters and either
FBI name check or fingerprint. Some segments had up to ten
agency file codes. In all, 38 different agency codes were identi-
fied. However, the four just mentioned accounted for 92% of the
total number of file checks.

Analyses of the year of NAC completion yielded the data shown
on Table 4. A large number of segments appear for every year
since 1973. Just under half (49%) of the DCII NAC history segments
have completion dates since 1980. With regard to the status code,
98% were coded as "NAC history" and the other 2% had an "incomplete
history" code.

Tracing or Dossier Segments

This type of DCII segment is the most numerous with 8.6
million in the file. In addition to the submitting agency, key
data elements are the context, retention and status codes and the
year of the file. Context codes are displayed for each submitting
agency on Table 5. Most dossier segments (83%), reference subject
investigations. This is most true for DIS segments and much less
the case for Army and Air Force submissions. AIRR (28%) and Air
Force OSI (20%) segments are the only ones with a significant
fraction of cross reference segments, while ACRD submissions
(21%) have the only sizeable portion of victim segments.

Most dossier segments also have a retention code indicating the length of time they are to remain in the DCII before being purged. As Table 6 indicates, the predominant code varies by submitting agency. Most of the DIS, Air Force OSI, and Air Force investigations transferred to DIS are to remain in the DCII for 15 years. Most Naval Investigative Service segments (94%) have a 25 year retention code. Almost all Army Criminal Records Division segments are coded for forty year retention, while most (83%) of the AIRR dossier segments have no retention code.

Overall, over 99% of the status codes refer to tracing segments, with the remaining segments coded as open cases. Only for DIS segments (3%) were more than one percent coded as open cases. Table 7 summarizes the year indexed information for the dossier segments. Overall, about two-thirds of the dossier segments show dates in the seventies and eighties. DIS segments (48%) have the highest percentage of recent (since 1980) dossiers. AIRR segments had the greatest fraction (55%) with pre-1970 codes and also the highest rate (24%) of segments with no date of indexing indicated.

More detailed analyses were performed on DIS dossier segments. Case category codes were examined for the 2.1 million DIS investigations in the DCII. For most segments these codes specify the subjects' status as military, civilian or industrial. Analysis showed 71% of the segments to refer to military subjects, 20% to industrial subjects and 7% to civilian subjects. These codes also indicated the level of investigation involved (NAC, BI, SBI) and whether the case contained security, hostage or suitability issues. A total of 374 different case category codes were found. Table 8 carries the most frequently encountered types of DIS segments. When combined, these relatively few category codes account for 95% of the DIS dossier segments. Military non-issue BI/IBI/SBIs alone represent 34% of the segments, while military file NACs and ENTNACs along with expanded ENTNACs comprise another 26% of the total number of DIS dossier segments.

Clearance Segments

A total of 3.2 million clearance segments were found in the DCII. These included 1.5 million Army segments and 1.7 million Air Force segments. The key data element included with clearance segments is a code defining the clearance status. Distributions of clearance status codes are presented on Table 9. Note that code definitions vary somewhat between the Army and Air Force. Of the Army clearance segments, 81% were at the secret level, 9% SCI and 6% top secret. In contrast, 74% of Air Force segments reflected secret, 17% top secret and 5% SCI eligibility.

Other noteworthy constituents of DCII clearance segments are clearance basis, adjudication date, investigation date and review action codes. Clearance basis codes identify the level of investigation on which a clearance decision is based. Table 10 shows that variations of the national agency check account for 81% of Army and 76% of Air Force segments.

Review action codes only pertain to Army segments, and along with the status and basis codes, fully define an Army clearance action. A frequency distribution of these codes is presented on Table 11. This table shows 90% of Army clearance segments covered by one of three review action codes: surety (49%), clearance (21%) or nuclear (19%).

Adjudication and investigation dates on clearance segments are shown on Tables 12 and 13 respectively. Most of the adjudications have been accomplished since 1980. More Air Force (44%) than Army (17%) adjudications prior to 1980 are shown on Table 12. Similar investigation distributions are presented on Table 13, with somewhat greater percentages appearing in the categories before 1980.

Current Name and AKA Segments

These two types of segments are quite similar in format, the only difference being the nature of the name (current or AKA) contained in the segment. The only data element relevant to this paper is the contributor code. Table 14 shows the current name and AKA contributor code distributions. Note how closely the two distributions parallel one another. Just over half (51%) of these segments resulted form NAC information. Another third came from DIS and the Army's Investigative Records Repository.

Social Security Numbers

It was mentioned earlier that 2.3 million DCII records do not include valid SSNs. This presents difficulties in linking the DCII with other data bases for various personnel security analyses. Since DCII records can contain multiple segments, further analyses were performed to assess whether the magnitude of the lack of SSN problem varied by segment type. Table 15 summarizes the results. Overall, 20.0 million of the 22.8 million (88%) segments have valid SSNs. But there was considerable variation in this rate by segment type. It was 99.5% or higher for NAC history, DIS dossier, Army clearance and Air Force clearance segments. Much lower rates were found for AIRR dossier (42%), ACRD dossier (73%) and Air Force OSI dossier (75%) segments. Valid SSN percentages ranged from 86% to 95% for the other segment types listed on Table 15.

Table 1

Pending NAC Segments
(As of 1 April 1985)

Type of NAC	ARMY n	%	NAVY n	%	USAF n	%	USMC n	%	DIS n	%	DISCO n	%	Other n	%	Total n	%
ENTNAC	18,308	60.7	8,304	72.6	7,457	60.0	4,479	83.0							38,548	37.2
Standard:																
Military	10,092	33.5	2,744	24.0	3,708	29.8	866	16.0					1	1.0	17,411	16.8
Civilian	1,736	5.8	389	3.4	1,264	10.2	54	1.0					100	96.2	3,543	3.4
Industrial	4	0.0			2	0.0					12,016	100.0	3	2.9	12,025	11.6
Background Investigation:																
Military									10,720	33.3					10,720	10.3
Civilian									10,583	32.9					10,583	10.2
Industrial									10,851	33.7					10,851	10.5
Total	30,140	100.0	11,437	100.0	12,431	100.0	5,399	100.0	32,154	100.0	12,016	100.0	104	100.0	103,681	100.0

Table 2

National Agency Check Backlog
(As of 1 April 1985)

Month Initiated	Number	Percent of Total	Cumulative Percent
1985 - April	3,184	3.1	3.1
March	75,762	73.1	76.2
February	16,880	16.3	92.5
January	3,245	3.1	95.6
1984 - December	2,143	2.1	97.7
November	959	0.9	98.6
October	651	0.6	99.2
September	322	0.3	99.5
August	397	0.4	99.9
Prior to August 1984	138	0.1	100.0
Total	103,681	100.0	

Table 3

NAC History Segments
(As of 1 April 1985)

Agency File Checked	Number of Checks	Percent of NAC Segments	Percent of all files Checked
DCII	7,388,909	100.0	30.6
FBI-Headquarters	7,380,875	99.9	30.5
FBI-Name Check	4,779,185	64.7	19.8
FBI-Fingerprint	2,595,700	35.1	10.7
Army-Prior Service	406,697	5.5	1.7
OPM	399,480	5.4	1.7
CIA	174,513	2.4	0.7
Navy-Military Personnel	173,137	2.3	0.7
Air Force-Military Personnel	158,383	2.1	0.7
State Department-Passport	121,150	1.6	0.5
Army-Enlisted Personnel	109,439	1.5	0.5
I & NS-Alien	102,594	1.4	0.4
I & NS-Citizen	74,678	1.0	0.3
Army-Officer Personnel	55,670	0.8	0.2
Army Investigative Files	53,933	0.7	0.2
Marine Corps Personnel	39,135	0.5	0.2
DIS	38,303	0.5	0.2
Air Reserve Personnel Center	31,028	0.4	0.1
State Department-Birth Abroad	29,701	0.4	0.1
Air Force Investigative Files	23,060	0.3	0.1
Navy Investigative Files	19,821	0.3	0.1
All other file checks	25,331	0.3	0.1
Total	24,180,722		100.0

Table 4

Year NAC Completed
(As of 1 April 1985)

Year Completed	Number	Percent	Cumulative Percent
1985	199,443	2.7	2.7
1984	718,047	9.7	12.4
1983	666,451	9.0	21.4
1982	670,451	9.1	30.5
1981	655,754	8.9	39.4
1980	684,222	9.3	48.7
1979	573,293	7.8	56.5
1978	518,657	7.0	63.5
1977	587,544	7.9	71.4
1976	581,387	7.9	79.3
1975	564,344	7.6	86.9
1974	538,952	7.3	94.2
1973	430,606	5.8	100.0
Other	16	0.0	---
Total	7,389,167	100.0	

Table 5

Context Codes For Dossier Segments
(As of 1 April 1985)

Submitting Agency	Code	Context									
		Subject		Cross Reference		Victim		Not Indicated		Total	
		n	%	n	%	n	%	n	%	n	%
Defense Investigative Service	(DDIS)	2,074,487	100.0	66	0.0	0	---	514	0.0	2,075,067	100.0
Army Investigative Records Repository	(AIRR)	1,705,437	69.1	678,897	27.5	5	0.0	83,381	3.4	2,467,720	100.0
Army Criminal Records Division	(ACRD)	1,793,054	78.8	34	0.0	481,343	21.2	212	0.0	2,274,643	100.0
Naval Investigative Service	(NNIS)	884,060	93.5	37,438	4.0	23,639	2.5	0	---	945,137	100.0
Air Force Office of Special Investigations	(FOSI)	526,970	74.7	143,807	20.4	33,065	4.7	1,469	0.2	705,311	100.0
Air Force PSIs transferred to DIS	(DDISF)	109,250	91.1	10,729	8.9	5	0.0	3	0.0	119,987	100.0
Other		146	98.6	0	---	2	1.4	0	---	148	100.0
Total		7,093,404	82.6	870,971	10.1	538,059	6.3	85,579	1.0	8,588,013	100.0

Table 6

Retention Codes for Dossier Segments
(As of 1 April 1985)

Submitting Agency Code	Period of Retention											
	Under 15 Years		15 Years		25 Years		30 Years or More		Not Indicated		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
DDIS	6,317	0.3	1,991,569	96.0	16,300	0.8	68	0.0	61,113	2.9	2,075,067	100.0
AIRR	6,719	0.3	112,523	4.6	235,172	9.5	73,730	3.0	2,039,576	82.7	2,467,720	100.0
ACRD	1	0.0	0	---	0	---	2,256,966	99.2	17,676	0.8	2,274,643	100.0
NNIS	7,105	0.8	10,625	1.1	892,867	94.5	34,496	3.6	44	0.0	945,137	100.0
FOSI	1,988	0.3	614,250	87.1	16,380	2.3	40,071	5.7	32,622	4.6	?05,311	100.0
DDISF	0	---	118,900	99.1	1,087	0.9	0	---	0	---	119,987	100.0
Other	2	1.4	0	---	0	---	0	---	146	98.6	148	100.0
Total	22,132	0.3	2,847,867	33.2	1,161,506	13.5	2,405,331	28.0	2,151,177	25.0	8,588,013	100.0

Table 7

Year Dossier Segments Indexed
(As of 1 April 1985)

Period Segment Indexed

Submitting Agency Code	Before 1960		1960-1969		1970-1979		1980-1985		Not Indicated		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
DDIS	1	0.0	1	0.0	1,084,390	52.3	990,672	47.7	3	0.0	2,075,067	100.0
AIRR	563,459	22.8	797,744	32.3	418,848	17.0	92,840	3.8	594,829	24.1	2,467,720	100.0
ACRD	161,255	7.1	375,198	16.5	1,045,955	46.0	548,765	24.1	143,470	6.3	2,274,643	100.0
NNIS	7,439	0.8	195,895	20.7	463,582	49.0	277,982	29.4	239	0.0	945,137	100.0
FOSI	13,369	1.9	137,736	19.5	390,312	55.3	163,883	23.2	11	0.0	705,311	100.0
DDISF	4	0.0	49	0.0	119,929	100.0	3	0.0	2	0.0	119,987	100.0
Other	4	2.7	1	0.7	143	96.6	0	---	0	---	148	100.0
Total	745,531	8.7	1,506,624	17.5	3,523,159	41.0	2,074,145	24.2	738,554	8.6	8,588,013	100.0

Table 8

Most Frequent DIS Investigation Segments
(As of 1 April 1985)

	DIS Codes	Description	Number	Percent of Total
Military:	1A1/A	BI-non issue	319,563	15.4
	1A2/B	SBI-non issue	295,807	14.3
	1G1/A	ENTNAC-file	230,639	11.1
	1G2	NAC-file	184,192	8.9
	1K1/A	ENTNAC-expanded	135,850	6.5
	1A3/C	IBI-non issue	94,477	4.6
	1A7/G	SBI-supplemental	62,157	3.0
	1D3/C	Periodic Review	31,639	1.5
	1D5/E	SBI-PR (limited)	28,718	1.4
	1K2/B	NAC-expanded	27,363	1.3
	1P3/C	SBI-suitability	20,391	1.0
	1N3/C	BI-suitability	12,952	0.6
	1D2/B	BI-Bring up (special coverage)	11,969	0.6
		Subtotal	1,455,717	70.2
Industrial:	1C1/A	BI-non issue	67,630	3.3
	1C2/B	SBI-non issue	63,258	3.0
	1J2	NAC-file	59,459	2.9
	1C3/C	IBI-non issue	50,583	2.4
	1M2/B	NAC-expanded	43,557	2.1
	1V9/I	NAC-expanded (suitability)	41,671	2.0
	1Z9/I	Limited Inquiry	12,724	0.6
	1T8/H	Periodic Review-hostage	11,755	0.6
	1C7/G	SBI-supplemental	11,670	0.6
	1F3/C	Periodic Review	11,661	0.6
		Subtotal	373,968	18.0
Civilian:	1B2/B	SBI-non issue	48,833	2.4
	1B1/A	BI-non issue	39,129	1.9
	1E5/E	SBI-PR (limited)	19,072	0.9
	1E3/C	Periodic Review	12,021	0.6
		Subtotal	119,055	5.7
Other:	1XX	Investigation transferred to DIS	20,097	1.0

Table 9

Clearance Status
(As of 1 April 1985)

ARMY

Code	Meaning	Number	Percent
M	Secret-Nuclear	829,583	54.1
S	Secret-Denied Surety	409,505	26.7
V	SCI	137,013	8.9
T	Top Secret-Denied Surety	53,426	3.5
N	Top Secret-Nuclear	42,608	2.8
R	Revoked/Denied	37,850	2.5
X	Pending Adjudication	19,854	1.3
-	Other Codes	2,253	0.1
Total		1,532,092	100.0

AIR FORCE

Code	Meaning	Number	Percent
S	Secret	1,237,391	74.2
T	Top Secret	282,575	16.9
V	Top Secret-SCI Eligible	87,398	5.2
F	Favorable Adjudication-No Clearance	25,232	1.5
Z	Adjudication Terminated-Unfavorable Investigation	21,307	1.3
Y	Pending Adjudication	4,058	0.2
Q	Adjudication Terminated-Favorable Investigation	2,856	0.2
-	Other Codes	7,650	0.5
Total		1,668,467	100.0

Table 10

Basis for Clearance
(As of 1 April 1985)

Basis	ARMY		AIR FORCE	
	Number	Percent	Number	Percent
ENTNAC	834,686	54.5	635,696	38.1
NAC	311,683	20.3	377,381	22.6
NACI	93,314	6.1	256,582	15.4
BI	92,173	6.0	199,035	11.9
SBI	146,045	9.5	179,210	10.7
Other	54,191	3.5	20,563	1.2
Total	1,532,092	100.0	1,668,467	100.0

Table 11

Army Review Action Codes
(As of 1 April 1985)

Code	Meaning	Number	Percent
P	Surety	752,037	49.1
A	Clearance	329,274	21.5
D	Nuclear	294,035	19.2
C	Special Intelligence	98,270	6.4
X	Review Required	31,217	2.0
B	Revalidation	16,169	1.1
P	Military Intelligence	4,981	0.3
W	White House	1,876	0.1
G	AGO (General Officer Review)	1,097	0.1
-	Other	2,051	0.1
-	Not Indicated	1,085	0.1
Total		1,532,092	100.0

Table 12

Year of Adjudication
(As of 1 April 1985)

Year of Adjudication	ARMY		AIR FORCE	
	Number	Percent	Number	Percent
1985	62,346	4.1	67,485	4.0
1980-1984	1,215,486	79.3	873,051	52.3
1970-1979	252,886	16.5	537,901	32.2
1960-1969	773	0.1	152,703	9.2
1950-1959	3	0.0	36,495	2.2
Other	598	0.0	832	0.0
Total	1,532,092	100.0	1,668,467	100.0

Table 13

Year of Investigation
(As of 1 April 1985)

Year of Investigation	ARMY		AIR FORCE	
	Number	Percent	Number	Percent
1985	29,346	1.9	42,504	2.5
1980-1984	1,055,685	68.9	771,696	46.3
1970-1979	423,126	27.6	633,052	37.9
1960-1969	21,530	1.4	173,739	10.4
1950-1959	2,228	0.1	45,775	2.7
Other	177	0.0	1,701	0.1
Total	1,532,092	100.0	1,668,467	100.0

Table 14

Contributor Codes for Current Name and AKA Segments
(As of April 1985)

Contributor Code	Segment Type			
	Current Name		AKA	
	n	%	n	%
NAC	894,789	51.1	893,805	51.2
DDIS	320,749	18.3	320,280	18.3
AIRR	251,640	14.4	250,846	14.4
FOSI	145,653	8.3	142,051	8.1
NAVY	89,157	5.1	88,615	5.1
ACRD	50,775	2.9	50,759	2.9
DODIG	1	0.0	1	0.0
NSA	1	0.0	1	0.0
Total	1,752,765	100.0	1,746,358	100.0

Table 15

Social Security Number Validity of DCII Segments
(As of 1 April 1985)

Segment Type	Segments With Valid SSNs	Total Segments	Percent Valid
NAC History	7,353,541	7,389,167	99.5
NAC Pending	98,376	103,681	94.9
DIS Dossier	2,065,618	2,075,067	99.5
AIRR Dossier	1,025,197	2,467,720	41.5
ACRD Dossier	1,664,732	2,274,643	73.2
NIS Dossier	811,506	945,137	85.9
AFOSI Dossier	531,647	705,311	75.4
Air Force-DIS Dossier	108,162	119,987	90.1
Other Dossier	141	148	95.3
Army Clearance	1,527,036	1,532,092	99.7
Air Force Clearance	1,664,863	1,668,467	99.8
Current Name	1,569,609	1,752,765	89.6
AKA	1,561,341	1,746,358	89.4
Total	19,981,769	22,780,543	87.7

CLEANING UP THE PERIODIC REVIEW BACKLOG: ESTIMATES OF THE
NUMBERS AND LOCATION OF MILITARY SUBJECTS

August 1985

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A-19-1

Cleaning Up the Periodic Review Backlog: Estimates of the Numbers and Location of Military Subjects

Background

Current interest in increasing the number of periodic reviews among those with high level security clearances raises two key questions. Who are the likely subjects and where are they located? The first is a previously irrelevant matter for DIS, since under the recent quota system, it was up to the services to identify the subjects in their periodic review requests. Now, with the presumption of sufficient additional resources to augment the field agent staff, it is important to know how many investigations are required under various criteria and over projectable time periods.

Anticipation of subjects' locations is equally important, both to optimize hiring decisions and minimize temporary reassignment of current staff. In an organization such as DIS, with a large number of widely dispersed field units, it is critical to pinpoint the relative proportions of expected additional workload across the various field elements.

This paper represents an initial attempt to answer these who and where questions. A previous report (84-7) in the Personnel Security Research Program series (Appendix A) determined the feasibility of such analysis by means of linking automated military

personnel master files with the DCII. This effort includes an
additional ingredient--Navy and Marine Corps clearance data from
their respective personnel data files.

As a starting point for this analysis, it was assumed that
those active duty military personnel with the following general
characteristics would be most likely to require a periodic review:

a)   Top secret or SCI clearance,

b)   based on a DIS military BI or SBI level investi-
      gation,

c)   which is more than 5 years old.

Previous findings in this area have documented the extent of
incompleteness of clearance data for the Army and Navy. For this
and other reasons, it was decided to define the PR target groups
in two steps, so that a range of values could be identified.
While this is not as desirable as a single (correct) figure, it
is a limitation dictated by the quality of current security data
bases.

Who

All data used in this study were current as the second half
of FY85 began. The 2.1 million active duty officers and enlisted
military personnel served as the starting population. A pass

through this population first selected those with DCII segments indicating a military BI or SBI initiated by the end of FY81. This subset would, in effect, define the maximum number who might be eligible for a PR by the end of FY86. A total of 198,170 such individuals were found. Table 1 sorts them by service and officer-enlisted status. It shows more enlisted personnel than officers in each service and the Air Force, with over 86,000, to far outnumber the other three branches.

Additionally, Table 1 splits these service members into three categories, approximating the fiscal year during which the member could have initially entered the PR queue. This is less than exact since the DIS investigation date in the DCII is an initiation rather than completion date. Those with investigations begun prior to FY80 (a maximum estimate of the backlog at the beginning of FY85) predominated with over 110,000 of the total while nearly 41,000 could have entered during FY85 and most of the remaining 47,000 will be due during FY86.

The specific DIS investigation codes entered into this analysis are listed on Table 2. This table represents the relative distribution of these background investigations by officer-enlisted status within service and for the DoD aggregate. Initial non-issue BI and SBI investigations form the bulk of these codes, 80% of the enlisted members and 72% of the officers. Supplemental and PR-SBIs and suitability issue BIs and SBIs comprised most

TABLE 1
Active Duty Military Personnel with Military BI Or SBI
DIS Codes Showing Investigation Initiated Prior to FY82
(As of 1 April 1985)

Enlisted

Investigation Initiated	Army	Navy	Marine Corps	Air Force	DoD
During or before FY79	15,610	17,698	3,838	31,441	68,587
FY80	6,438	6,637	1,111	10,972	25,158
FY81	7,541	7,148	1,130	14,208	30,027
TOTAL	29,589	31,483	6,079	56,621	123,772

Officer

Investigation Initiated	Army	Navy	Marine Corps	Air Force	DoD
During or before FY79	13,662	8,826	2,493	16,808	41,789
FY80	5,273	3,511	769	6,110	15,663
FY81	5,327	3,979	773	6,867	16,946
TOTAL	24,262	16,316	4,035	29,785	74,398

TABLE 2
Percentage Distributions Of Pre-FY82 DIS
BI and SBI Codes Of Active Duty Military Personnel
(As of 1 April 1985)

Enlisted

BI/SBI Code	Army	Navy	Marine Corps	Air Force	DoD
1A1/A	45.6	58.0	65.0	50.6	52.0
1A2/B	32.9	21.7	19.2	30.7	28.4
1A3/C	.6	.2	3.1	.6	.6
1A6/F	.3	.5	.4	.4	.4
1A7/G	5.1	5.8	3.4	7.5	6.3
1D1/A	1.1	1.0	.7	1.0	1.0
1D2/B	.5	.2	.2	.6	.4
1D5/E	4.7	6.0	2.6	4.1	4.7
1N3/C	4.1	3.8	3.0	2.1	3.1
1P3/C	4.6	2.3	2.0	2.1	2.7
1U3/C	.2	.2	.1	.2	.2
Others*	.3	.3	.3	.1	.2
Total	100.0	100.0	100.0	100.0	100.0

Officer

BI/SBI Code	Army	Navy	Marine Corps	Air Force	DoD
1A1/A	42.5	49.3	60.7	39.9	43.9
1A2/B	29.6	21.0	17.2	33.0	28.4
1A3/C	.3	.2	1.7	.2	.3
1A6/F	.4	.6	.4	.8	.6
1A7/G	16.3	18.3	13.6	16.7	16.7
1D1/A	1.1	1.2	1.0	1.4	1.2
1D2/B	1.2	.5	.3	.6	.8
1D5/E	6.6	7.3	3.5	6.1	6.4
1N3/C	.8	.8	.8	.6	.7
1P3/C	1.0	.6	.6	.6	.8
1U3/C	.1	.1	.1	.0	.1
Others*	.1	.1	.1	.1	.1
Total	100.0	100.0	100.0	100.0	100.0

* Includes 1A8/H, 1D3/C, 1N1/A, 1N2/B, 1P1/A, 1P2/B, 1Q1/A,
1Q3/C, 1R1/A, 1R2/B, 1R3/C, 1U1/A, and 1U2/B.

(17%) of the remaining codes for the enlisted personnel. Supplemental SBIs and SBI periodic reviews are the only other significant officer investigation codes, covering 23%.

Having examined this subpopulation, a second analysis was performed to identify those with two additional characteristics—a top secret or SCI clearance code and an investigation completion date of September 1981 or earlier. Table 3 subdivides the 151,512 remaining personnel by service, officer-enlisted status, and investigation date. As in the first analysis there were more enlisted members than officers by a three to two margin. Also, the Air Force contributed half of the total personnel with these characteristics. Nearly 83,000 reached the five year point before FY85, 44,000 did or will during FY85, and the remaining 24,000 are due by the end of FY86.

Army and Air Force clearance data used in this report were taken from the DCII. Army personnel with the following clearance codes were considered to have top secret or SCI status: G, J, N, P, T, V. Of these, the SCI code V was held by 53%, while 24% had a top secret N code and 23% a top secret T code. Air Force personnel with clearance codes E, N, T, U, V, or W were included. Here the top secret T code (76%) and SCI code V (23%) dominated.

Navy and Marine Corps clearance data were obtained from personnel data tapes routinely submitted by those services to the

TABLE 3
Active Duty Military Personnel with Pre-FY82 DIS BI/SBI Codes,
Top Secret Or SCI Clearances, and Investigations Reaching
Five Year Point By The End Of FY86
(As of 1 April 1985)

Enlisted

Investigation Completed	Army	Navy	Marine Corps	Air Force	DoD
During or before FY79	8,930	10,619	2,300	27,034	48,883
FY80	7,401	5,677	917	13,206	27,201
FY81	3,831	2,723	410	8,004	14,968
TOTAL	20,162	19,019	3,627	48,244	91,052

Officer

Investigation Completed	Army	Navy	Marine Corps	Air Force	DoD
During or before FY79	9,416	6,483	2,200	15,962	34,061
FY80	6,177	2,939	716	7,224	17,056
FY81	3,321	1,518	345	4,159	9,343
TOTAL	18,914	10,940	3,261	27,345	60,460

Defense Manpower Data Center. Three Navy clearance codes (A, K, and P) were accepted. The K code (top secret based on a BI) accounted for 62% of these Navy clearances, while 38% had top secret based on an SBI (code A). The only Marine Corps code used for top secret or above (T) was used in this analysis.

The investigation completion dates used in this analysis were extracted from the DCII clearance segments in the cases of the Army and Air Force. For the Navy and Marine Corps, personnel data submission sources were utilized.

Where

Having developed two estimates of the numbers of active duty military personnel needing periodic reviews by the end of FY86, it remains to specify their current locations. The most critical data element at this point became the members' zip codes, which are found on the DMDC master files. A check of this data field revealed zip codes present for all but about 3,000 of the 198,000 individuals described earlier in this report. Scanning of the codes spotted two general types--U.S. and non-U.S. locations. For the U.S. locations, individuals were found in all 50 states and the District of Columbia. Non-U.S. zip codes (military APO/FPO) identified personnel in 69 different countries or territories.

U.S. zip codes were sorted into states by aggregating the postal sectional service centers represented by the first three zip code digits. This produced the first page of Table 4 showing state by state counts of those with DIS military BIs and SBIs initiated before FY82. Note that the largest numbers of these personnel were found in California, Texas, Virginia, Florida, and Washington, D.C. These locations contained 42% of the 137,693 individuals with U.S. zip codes.

The second part of Table 4 shows the country or territory in which the remaining personnel were assigned. To do this, the five digit APO/FPO zip codes were aggregated by country. Those countries with the most military personnel on 1 April 1985 were Germany, Korea, England, and Japan. Collectively these countries had 72% of the 41,334 personnel with such zip codes.

Table 4 also documents the finding of nearly 16,000 personnel with zip codes assigned to ships and other mobile units with no fixed location. Overall, then, of the 198,170 personnel of interest, 69.5% were in the U.S., 20.9% in other countries or territories, 8.0% on ships or with mobile units, and 1.6% without valid or any zip codes.

State and country distributions of those included in the more restricted PR candidate estimate are shown on Table 5. For U.S. located personnel, California, Texas, Virginia, Florida, and

TABLE 4

STATE AND COUNTRY LEVEL DISTRIBUTION OF ACTIVE DUTY MILITARY PERSONNEL WITH PRE-FY82 DIS BI/SBI LEVEL INVESTIGATIONS (AS OF 1 APRIL 1985)

NORTHEAST	NUMBER
CONNECTICUT	1181
MAINE	678
MASSACHUSETTS	1340
NEW HAMPSHIRE	512
NEW JERSEY	1454
RHODE ISLAND	553
VERMONT	27
AREA TOTAL	5745

MIDDLE ATLANTIC	NUMBER
DELAWARE	339
MARYLAND	4054
NORTH CAROLINA	5469
SOUTH CAROLINA	3130
VIRGINIA	11142
WASHINGTON D.C.	8912
WEST VIRGINIA	92
AREA TOTAL	33138

SOUTHEAST	NUMBER
ALABAMA	2379
FLORIDA	8395
GEORGIA	4694
MISSISSIPPI	1492
TENNESSEE	973
AREA TOTAL	17933

GREAT LAKES	NUMBER
INDIANA	764
KENTUCKY	1707
MICHIGAN	1205
NEW YORK	2385
OHIO	2747
PENNSYLVANIA	988
AREA TOTAL	9796

CENTRAL	NUMBER
ILLINOIS	1302
KANSAS	1998
MISSOURI	2572
NEBRASKA	2766
AREA TOTAL	8638

NORTH CENTRAL	NUMBER
IOWA	76
MINNESOTA	178
MONTANA	576
NORTH DAKOTA	1846
SOUTH DAKOTA	975
WISCONSIN	168
AREA TOTAL	3819

SOUTH CENTRAL	NUMBER
ARKANSAS	931
LOUISIANA	2119
OKLAHOMA	3813
TEXAS	11071
AREA TOTAL	17934

MOUNTAIN	NUMBER
ARIZONA	2977
COLORADO	3298
IDAHO	550
NEW MEXICO	2434
NEVADA	1527
UTAH	1049
WYOMING	591
AREA TOTAL	12426

PACIFIC	NUMBER
ALASKA	1954
CALIFORNIA	18044
HAWAII	4814
OREGON	142
WASHINGTON	3310
AREA TOTAL	28264

TABLE 4

STATE AND COUNTRY LEVEL DISTRIBUTION OF ACTIVE DUTY MILITARY
PERSONNEL WITH PRE-FY82 DIS BI/SBI LEVEL INVESTIGATIONS
(AS OF 1 APRIL 1985)

NORTH ATLANTIC	NUMBER
AZORES	191
BAHAMAS	5
BERMUDA	104
CANADA	29
CUBA	165
DOMINICAN REPUBLIC	5
GREENLAND	45
ICELAND	297
PUERTO RICO	353
WEST INDIES	8
AREA TOTAL	1202

CENTRAL/SOUTH AMERICA	NUMBER
ARGENTINA	3
BOLIVIA	3
BRAZIL	15
CHILE	2
COLOMBIA	3
COSTA RICA	2
ECUADOR	3
EL SALVADOR	10
GUATEMALA	1
HONDURAS	7
NICARAGUA	2
PANAMA	856
PARAGUAY	5
PERU	9
URUGUAY	4
VENEZUELA	12
AREA TOTAL	937

EUROPE	NUMBER
BELGIUM	344
DENMARK	15
ENGLAND	3877
FINLAND	25
FRANCE	20
GERMANY	18429
GREECE	471
ITALY	1623
NETHERLANDS	632
NORWAY	62
PORTUGAL	39
SCOTLAND	327
SICILY	190
SPAIN	1338
WALES	37
AREA TOTAL	27429

MIDDLE EAST/AFRICA	NUMBER
BAHRAIN	16
CYPRUS	2
EGYPT	47
ISRAEL	32
JORDAN	5
KENYA	4
LIBERIA	2
MOROCCO	5
SAUDI ARABIA	165
SUDAN	1
TURKEY	759
ZAIRE	8
AREA TOTAL	1046

ASIA/PACIFIC	NUMBER
ANTARCTICA	3
AUSTRALIA	124
DIEGO GARCIA	158
GUAM	1190
HONG KONG	9
INDONESIA	9
JAPAN	3491
JOHNSTON ISLAND	7
KOREA	3905
MARSHALL ISLANDS	10
MIDWAY ISLAND	1
NEW ZEALAND	17
PHILIPPINES	1755
SINGAPORE	9
THAILAND	31
WAKE ISLAND	1
AREA TOTAL	10720

OTHER	NUMBER
NO FIXED LOCATION	15913
UNLISTED APO/FPO	186
NO ZIP CODE	3044
AREA TOTAL	19143

Washington, D.C. had 41% of the 107,034 military members. Of the
32,240 in non-U.S. countries or territories, 72% were in Germany,
England, Japan, or Korea. Overall, 70.6% of the 151,512 personnel
included on Table 5 were in the U.S., 21.3% in other countries
and territories, 6.4% on ships or with other mobile units, and
1.7% without valid or any zip codes.

Future Related Work

While it is useful to identify the states or countries to
which future military PR subjects are assigned, it is recognized
that additional analyses are needed to provide DIS with information
necessary for planning purposes. Currently, efforts are underway
in several directions. With regard to the military personnel
described in this report, an analysis is underway that will
allocate U.S. personnel to specific DIS field offices rather than
the state level display presented here. To date, zip codes have
been matched with DIS field organization data. Two problems
have been identified which must be overcome before field office
level results can be provided. First, about 500 U.S. zip codes
were identified with no DIS field element code. The locations
must be identified and the appropriate field elements specified.
Secondly, about 500 zip codes were found to have more than one
DIS field element code. These must be examined individually and
the most appropriate DIS field element selected.

TABLE 5

STATE AND COUNTRY LEVEL DISTRIBUTION OF ACTIVE DUTY MILITARY PERSONNEL
WITH PRE-FY82 DIS BI/SBI LEVEL INVESTIGATIONS AND TOP SECRET OR SCI
CLEARANCES BASED ON INVESTIGATIONS FIVE YEARS OLD BY END OF FY86
(AS OF 1 APRIL 1985)

NORTHEAST	NUMBER		NORTH CENTRAL	NUMBER
CONNECTICUT	744		IOWA	53
MAINE	524		MINNESOTA	116
MASSACHUSETTS	1099		MONTANA	510
NEW HAMPSHIRE	444		NORTH DAKOTA	1607
NEW JERSEY	1098		SOUTH DAKOTA	875
RHODE ISLAND	350		WISCONSIN	111
VERMONT	23			
			AREA TOTAL	3272
AREA TOTAL	4282			

MIDDLE ATLANTIC	NUMBER		SOUTH CENTRAL	NUMBER
DELAWARE	295		ARKANSAS	800
MARYLAND	3175		LOUISIANA	1727
NORTH CAROLINA	3935		OKLAHOMA	3096
SOUTH CAROLINA	2454		TEXAS	8749
VIRGINIA	8401			
WASHINGTON D.C.	7067		AREA TOTAL	14372
WEST VIRGINIA	63			
			MOUNTAIN	NUMBER
AREA TOTAL	25390		ARIZONA	2442

SOUTHEAST	NUMBER		MOUNTAIN (cont.)	NUMBER
			COLORADO	2729
			IDAHO	475
ALABAMA	1812		NEW MEXICO	2069
FLORIDA	6511		NEVADA	1284
GEORGIA	3475		UTAH	896
MISSISSIPPI	1216		WYOMING	502
TENNESSEE	738			
			AREA TOTAL	10397
AREA TOTAL	13752			

GREAT LAKES	NUMBER		PACIFIC	NUMBER
INDIANA	591		ALASKA	1526
KENTUCKY	1200		CALIFORNIA	13086
MICHIGAN	1015		HAWAII	3604
NEW YORK	1907		OREGON	96
OHIO	2412		WASHINGTON	2533
PENNSYLVANIA	689			
			AREA TOTAL	20845
AREA TOTAL	7814			

CENTRAL	NUMBER
ILLINOIS	854
KANSAS	1526
MISSOURI	2128
NEBRASKA	2402
AREA TOTAL	6910

TABLE 5

STATE AND COUNTRY LEVEL DISTRIBUTION OF ACTIVE DUTY MILITARY PERSONNEL
WITH PRE-FY82 DIS BI/SBI LEVEL INVESTIGATIONS AND TOP SECRET OR SCI
CLEARANCES BASED ON INVESTIGATIONS FIVE YEARS OLD BY END OF FY86
(AS OF 1 APRIL 1985)

NORTH ATLANTIC	NUMBER	MIDDLE EAST/AFRICA	NUMBER
AZORES	157	BAHRAIN	11
BAHAMAS	4	CYPRUS	2
BERMUDA	66	EGYPT	39
CANADA	16	ISRAEL	22
CUBA	112	JORDAN	5
DOMINICAN REPUBLIC	4	KENYA	3
GREENLAND	36	LIBERIA	1
ICELAND	190	MOROCCO	5
PUERTO RICO	223	SAUDI ARABIA	133
WEST INDIES	6	SUDAN	1
		TURKEY	640
AREA TOTAL	814	ZAIRE	5
		AREA TOTAL	867

CENTRAL/SOUTH AMERICA	NUMBER	ASIA/PACIFIC	NUMBER
ARGENTINA	3	ANTARCTICA	3
BOLIVIA	2	AUSTRALIA	83
BRAZIL	12	DIEGO GARCIA	108
CHILE	1	GUAM	928
COLOMBIA	2	HONG KONG	7
COSTA RICA	2	INDONESIA	8
ECUADOR	2	JAPAN	2717
EL SALVADOR	10	JOHNSTON ISLAND	6
GUATEMALA	1	KOREA	3022
HONDURAS	5	MARSHALL ISLANDS	8
NICARAGUA	2	MIDWAY ISLAND	1
PANAMA	626	NEW ZEALAND	11
PARAGUAY	3	PHILIPPINES	1361
PERU	9	SINGAPORE	6
URUGUAY	4	THAILAND	26
VENEZUELA	10	WAKE ISLAND	1
AREA TOTAL	694	AREA TOTAL	8296

EUROPE	NUMBER	OTHER	NUMBER
BELGIUM	277		
DENMARK	14	NO FIXED LOCATION	9689
ENGLAND	3296	UNLISTED APO/FPO	155
FINLAND	21	NO ZIP CODE	2394
FRANCE	19		
GERMANY	14263	AREA TOTAL	12238
GREECE	386		
ITALY	1285		
NETHERLANDS	520		
NORWAY	46		
PORTUGAL	23		
SCOTLAND	256		
SICILY	116		
SPAIN	1020		
WALES	27		
AREA TOTAL	21569		

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Military personnel are only one of three types needing DIS periodic reviews. DoD civilian employees and industrial contractors are the others. An analysis is now underway to provide state and country level, as well as selected city distributions, for civilian employees. The DCII and master personnel files have already been matched. Limitations here are the lack of Navy and Marine Corps clearance data in the DCII and lack of zip codes in the civilian master file.

In the industrial area, preliminary discussions have identified several data elements in the automated DISCO files that should be of use in this general effort. Attempts are underway to have the DISCO files made available to DoD Personnel Security Research Program personnel so that they may be matched against other relevant data bases. A possible limitation is the lack of specific worksite zip code in the case of some companies with multiple locations. It appears that only the headquarters zip code is provided.

DOD PESONNEL SECURITY RESEARCH PROGRAM REPORTS

1. Personnel Security Investigation and Clearance Contents of the Defense Central Index of Investigations, 84-1, March 1984

2. Defense Investigative Service Investigations and Army and Air Force Adjudications Contained in the DCII, 84-2, May 1984

3. Army and Air Force Adjudications During FY83 and DIS Investigation and Clearance Status of DoD Personnel as of the End of FY83, June 1984

4. Investigation and Clearance Status of Those in Army Personnel Security Screening Program Occupations, 84-4, July 1984

5. Iden ification of Army Top Secret and SCI Eligibles Not Included in DCII Clearances, 84-5, July 1984

6. Navy Security Clearances, 84-6, August 1984

7. Projections of Military Periodic Review Requirements, 84-7, August 1984

8. Security Clearances Among Army and Air Force Reserve Component Personnel, 84-8, September 1984

9. Comparison of Investigations and Adjudications During FY83 and the First Half of FY84, 84-9, September 1984

10. DIS Investigations and Clearance Eligibility of Air Force Enlistees Requiring BIs and SBIs, 85-1, October 1984

11. The DoD Personnel Security Research Program: Initial USAF Findings and Future Areas of Study, 85-2, November 1984

12. Identification of Unnecessary Background Investigations, 85-3, December 1984

13. Personnel Security Investigations: Service Differences for Similar Occupations, 85-4, December 1984

14. Most Recent DIS Investigation and Clearances Information in the DCII at the Beginning of Fiscal Year 1985, 85-5, March 1985

15. Continued Top Secret and SCI Status of Former Army Personnel with Unsuitability Discharges, 85-6, April 1985

16. Continued Top Secret and SCI Status of Former Air Force Personnel with Unsuitability Discharges, 85-7, April 1985.

17. Security Investigations and Clearances in the DCII at the End of Fiscal Year 1984: A Profile of 2.1 Million Active Duty Military Personnel, 85-8, May 1985

18. A Census of Key Data Elements in the Defense Central Index of Investigations (As of 1 April 1985), 85-9, June 1985

19. Cleaning Up the Periodic Review Backlog: Estimates of the Numbers and Location of Military Subjects, 85-10, August 1985

20. Extent of National Agency Checks on Active Military Personnel, 85-11, September 1985

EXTENT OF NATIONAL AGENCY CHECKS ON ACTIVE MILITARY PERSONNEL

September 1985

Prepared by:

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DoD Personnel Security Research Program

Report 85-11

EXTENT OF NATIONAL AGENCY CHECKS ON
ACTIVE MILITARY PERSONNEL

Current DoD policy calls for National Agency Checks (NACs) to be run on all military personnel entering active duty. These are generally accomplished either as entrance NACs or, for personnel requiring top secret or higher clearance, as part of a detailed background or special background investigation. Recent espionage cases involving persons only requiring clearance at the secret level have raised questions about the adequacy of the NAC as a key element of the personnel security system.

This paper reports on the results of analyses made possible by the matching of the Defense Central Index of Investigation (DCII) with the DoD active duty master files maintained by the Defense Manpower Data Center (DMDC). The IBM computer system at the Naval Postgraduate School was used to process the massive data files used in this study. All results reflect the situation at the beginning of the second half of fiscal year 1985. Specifically, the following issues were examined; have all current military personnel been subjected to a NAC, and how many and what kind of files are searched during a NAC?

As described in a recent report in this series, one of the six types of segments in the DCII is the NAC History segment. Currently, over seven million NACs involving over 24 million agency file searches are identified in this portion of the DCII. Each entry includes a completion date and code along with identification of up to eleven agency files that may have been searched during the NAC. The DCII does not however, identify the employer or status of the subject of the NAC. This study matched the 2.1 million record active military personnel inventory against these NACs. The tables and discussion in the following pages describes the results of this matching.

The first question asked of the data was how many military personnel have DCII NAC History segments. As Table 1 shows, that answer ranges from 82% for Air Force and Navy officers to 86% of enlisted Marines. The overall DoD figure was 84% at the end of the first half of FY85. Table 1 shows for each service a slightly higher percentage of enlisted members with NAC History segments than officers. This difference varied from 1.1% in the Navy to 2.6% in the Marine Corps.

To determine if lack of a NAC History segment is more pronounced at certain paygrades, the analysis presented on Table 2 was conducted. It was speculated that the percent without a NAC History segment would be higher at the upper and lowest paygrades. This would be expected since NACs on all new recruits may not yet be completed and entered into the system. Also, previous analyses have shown completion dates ranging between 1973 and 1985. Personnel entering before 1973 would not have a NAC History

TABLE 1 - Percent With NAC History DCII Segments
(As of 1 April 1985)

	Enlisted	Officer	Overall
Army	85.5	83.1	85.2
Navy	83.4	82.3	83.2
Air Force	83.4	82.1	83.2
Marine Corps	86.2	83.6	86.0
DoD	84.4	82.6	84.2

TABLE 2 - Paygrade Distribution of Percentages With NAC History DCII Segments (As of 1 April 1985)

	Grade	Army	Navy	Air Force	Marine Corps	DoD
Enlisted	E1	83.7	83.5	92.4	84.9	85.3
	E2	92.5	91.1	96.2	90.7	92.5
	E3	92.8	93.3	97.5	93.5	94.4
	E4	94.0	93.7	97.2	93.8	94.8
	E5	92.0	90.9	88.2	93.0	90.6
	E6	76.1	67.9	52.8	77.9	67.9
	E7	52.5	43.5	36.9	34.6	44.5
	E8	42.5	38.0	37.7	29.7	38.9
	E9	35.4	33.6	38.1	24.4	34.8
Officer	Warrant	69.3	49.7	NA	66.0	66.0
	01	97.0	94.2	96.7	96.4	96.1
	02	96.5	93.4	96.5	93.2	95.4
	03	90.4	92.3	89.6	89.1	90.4
	04	71.4	74.4	62.5	66.4	68.6
	05	73.3	62.2	61.6	65.0	65.8
	06	69.7	62.2	71.0	77.5	68.6
	07-010	93.7	77.5	96.2	86.2	90.2

segment unless they had been checked during this more recent period after entering service.

Table 2 generally shows what was expected. For enlisted personnel in each service, highest percentages (over 90%) with DCII NAC History segments were found at grades E2 - E5. Somewhat lower rates were identified at the E1 entry level. The percent with NAC History segments declines greatly as grade rises from E6 to E9. Only 24% of enlisted Marines at the E9 level had DCII NAC History segments. For officers the pattern was different. For grades 01-03 the percent with NAC History segments ranged from 89% to 97%. At grades 04 to 06 it ranged from 62% to 78%. However, at 07 and above the percentage rose to 01-03 levels, except in the Navy where it was only 78%. For Army and Marine warrant officers the NAC History percent was similar to that found for those at the 04-06 level, but it was only 50% for Navy warrants.

Lack of a NAC History segment does not necessarily mean there is no DCII evidence of a NAC. The structure of the DCII places certain types of NACs under the category of DIS dossier segments. These are NACs which developed derogatory findings or information requiring further clarification on a subject. This study included an assessment of this source of NAC documentation for those without a NAC History segment. Results are presented after the discussion of NAC History segment findings.

For those with NAC History segments the number of different agency files checked went as high as ten (for one Army officer). However, as shown on Table 3, most NACs involved the search of three or four different files. This was true for from 88% of the Army officers to 99% of the enlisted Marines. Consistent differences were found in each service such that officers generally had more files checked than enlisted personnel. This is accurately reflected in the average number of files checked during the course of a NAC, which overall was 3.2 for enlisted members and 3.8 for officers.

Tables 4A and 4B identify the specific agency files found to be most often checked during a NAC. The values in these tables indicate the percent of all NACs which included a particular type of file check. As Table 4A shows for enlisted personnel, almost all NACs include DCII and FBI Headquarters checks and either an FBI Name or Fingerprint check. The only noticeable differences across services were the relatively higher rate of FBI Fingerprint checks (31%) in the Air Force and lower rate in the Marine Corps (11%). These, in turn, produced higher rates of FBI Name checks for the Marine Corps (89%) and a lower Air Force rate (69%).

Other than these four files, the only ones checked for more than 2% of current enlisted personnel with NACs were the Air Force, Army, and Navy Personnel Center files. These checks were

TABLE 3 - Number of Agency Files Checked during NACs
(As of 1 April 1985)

Number of Files Checked	Army Enlisted	Army Officer	Navy Enlisted	Navy Officer	Air Force Enlisted	Air Force Officer	Marine Corps Enlisted	Marine Corps Officer	DoD Enlisted	DoD Officer
2	0.1	0.3	0.1	0.4	0.1	0.2	0.1	1.4	0.1	0.4
3	83.0	43.2	82.3	34.0	79.9	34.9	90.1	44.1	82.7	38.2
4	13.3	45.1	14.1	56.6	16.7	54.1	8.5	46.9	14.0	51.0
5	2.8	7.2	2.9	6.2	2.3	7.1	1.1	4.9	2.5	6.8
6	0.7	3.8	0.5	2.5	0.9	3.3	0.2	2.5	0.6	3.2
7	0.1	0.4	0.1	0.3	0.1	0.4	0.0	0.2	0.1	0.4
Average Number	3.2	3.7	3.2	3.8	3.2	3.8	3.1	3.6	3.2	3.8

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TABLE 4A - Agency Files Most Frequently Checked
During Enlisted NACs
(As of 1 April 1985)

Agency Files Checked	Percent of National Agency Checks				
	Army	Navy	Air Force	Marine Corps	Enlisted Total
DCII	100.0	100.0	100.0	100.0	100.0
FBI Headquarters	99.9	99.9	99.9	100.0	99.9
FBI Name Check	80.3	80.4	69.1	88.6	78.2
FBI Fingerprint	19.6	19.5	30.8	11.3	21.7
Air Force Military Personnel Center	0.0	0.0	14.5	0.0	3.8
Army Military Personnel Center (Enlisted)	9.8	0.0	0.0	0.0	3.6
Navy Military Personnel Records	0.1	11.7	0.1	0.0	3.1
Army Prior Service Records	3.4	1.7	0.8	0.7	2.0
I & NS (Alien)	1.9	1.8	1.7	1.8	1.8
Central Intelligence Agency	1.4	2.1	1.6	0.5	1.5
Office of Personnel Management	1.6	1.4	1.8	0.8	1.5
I & NS (Citizen)	0.6	1.0	0.9	0.4	0.8
State Department (Passport)	0.7	0.4	1.1	0.2	0.7
Marine Corps Personnel Records	0.1	0.1	0.0	5.8	0.7
Defense Investigative Service	0.2	0.5	0.7	0.2	0.4
Army Investigative Files	1.0	0.1	0.1	0.1	0.4
Total Personnel with NACs	573,727	409,153	409,248	153,604	1,545,732

TABLE 4B - <u>Agency Files Most Frequently Checked</u>
<u>During Officer NACs</u>
(As of 1 April 1985)

Agency Files Checked	Percent of National Agency Checks				
	Army	Navy	Air Force	Marine Corps	Officer Total
DCII	100.0	100.0	100.0	100.0	100.0
FBI Headquarters	99.9	99.9	99.9	99.9	99.9
FBI Fingerprint	80.5	82.5	85.4	79.0	82.6
Air Force Military Personnel Center	1.0	0.1	54.9	0.0	19.2
FBI Name Check	19.0	16.9	14.3	19.2	16.9
Army Military Personnel Center (Officer)	39.9	0.0	0.1	0.0	14.2
Navy Military Personnel Records	0.3	58.5	0.3	0.5	13.5
Office of Personnel Management	5.2	4.7	5.1	2.9	4.9
Central Intelligence Agency	5.0	3.8	4.5	3.4	4.4
Army Prior Service Records	6.1	2.9	4.1	2.5	4.4
State Department (Passport)	4.5	3.4	4.1	3.2	4.0
Marine Corps Personnel Records	0.1	0.2	0.1	49.1	3.5
Army Military Personnel Center (Enlisted)	5.0	0.0	0.0	0.0	1.8
I & NS (Citizen)	1.8	1.5	1.6	1.0	1.6
Defense Investigative Service	0.7	0.6	1.3	0.7	0.9
State Department (US Citizens Born Abroad)	1.1	0.5	0.7	0.7	0.8
Army Investigative Files	1.8	0.1	0.2	0.1	0.7
Air Reserve Personnel Center	0.2	0.1	1.2	0.1	0.5
Total Personnel with NACs	89,127	56,685	87,329	17,147	250,288

primarily limited to those in a particular service. For example, while 14% of the NACs done on enlisted Air Force personnel included a check of the Air Force Military Personnel Center files, less than .1% of those in the other branches had been checked in this Air Force file.

The only other NAC file searched for more than 4% of the enlisted NAC recipients, in any service, was the Marine Corps Personnel Records file. This was searched during 6% of the enlisted Marine Corps NACs. Table 4A shows all files searched in .4% or more of the 1.5 million enlisted DCII NAC History segments for personnel active at the middle of FY85.

Comparable officer data is presented on Table 4B. Again the DCII and FBI Headquarters files were checked for virtually all of the quarter million current officer NACs, as were either the FBI fingerprint or name files. In contrast to the enlisted findings where four-fifths were given FBI name checks rather than fingerprint searches, Table 4B shows the ratio to be reversed for officers, with about four-fifths getting fingerprint checks and one-fifth name searches. Only small service differences are shown for the officers.

Next in prominence for the officers were the service specific searches of the Air Force, Army, and Navy Personnel Records files. These were the only other files searched in over 5% of the overall officer NACs. The only other frequently checked file in a specific service was the Marine Corps Personnel Records file, referenced in 49% of the Marine officer NACs.

A second meaningful way of viewing the NAC files is to consider each type of file as a percentage of all files checked during NACs. Tables 5A and 5B present such distributions for enlisted personnel and officers. For enlisted members, Table 5A shows nearly 5 million individual agency file checks. DCII, FBI Headquarters, and FBI name and fingerprint file checks account for 93% of this total. These four files also account for 80% of the 940,000 checks conducted as part of officer NACs, as indicated on Table 5B. Individual service personnel record files represent another 13% of the officer file checks.

In addition to the specific files checked, NAC History segments in the DCII have completion status and date codes. Completion codes reflect either complete or incomplete NAC histories. Almost all NACs on current military personnel have completed NAC history codes. Table 6 shows an overall DoD figure of 98%. Little variance from that value is evident either across service or military status. However, in each service a slightly higher percentage of enlisted than officer personnel have a completed NAC history code assigned to their NAC segment.

TABLE 5A - Frequency Distribution of Agency Files Searched
During Enlisted NACs
(As of 1 April 1985)

	Percent of Total Files Checked				
Agency Files Checked	Army	Navy	Air Force	Marine Corps	Enlisted Total
DCII	31.1	31.1	30.8	32.1	31.1
FBI Headquarters	31.1	31.1	30.8	32.1	31.1
FBI Name Check	25.0	25.0	21.3	28.5	24.3
FBI Fingerprint	6.1	6.1	9.5	3.6	6.8
Air Force Military Personnel Center	0.0	0.0	4.5	0.0	1.2
Army Military Personnel Center (Enlisted)	3.0	0.0	0.0	0.0	1.1
Navy Military Personnel Records	0.0	3.6	0.0	0.0	1.0
Army Prior Service Records	1.1	0.5	0.2	0.2	0.6
I & NS (Alien)	0.6	0.6	0.5	0.6	0.6
Central Intelligence Agency	0.4	0.6	0.5	0.2	0.5
Office of Personnel Management	0.5	0.4	0.5	0.3	0.5
I & NS (Citizen)	0.2	0.3	0.3	0.1	0.2
State Department (Passport)	0.2	0.1	0.3	0.1	0.2
Marine Corps Personnel Records	0.0	0.0	0.0	1.9	0.2
Defense Investigative Service	0.1	0.1	0.2	0.1	0.1
Army Investigative Files	0.3	0.0	0.0	0.0	0.1
All Others	0.2	0.3	0.4	0.3	0.3
Total Number of Files Checked	1,843,935	1,316,279	1,326,958	478,148	4,965,320

TABLE 5B - Frequency Distribution of Agency Files Searched
During Officer NACs
(As of 1 April 1985)

Agency Files Checked	Percent of Total Files Checked				
	Army	Navy	Air Force	Marine Corps	Officer Total
DCII	26.9	26.5	26.3	27.5	26.6
FBI Headquarters	26.8	26.5	26.3	27.5	26.6
FPI Fingerprint	21.6	21.9	22.5	21.7	22.0
Air Force Military Personnel Center	0.0	0.0	14.5	0.0	5.1
FBI Name Check	5.1	4.5	3.8	5.3	4.5
Army Military Personnel Center (Officer)	10.7	0.0	0.0	0.0	3.8
Navy Military Personnel Records	0.1	15.5	0.1	0.1	3.6
Office of Personnel Management	1.4	1.2	1.3	0.8	1.3
Central Intelligence Agency	1.3	1.0	1.2	0.9	1.2
Army Prior Service Records	1.6	0.8	1.1	0.7	1.2
State Department (Passport)	1.2	0.9	1.1	0.9	1.1
Marine Corps Personnel Records	0.0	0.0	0.0	13.5	0.9
Army Military Personnel Center (Enlisted)	1.3	0.0	0.0	0.0	0.5
I & NS (Citizen)	0.5	0.4	0.4	0.3	0.4
Defense Investigative Service	0.2	0.2	0.4	0.2	0.2
State Department (U.S. Citizens Born Abroad)	0.3	0.1	0.2	0.2	0.2
Army Investigative Files	0.5	0.0	0.0	0.0	0.2
Air Reserve Personnel Center	0.0	0.0	0.3	0.0	0.1
All Others	0.3	0.4	0.5	0.3	0.4
Total Number of Files Checked	331,792	213,898	331,446	62,351	939,487

TABLE 6 - <u>Percent of NACs With Completed NAC</u>
<u>History Status Codes</u>

	<u>Enlisted</u>	<u>Officer</u>	<u>Overall</u>
Army	98.5	97.0	98.3
Navy	98.7	97.9	98.6
Air Force	98.4	97.1	98.1
Marine Corps	99.1	97.0	98.9
DoD	98.6	97.3	98.4

With regard to the completion dates on the military NACs, Table 7 presents frequency distributions of the year during which the agency checks were completed. Dates ranged from 1973 to 1985. Overall, more enlisted than officer NACs were more recently completed. For example, Table 7 shows 50% of the officer NACs completed since 1981 and 65% of the enlisted NACs, completed since that time.

As previously mentioned, DIS investigation segments are an alternate DCII source of NAC information for those with negative or questionable NAC findings. Table 8 contains the results of a special analysis of DIS investigation DCII segments only for those current military members without a NAC History segment. Recall from Table 1 that this represents about 16% of the active force. Table 8 shows that most military personnel without NAC History segments also do not have DIS investigation segments in the DCII. This was true for 67% of the enlisted personnel and 72% of the officers. For the officers this finding did not differ much by service. However there was considerable variation at the enlisted level. Far more Army and Navy personnel without NAC History segments were found with DIS dossier segments than was the case in the Air Force.

Most enlisted personnel with DIS investigations described on Table 8 had file or extended NACs or ENTNACs. Overall these investigation codes were found in 25% of such cases. All other DIS codes applied to 8% of the enlisted personnel depicted in Table 8. Among officers, far fewer NAC and ENTNAC dossiers were found (7%). Far more officer DIS segment codes (17%) reflect initial non-issue BI/IBI/SBI and supplemental SBI types of investigations.

Thus while some current military personnel without NAC History segments were found with NAC type DIS investigation segments in the DCII, this alternative source of NAC information still falls short of accounting for all personnel.

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TABLE 7 - Frequency Distribution of NAC Completion Dates

Year NAC Completed	Army		Navy		Air Force		Marine Corps		DoD	
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer
1973	1.7	3.0	1.4	1.9	2.2	2.4	1.3	2.4	1.7	2.5
1974	2.6	4.2	2.0	2.5	2.4	3.0	1.7	3.2	2.4	3.3
1975	2.9	5.8	2.6	4.0	3.4	4.3	2.3	5.6	2.9	4.9
1976	3.9	5.9	3.4	4.3	3.5	4.3	2.7	5.6	3.5	4.9
1977	4.8	7.9	4.9	5.4	4.9	6.0	4.1	5.9	4.7	6.5
1978	4.8	8.6	5.1	6.9	5.1	6.7	4.5	7.8	4.9	7.5
1979	6.2	9.2	6.5	8.4	6.6	9.6	4.8	8.5	6.2	9.1
1980	7.4	12.0	9.5	10.5	10.5	11.7	7.4	9.5	8.8	11.4
1981	9.4	11.6	13.6	12.5	15.0	10.6	12.8	10.0	12.3	11.3
1982	15.3	9.9	17.7	11.7	14.2	11.8	19.4	14.3	16.0	11.3
1983	19.3	10.0	16.5	14.0	14.6	12.9	20.0	12.8	17.4	12.1
1984	18.0	9.9	14.1	15.2	15.2	14.2	16.3	12.0	16.0	12.8
1985	4.0	1.9	2.5	2.8	2.2	2.6	2.7	2.3	3.0	2.4

TABLE 8 - Most Frequent Types Of DIS Investigations For Military
Personnel Without NAC History Segments
(as of 1 April 1985)

| Type of Investigation | Enlisted (Percents) | | | | |
	Army	Navy	Air Force	Marine Corps	DoD
None	58.6	63.0	78.5	71.3	66.7
File NAC	15.2	8.0	3.9	4.8	9.0
Expanded ENTNAC	10.9	10.5	3.9	10.2	8.7
File ENTNAC	6.6	9.3	3.1	6.7	6.4
Initial BI (non-issue)	2.3	2.8	3.1	2.9	2.7
Initial SBI (non-issue)	1.5	1.2	3.1	0.7	1.8
Expanded NAC	1.8	1.3	0.5	1.1	1.2
Initial IEI (non-issue)	0.7	0.9	0.9	0.8	0.8
Other DIS Codes	2.4	3.0	3.0	1.5	2.7
Number Without NAC History Segments	97,378	81,658	81,529	24,535	285,100

| Type of Investigation | Officer (Percents) | | | | |
	Army	Navy	Air Force	Marine Corps	DoD
None	72.6	74.4	69.4	70.4	71.7
Initial SBI (non-issue)	4.7	4.7	12.3	4.9	7.5
Initial BI (non-issue)	4.5	6.2	6.6	8.2	5.9
File NAC	8.7	5.1	2.9	6.0	5.6
Supplemental SBI	1.7	1.8	2.2	1.6	1.9
Initial IEI (non-issue)	1.2	1.8	1.8	1.0	1.4
Expanded NAC	1.5	1.1	0.8	2.3	1.2
File ENTNAC	0.8	0.3	0.1	1.1	0.4
Other DIS Codes	4.3	4.6	4.5	3.8	4.4
Number Without NAC History Segments	18,175	12,197	18,976	3,369	52,717

APPENDIX B
SOFTWARE DEVELOPED TO AUDIT
AND EDIT THE DCII

```
//MHSNWXXX JOB (307.,,PSFV214),DLW,CLASS=D
//*MAIN PROC=20,RINCCHK=NO,OFG=RMT01
//*FORMAT PR,DDNAME=,DEST=RMT01,COPIES=1
//*EF EXEC PGM=IEFBR14
//*    DD   DSN=MRDC.MYFXXX.WARD,DISP=(OLD,DELETE)
//*    UNIT=3350,VOL=SER=
// EXEC PLIXCLG,REGION=2048K
//PLI.SYSIN DD *
/* THIS PROGRAM REJOINS THE BASE FILE WITH THE SEGMENT FILE */
/* ELIMINATING ALL BASE RECORDS THAT DON'T HAVE A TYPE 2/3 */
/* OR ODDIS SEGMENT. */
START:
    PROCEDURE OPTIONS (MAIN) REORDER;

DCL
    INB FILE INPUT RECORD,
    INO FILE INPUT RECORD,
    IN2 FILE INPUT RECORD,
    IN3 FILE INPUT RECORD,
    OUT FILE OUTPUT RECORD,
    SYSPRINT FILE OUTPUT STREAM,

  1 RECB BASED (P1),
    2 SSN    CHAR(9),     /*  1 - 9   SSN */
    2 FIL1   CHAR(37),    /* 10 - 46  REST */

  1 RECO BASED (P2),
    2 SSNO   CHAR(9),     /*  1 - 9   SSN */
    2 FILO   CHAR(23),    /* 10 - 32  REST */

  1 REC2 BASED (P3),
    2 SSN2   CHAR(9),     /*  1 - 9   SSN */
    2 FIL2   CHAR(30),    /* 10 - 39  REST */

  1 REC3 BASED (P4),
    2 SSN3   CHAR(9),     /*  1 - 9   SSN */
    2 FIL3   CHAR(17),    /* 10 - 26  REST */

  1 RECOUT,
    2 SSN    CHAR(9),     /*   1 - 9    SSN  */
    2 FIL1   CHAR(37),    /*  10 - 46   BASE */
    2 OUTO   CHAR(23),    /*  47 - 69   TYPE  */
    2 OUT2   CHAR(30),    /*  70 - 99   TYPE  */
    2 OUT3   CHAR(17),    /* 100 - 116  TYPE  */

    (P1,P2,P3,P4) POINTER,
    (EOFB,EOFO,EOF2,EOF3)   BIT(1) INIT('0'B),
    (CO,C2,C3,CB)     FIXED BIN(31) INIT(0),
    OUTCNT FIXED BIN(31) INIT(0),
    MATCH BIT(1) INIT('0'B);

ON ENDFILE (INB) EOFB = '1'B;
ON ENDFILE (INO) EOFO = '1'B;
ON ENDFILE (IN2) EOF2 = '1'B;
ON ENDFILE (IN3) EOF3 = '1'B;

READ FILE (INB) SET (P1);
READ FILE (INO) SET (P2);
READ FILE (IN2) SET (P3);
READ FILE (IN3) SET (P4);

DO WHILE (¬EOFB);

IF (SSNO = RECB.SSN & ¬EOFO) THEN DO;
   MATCH = '1'B;
   OUTO = FILO;
   CO = CO + 1;
   READ FILE (INO) SET (P2);
END;
ELSE OUTO = '                       ';

IF (SSN2 = RECB.SSN & ¬EOF2) THEN DO;
   MATCH = '1'B;
   OUT2 = FIL2;
   C2 = C2 + 1;
   READ FILE (IN2) SET (P3);
END;
```

```
   ELSE OUT2 = '                              ';

   IF (SSN3 = RECB.SSN & RECB3) THEN DO;
      MATCH = '1';
      OUT3 = FIL3;
      C3 = C3 + 1;
      READ FILE (IN3) SET (P4);
   END;
   ELSE OUT3 = '                  ';

   IF MATCH THEN DO;
      RECOUT = RECB, BY NAME;
      WRITE FILE (OUT) FROM (RECOUT);
      OUTCNT = OUTCNT + 1;
      MATCH = '0';
   END;

   CB = CB + 1;
   READ FILE (IN3) SET (P1);
   END;

   PUT SKIP EDIT('BASE RECORDS READ ',CB)(COL(10),A(19),P'ZZ,ZZZ,ZZ9');
   PUT SKIP EDIT('TYPED RECORDS READ',C0)(COL(10),A(19),P'ZZ,ZZZ,ZZ9');
   PUT SKIP EDIT('TYPED RECORDS READ',C2)(COL(10),A(19),P'ZZ,ZZZ,ZZ9');
   PUT SKIP EDIT('TYPED RECORDS READ',C3)(COL(10),A(19),P'ZZ,ZZZ,ZZ9');
   END;
/*
//GO.INB     DD UNIT=3400-5,DISP=SHR,
//           DCB=(LRECL=49,BLKSIZE=32752,RECFM=FB),
//           DSN=DCIDD.SPC45.P4503,
//           VOL=SER=(K02732,K05216,K07555)
//GO.IN0     DD UNIT=3400-5,DISP=SHR,
//           DCB=(LRECL=32,BLKSIZE=32736,RECFM=FB),
//           DSN=DCIDD.SP000.P4503,
//           VOL=SER=(C04355)
//GO.IN2     DD UNIT=3400-5,DISP=SHR,
//           DCB=(LRECL=32,BLKSIZE=32760,RECFM=FB),
//           DSN=DCIDD.SPC02.P4503,
//           VOL=SER=(J02111,J02112)
//GO.IN3     DD UNIT=3400-5,DISP=SHR,
//           DCB=(LRECL=26,BLKSIZE=32760,RECFM=FB),
//           DSN=DCIDD.SPC03.P4503,
//           VOL=SER=(C05914)
//GO.OUT     DD UNIT=3400-5,DISP=SHR,
//           DCB=(LRECL=116,BLKSIZE=32712,RECFM=FB),
//           DSN=DCIDD.MRG46.P4503,
//           VOL=SER=(C07004,C01222,001557,K05210,K03651,
//           K04547,KC1302)
//
```

```
//MWS#DCII JOB (3378,35F5214),'DONNA',CLASS=K
//*FORMAT PR,DDNAME=,DEST=RMT01
//*MAIN PROC=20,ORG=RMT01,RINGCHK=NO
//  EXEC PGM=IEBGENER
//STEPLIB  DD DISP=SHR,DSN=MRDC.LOAD
//SYSPRINT DD SYSOUT=A
//SYSIN    DD DUMMY
//SYSUT1   DD UNIT=3400-6,DISP=OLD,LABEL=(2,BLP),VOL=SER=T0C079,
//            DCB=(LRECL=344,BLKSIZE=20640,RECFM=VBS,DEN=4)
//            DD UNIT=AFF=SYSUT1,DISP=OLD,LABEL=(2,BLP),VOL=SER=T0C080,
//            DCB=(LRECL=344,BLKSIZE=20640,RECFM=VBS,DEN=4)
//            DD UNIT=AFF=SYSUT1,DISP=OLD,LABEL=(2,BLP),VOL=SER=T0C081,
//            DCB=(LRECL=344,BLKSIZE=20640,RECFM=VBS,DEN=4)
//            DD UNIT=AFF=SYSUT1,DISP=OLD,LABEL=(2,BLP),VOL=SER=T0C082,
//            DCB=(LRECL=344,BLKSIZE=20640,RECFM=VBS,DEN=4)
//            DD UNIT=AFF=SYSUT1,DISP=OLD,LABEL=(2,BLP),VOL=SER=T0C083,
//            DCB=(LRECL=344,BLKSIZE=20640,RECFM=VBS,DEN=4)
//            DD UNIT=AFF=SYSUT1,DISP=OLD,LABEL=(2,BLP),VOL=SER=T0C084,
//            DCB=(LRECL=344,BLKSIZE=20640,RECFM=VBS,DEN=4)
//            DD UNIT=AFF=SYSUT1,DISP=OLD,LABEL=(2,BLP),VOL=SER=T0C085,
//            DCB=(LRECL=344,BLKSIZE=20640,RECFM=VBS,DEN=4)
//            DD UNIT=AFF=SYSUT1,DISP=OLD,LABEL=(2,BLP),VOL=SER=T0C086,
//            DCB=(LRECL=344,BLKSIZE=20640,RECFM=VBS,DEN=4)
//            DD UNIT=AFF=SYSUT1,DISP=OLD,LABEL=(2,BLP),VOL=SER=T0C087,
//            DCB=(LRECL=344,BLKSIZE=20640,RECFM=VBS,DEN=4)
//            DD UNIT=AFF=SYSUT1,DISP=OLD,LABEL=(2,BLP),VOL=SER=T0C088,
//            DCB=(LRECL=344,BLKSIZE=20640,RECFM=VBS,DEN=4)
//            DD UNIT=AFF=SYSUT1,DISP=OLD,LABEL=(2,BLP),VOL=SER=T0C089,
//            DCB=(LRECL=344,BLKSIZE=20640,RECFM=VBS,DEN=4)
//SYSUT2   DD UNIT=3400-5,DISP=(NEW,KEEP),DSN=INVDT.SAKCM.P0509,
//            DCB=(LRECL=344,BLKSIZE=20640,RECFM=VBS,DEN=4),
//            VOL=SER=(J01593,J01504,J01549,J02092,J02033,J02094,J02085,
//            J02110,J02113,J02217)
//
```

```
//MWS&&DC4 JOB (3375,6559214),BLW,CLASS=K
//*MAIN PROC=20,RINGCHK=NO,ORG=PHT01
//*FORMAT PR,DDNAME=,DEST=RMT01,COPIES=1
//*EF EXEC PGM=IEF9214
//*    DD   DSN=MRDC.WYFXXX.YARD,DISP=(OLD,DELETE)
//*    UNIT=3350,VOL=SER=
//STEPNAME EXEC PLIXCLG,REGION=1024K,LKLEDSN='MRDC.LOAD'
//PLI.SYSIN DD *
 START: PROCEDURE
   OPTIONS (MAIN) REORDER;

 DCL
   IN FILE INPUT RECORD,
   OUT FILE OUTPUT RECORD,
   SYSPRINT FILE OUTPUT STREAM,

   SSNCHK EXTERNAL RETURNS (FIXED BIN(15)),

 1 SEG BASED (X),
   2  SSN        CHAR(9),        /*  1 -  9      SSN              */
   2  FIL1       CHAR(6),        /*  1 - 15      SSN + COMM'YTE   */
   2  LCHG       FIXED DEC(7,0), /* 16 - 19      LAST CHANGE DATE */
   2  FIL2       CHAR(2),        /* 20 - 21      CHANGE SEP       */
   2  DOB        CHAR(6),        /* 22 - 27      DOB              */
   2  POB        CHAR(2),        /* 28 - 29      PLACE OF BIRTH   */
   2  ILAST      CHAR(20),       /* 30 - 49      LAST NAME        */
   2  IFIRST     CHAR(10),       /* 50 - 59      FIRST NAME       */
   2  IMID       CHAR(10),       /* 60 - 69      MIDDLE NAME      */

 1 MASTER,
   2  SSNOUT     CHAR(9),        /*  1 -  9      SSN              */
   2  LCHGOUT    CHAR(6),        /* 10 - 15      LAST CHANGE DATE */
   2  DOBOUT     CHAR(6),        /* 16 - 21      DOB              */
   2  POBOUT     CHAR(2),        /* 22 - 23      PLACE OF BIRTH   */
   2  OLAST      CHAR(10),       /* 24 - 43      LAST NAME        */
   2  OFIRST     CHAR(10),       /* 36 - 45      FIRST NAME       */
   2  OMID       CHAR(1),        /*       46     MIDDLE NAME      */

   TEMPLAST    CHAR(12) BASED(ADDR(ILAST)),
   TEMPFIRST   CHAR(10) BASED(ADDR(IFIRST)),
   TEMPMID     CHAR(1) BASED(ADDR(IMID)),

   X           POINTER,
   EOF         BIT(1) INIT('0'B),
   FLAG        FIXED BIN(15) INIT(0),
   GOODCNT     FIXED BIN(31) INIT(0),
   TOTALCNT    FIXED BIN(31) INIT(0),
   LCHGP       PIC'(7)9',                    /*THESE VARS ARE USED TO */
   LCHGTEMP    PIC '(6)9',                   /*UNPACK THE CHG FIELD   */
   LYEAR       CHAR(2),
   LDAY        CHAR(2),
   LMONTH      CHAR(2),

   (ADDR,SUBSTR) BUILTIN;

 ON ENDFILE (IN) EOF = '1'B;
 READ FILE (IN) SET (X);

 DO WHILE (¬EOF);
    TOTALCNT = TOTALCNT + 1;
    FLAG = SSNCHK(SEG.SSN);
    IF FLAG = 0 THEN DO;
        GOODCNT = GOODCNT + 1;
        SSNOUT = SSN;
        LCHGP = LCHG;
        LCHGTEMP = LCHGP;
        LMONTH = SUBSTR(LCHGTEMP,1,2);
        LDAY = SUBSTR(LCHGTEMP,3,2);
        LYEAR = SUBSTR(LCHGTEMP,5,2);
        LCHGOUT = LYEAR || LMONTH || LDAY;
        DOBOUT = DOB;
        POBOUT = POB;
        OLAST = TEMPLAST;
        OFIRST = TEMPFIRST;
        OMID = TEMPMID;
        WRITE FILE (OUT) FROM (MASTER);
    END;
    READ FILE (IN) SET (X);
```

```
      END;
    PUT SKIP EDIT('TOTAL RECORDS READ =',TOTALCNT)(COL(15),A(20),
         P'ZZ,ZZZ,ZZ9');
    PUT SKIP(2);
    PUT SKIP EDIT('TOTAL RECORDS WRITTEN =',GOODCNT)(COL(15),A(23),
         P'ZZ,ZZZ,ZZ9');
    END;
/*
//GO.IN        DD UNIT=3400-5,DISP=SHR,
//             DCB=(LRECL=69,BLKSIZE=32706,RECFM=FB),
//             DSN=DCIDD.DENDS.PFILE,
//             VOL=SER=(KC1471,KJ1566,KC1691,KC3055,KC3321)
//GO.OUT       DD UNIT=3400-6,DISP=SHR,
//             DCB=(LRECL=43,BLKSIZE=32732,RECFM=FB,DEN=4),
//             DSN=DCIDD.EDT40.PFILE,
//             VOL=SER=(001222,001557,001933,003311)
//
```

```
//MWS#WDC3 JOB (337?,?5F9214),PLW,CLASS=K
//*MAIN PROC=20,RINGCHK=NO,ORG=RMT01
//*FORMAT PR,DDNAME=,DEST=RMTC1,COPIES=1
//*EF EXEC PGM=IEFBR14
//*    DD    DSN=MRDC.WMFXXX.VARD,DISP=(OLD,DELETE)
//*    UNIT=3350,VOL=SER=
//STEPNAME EXEC PLIXCLG,REGION=1024K,LKLBDSN='MRDC.LOAD'
//PLI.SYSIN DD *
 START: PROCEDURE
   OPTIONS (MAIN) REORDER;

 DCL
   IN FILE INPUT RECORD,
   OUT FILE OUTPUT RECORD,
   SYSPRINT FILE OUTPUT STREAM,

   VERIFY    BUILTIN,
   SSNCHK EXTERNAL RETURNS (FIXED BIN(15)),

 1 SEGO BASED (X),
   2  SSN       CHAR(9),         /*  1 -  9      SSN      */
   2  FIL1      CHAR(4),         /* 10 - 13      SEG  ?   */
   2  TYPE      CHAR(1),         /*      14      TYPE     */
   2  LOC       CHAR(5),         /* 15 - 19      LOCATION */
   2  YEAR      CHAR(2),         /* 20 - 21      YEAR     */
   2  DAY       CHAR(3),         /* 22 - 24      DAY      */
   2  TRACING   CHAR(15),        /* 25 - 40      THE REST */

 1 VSEG,
   2  SSN       CHAR(9),         /*  1 -  9      SSN       */
   2  TYPE      CHAR(1),         /*      10      TYPE      */
   2  DATE      CHAR(5),         /* 11 - 16      DATE YYMDD */
   2  TRACING   CHAR(15),        /* 17 - 33      REVIEW ACTION */

   JULIAN      PIC'(5)9',
   X           POINTER,
   EOF         BIT(1) INIT('0'B),
   FLAG        FIXED BIN(15) INIT(0),
   GOODCNT     FIXED BIN(31) INIT(0),
   TOTALCNT    FIXED BIN(31) INIT(0),

   ADDR        BUILTIN;

 DCL
   (ONCODE,ONSOURCE) BUILTIN;
 ON CONVERSION
   BEGIN;
     PUT SKIP EDIT (SEGO)(A);
     (NOSTRINGSIZE):
     ONSOURCE = (4) '0';
     PUT SKIP EDIT (SEGO)(A);
   END;

 ON ENDFILE (IN) EOF = '1'B;
 READ FILE (IN) SET (X);

 DO WHILE (¬EOF);
   TOTALCNT = TOTALCNT + 1;
   FLAG = SSNCHK(SEGO.SSN);
   IF FLAG = 0 THEN DO;
     GOODCNT = GOODCNT + 1;
     VSEG = SEGO, BY NAME;
     IF VERIFY (DAY,'0123456789') = 0 & DAY > '000' & DAY < '367'
     THEN DO;
       JULIAN = YEAR || DAY;
       CALL GREGORY(JULIAN,DATE);
     END;
     ELSE DATE = YEAR || '000';
     WRITE FILE(OUT) FROM (VSEG);
   END;
   READ FILE (IN) SET (X);
 END;
 PUT SKIP EDIT('TOTAL RECORDS READ =',TOTALCNT)(COL(15),A(20),
       P'ZZ,ZZZ,ZZ9');
 PUT SKIP(2);
 PUT SKIP EDIT('TOTAL RECORDS WRITTEN =',GOODCNT)(COL(15),A(23),
       P'ZZ,ZZZ,ZZ9');
 GREGORY : PROC (JULIAN,DATE);
```

```
DCL
JULIAN             PIC'99999',
DATE               CHAR(6),
TD                 PIC'999',
YY                 PIC'99' BASED(ADDR(JULIAN)),
MM                 PIC'99',
DD                 PIC'99',
I                  FIXED BIN(15),
(ADDR,SUBSTR,MOD) BUILTIN,
MOTABLE(12) FIXED BIN(15) INIT(31,28,31,30,31,30,31,31,30,31,30,31);

IF MOD(YY,4) = 0 THEN MOTABLE(2) = 29;

TD = SUBSTR(JULIAN,3,3);
IF TD < 32 THEN
DO;
   MM = 01;
   DD = TD;
   GOTO RETURNIT;
   END;
ELSE
DO;
   DO I = 1 TO 11;
     TD = TD - MOTABLE(I);
      IF TD <= MOTABLE(I+1) THEN
      DO;
        MM = I + 1;
        DD = TD;
        GOTO RETURNIT;
        END;
   END;
   END;

RETURNIT:
   DATE = YY || MM || DD;
   RETURN;
   END GREGORY;
END;
/*
//GO.IN      DD UNIT=3400-6,DISP=SHR,
//           DCB=(LRECL=31,BLKSIZE=32760,RECFM=FB),
//           DSN=DCIDD.EDTOO.P8503,
//           VOL=SER=(001015)
//GO.OUT     DD UNIT=3400-5,DISP=SHR,
//           DCB=(LRECL=32,BLKSIZE=32736,RECFM=FB,DEN=4),
//           DSN=DCIDD.EDTOO.P8503,
//           VOL=SER=(K01302)
//
```

```
//MWSWWXXX JOB (357=,85F9214),DLW,CLASS=C
//*MAIN PROC=20,RINCCHK=NO,ORG=RMT-1
//*FORMAT PR,DDNAME=,DEST=RMT01,COPIES=1
// EXEC PLIXCLG,REGION=768K
//PLI.SYSIN DD *
 START: PROCEDURE
           OPTIONS (MAIN) REORDER;

  DCL
    IN FILE INPUT RECORD,
    OUT FILE OUTPUT RECORD,
    SYSPRINT FILE OUTPUT STREAM,

    1 REC BASED (X),
      2 SSN           CHAR(9),
      2 LCDATE        CHAR(6),
      2 FIL1          CHAR(31),

    X                 POINTER,
    EOF1              BIT(1) INIT('0'B),
    TOTALCNT          FIXED BIN(31) INIT(0),
    OUTCNT            FIXED BIN(31) INIT(0),
    TEMPSSN           CHAR(9) INIT ('000000000');

  ON ENDFILE (IN) EOF1 = '1'B;

  READ FILE (IN) SET (X);
  DO WHILE (¬EOF1);
     WRITE FILE (OUT) FROM (REC);
     OUTCNT = OUTCNT + 1;
     TEMPSSN = SSN;
     READ FILE (IN) SET (X);
     TOTALCNT = TOTALCNT + 1;
     DO WHILE (¬EOF1 & TEMPSSN = SSN);
        TOTALCNT = TOTALCNT + 1;
        READ FILE (IN) SET (X);
     END;
  END;
  IF TEMPSSN ¬= SSN THEN DO;
     WRITE FILE (OUT) FROM (REC);
     OUTCNT = OUTCNT + 1;
  END;
  PUT SKIP EDIT('TOTAL RECORDS READ =',TOTALCNT)(COL(10),A(20),
       P'ZZ,ZZZ,ZZ9');
  PUT SKIP EDIT('TOTAL RECORDS WRITTEN =',OUTCNT)(COL(10),A(23),
       P'ZZ,ZZZ,ZZ9');
  END;
/*
//GO.IN          DD UNIT=3400-5,DISP=SHR,
//               DCB=(LRECL=46,BLKSIZE=32752,RECFM=FB),
//               DSN=DCIDD.SRT46.P6503,
//               VOL=SER=(K05005,K02344,K02731)
//GO.OUT         DD UNIT=3400-5,DISP=SHR,
//               DCB=(LRECL=46,BLKSIZE=32752,RECFM=FB,DEN=4),
//               DSN=DCIDD.SPC46.P6503,
//               VOL=SER=(K02732,K05296,K27556,C07304)
//
```

```
//MWS#WXX1 JOB (3375,45F9214),SLW,CLASS=G
//*MAIN PROC=20,RINGCHK=NO,ORG=PMTO1
//*FORMAT PR,DDNAME=,DEST=RYTO1,COPIES=1
// EXEC PLIXCLG,REGION=768K
//PLI.SYSIN DD *
 START: PROCEDURE
           OPTIONS (MAIN) REORDER;

   DCL
     IN FILE INPUT RECORD,
     OUT FILE OUTPUT RECORD,
     SYSPRINT FILE OUTPUT STREAM,

     1 REC BASED (X),
       2 SSN        CHAR(9),
       2 TYPE       CHAR(1),
       2 LCDATE     CHAR(6),
       2 FIL1       CHAR(16),

     X                POINTER,
     EOF1             BIT(1) INIT('0'B),
     TOTALCNT         FIXED BIN(31) INIT(0),
     OUTCNT           FIXED BIN(31) INIT(0),
     TEMPSSN          CHAR(9) INIT ('000000000');

 ON ENDFILE (IN) EOF1 = '1'B;

 READ FILE (IN) SET (X);
 TOTALCNT = TOTALCNT + 1;
 DO WHILE (¬EOF1);
     WRITE FILE (OUT) FROM (REC);
     OUTCNT = OUTCNT + 1;
     TEMPSSN = SSN;
     READ FILE (IN) SET (X);
     TOTALCNT = TOTALCNT + 1;
     DO WHILE (¬EOF1 & TEMPSSN = SSN);
         READ FILE (IN) SET (X);
         TOTALCNT = TOTALCNT + 1;
     END;
 END;
 IF TEMPSSN ¬= SSN THEN DO;
     WRITE FILE (OUT) FROM (REC);
     OUTCNT = OUTCNT + 1;
 END;
 PUT SKIP EDIT ('TOTAL RECORDS READ = ',TOTALCNT)(COL(10),A(21),
      P'Z,ZZZ,ZZ9');
 PUT SKIP EDIT ('TOTAL RECORDS WRITTEN = ',OUTCNT)(COL(10),A(24),
      P'Z,ZZZ,ZZ9');
 END;
/*
//GO.IN        DD UNIT=3400-5,DISP=OLD,
//             DCB=(LRECL=32,BLKSIZE=32736,RECFM=FB),
//             DSN=DCIDD.SRTO0.P3503,
//             VOL=SER=(K06054)
//GO.OUT       DD UNIT=3400-6,DISP=(NEW,KEEP),
//             DCB=(LRECL=32,BLKSIZE=32736,RECFM=FB,DEN=4),
//             DSN=DCIDD.SPCO0.P3503,
//             VOL=SER=(OC4550)
//
```

```
//MWS#WXX1 JOB (3275,25FS214),DLW,CLASS=S
//*MAIN PROC=20,RINGCHK=NO,OFF=RMT01
//*FORMAT PR,DDNAME=,DEST=RMT01,COPIES=1
//*EF EXEC PGM=IEFBR14
//*     DD    DSN=MRCC.WWFXAX.XARD,DISP=(OLD,DELETE)
//*     UNIT=3350,VOL=SER=
//  EXEC PLIXCLG,REGION=1024K
//PLI.SYSIN DD *
 START: PROCEDURE OPTIONS (MAIN) REORDER;

 DCL
  IN1 FILE INPUT RECORD,
  IN2 FILE INPUT RECORD,
  OUT FILE OUTPUT RECORD,
  SYSPRINT FILE OUTPUT STREAM,

  1 DCII BASED (X),
     2 SSN        PIC'(9)09'09'09',
     2 FIL1       CHAR(107),

  1 MASTER BASED (Y),
     2 MSSN       FIXED BIN(31),
     2 FIL2       CHAR(5),
     2 GARB       CHAR(1),
     2 FIL3       CHAR(4),
     2 GARB2      CHAR(10),
     2 FIL4       CHAR(2),
     2 GARB3      CHAR(5),
     2 FIL5       CHAR(7),
     2 GARB4      CHAR(25),
     2 FIL6       CHAR(6),
     2 GARB5      CHAR(2),
     2 FIL7       CHAR(7),
     2 GARB6      CHAR(36),
     2 FIL8       CHAR(5),
     2 GARB7      CHAR(5),

  1 RECOUT,
     2 SSN        CHAR(9),
     2 FIL1       CHAR(107),
     2 FIL2       CHAR(9),
     2 FIL3       CHAR(4),
     2 FIL4       CHAR(2),
     2 FIL5       CHAR(7),
     2 FIL6       CHAR(6),
     2 FIL7       CHAR(7),
     2 FIL8       CHAR(5),

  EOFD       BIT(1) INIT ('0'B),
  EOFM       BIT(1) INIT ('0'B),
  X          POINTER,
  Y          POINTER,
  OUTCNT     FIXED BIN(31) INIT(0),
  DCNT       FIXED BIN(31) INIT(0),
  MCNT       FIXED BIN(31) INIT(0),
  SSN_U      PIC'999999999' INIT(0);

  ON ENDFILE (IN1) EOFD = ('1'B);
  ON ENDFILE (IN2) EOFM = ('1'B);

  READ FILE (IN1) SET (X);
  READ FILE (IN2) SET (Y);

  DO WHILE (¬EOFD & ¬EOFM);
  IF MSSN = DCII.SSN THEN DO;
     RECOUT = DCII, BY NAME;
     RECOUT = MASTER, BY NAME;
     WRITE FILE (OUT) FROM (RECOUT);
     OUTCNT = OUTCNT + 1;
     READ FILE (IN1) SET (X);
     DCNT = DCNT + 1;
     READ FILE (IN2) SET (Y);
     MCNT = MCNT + 1;
  END;
  ELSE IF MSSN < DCII.SSN THEN DO;
     READ FILE (IN1) SET (X);
     DCNT = DCNT + 1;
  END;
```

```
     ELSE IF MSSN > DCII.SSN THEN DO;
          SSN_U = MSSN;
          RECOUT.SSN = SSN_U;
          RECOUT.FIL1 = ((T37)' ');
          RECOUT = MASTER BY NAME;
          WRITE FILE (OUT) FROM (RECOUT);
          OUTCNT = OUTCNT + 1;
          READ FILE (IN1) SET (Y);
          MCNT = MCNT + 1;
        END;
     END;
     PUT SKIP EDIT('TOTAL RECORDS WRITTEN',OUTCNT)
        (COL(10),A(22),P'ZZ,ZZZ,ZZ,');
     PUT SKIP EDIT('TOTAL DCII RECORDS READ',DCNT)
        (COL(10),A(24),P'ZZ,ZZZ,ZZ,');
     PUT SKIP EDIT('TOTAL MASTER RECORDS READ',MCNT)
        (COL(10),A(26),P'ZZ,ZZZ,ZZ,');
     END;
/*
//GO.IN1        DD UNIT=3400-5,DISP=SHR,
//              DCB=(LRECL=11 ,BLKSIZE=0271 ,RECFM=F ),
//              DSN=DCIID.MASTF.P0503,
//              VOL=SER=(KD1300 ,KD3344,KD5013,KD5295,
//              KJ5339,KJ6384)
//GO.IN2        DD UNIT=3400-5,DISP=SHR,
//              DCB=(LRECL=15 ,BLKSIZE=12900,RECFM=F ),
//              DSN=MAJDD.BATCF.P1503,
//              VOL=SER=(KD3210,KJ5051)
//GO.OUT        DD UNIT=3400-5,DISP=SHR,
//              DCB=(LRECL=15 ,BLKSIZE=02760,RECFM=F ),
//              DSN=DCIDD.MAGEN.P5503,
//              VOL=SER=(KD4547,KL7500)
//
```

```
//MWS#SPLT JOB (3444,00001),'R.SEFIL',CLASS=K
//*FORMAT PR,DDNAME=,DEST=RMT01
//*MAIN ORG=RMT01,PROC=3,RINCCHK=NO,LINES=50
// EXEC PLIXCLG,REGION=1536K
//PLI.SYSIN DD *
 SPLIT : PROC OPTIONS (MAIN) REORDER;
 DCL
 IN FILE RECORD INPUT ENV(TOTAL F1),
 OUT1     FILE RECORD OUTPUT,   /* TYPE    1/4/5 SEGMENTS */
 OUT2     FILE RECORD OUTPUT,   /* TYPE    2/6/7 SEGMENTS */
 OUT3     FILE RECORD OUTPUT,   /* TYPE 3/00000  SEGMENTS */
 OUT4     FILE RECORD OUTPUT,   /* TYPE       (  SEGMENTS */
 SYSPRINT FILE STREAM PRINT,
 P POINTER,

 1   A BASED(P) ALIGNED,  /* SEGMENT OUTPUT RECORD STRUCTURE */
   2 FIL1 CHAR(13),       /*    1 - 13  FILLER               */
   2 TYPE CHAR(1),        /*        14  TYPE                 */
   2 FIL2 CHAR(26),       /*   15 - 40  SEGMENT              */

 ADDR BUILTIN,
 (IC,OC1,OC2,OC3,OC4,T1,T4,T5,T2,T3,T6,T7,NOTYPE) FIXED BIN(31) INIT(0),
 TYPEC CHAR(4) BASED(ADDR(TYPE));
 EOF   BIT(1) ALIGNED INIT('0');

 ON ENDFILE(IN) EOF = '1'B;

 OPEN FILE (IN) INPUT,
      FILE (OUT1) OUTPUT,
      FILE (OUT2) OUTPUT,
      FILE (OUT3) OUTPUT,
      FILE (OUT4) OUTPUT,
      FILE (SYSPRINT) LINESIZE(132) PAGESIZE(70);

 READ FILE (IN) SET(P);
 IC = IC + 1;

 IF EOF THEN
 DO;
   PUT SKIP LIST('NO DATA READ (IN) - CORRECT AND RESUBMIT');
   STOP;
   END;

 DO WHILE (¬EOF);

   SELECT (TYPE);

     WHEN('1')
     DO;
       WRITE FILE (OUT1) FROM (A);
       OC1 = OC1 + 1;
       T1 = T1 + 1;
       END;

     WHEN('2')
     DO;
       WRITE FILE (OUT2) FROM (A);
       OC2 = OC2 + 1;
       T2 = T2 + 1;
       END;

     WHEN('3')
     DO;
       WRITE FILE (OUT3) FROM (A);
       OC3 = OC3 + 1;
       T3 = T3 + 1;
       END;

     WHEN('8')
     DO;
       WRITE FILE (OUT1) FROM (A);
       OC1 = OC1 + 1;
       T6 = T6 + 1;
       END;

     WHEN('9')
     DO;
       WRITE FILE (OUT1) FROM (A);
```

```
        OC1 = OC1 + 1;
        T9 = T9 + 1;
        END;

     WHEN ('O')
     DO;
        IF TYPEC = 'ODDIS ' THEN
        DO;
           WRITE FILE (OUT3) FROM (A);
           OC3 = OC3 + 1;
           TD = TD + 1;
           END;
        ELSE
        DO;
           WRITE FILE (OUT4) FROM (A);
           OC4 = OC4 + 1;
           TC = TC + 1;
           END;
        END;

     OTHERWISE NOTYPE = NOTYPE + 1;
     END;

   READ FILE (IN) EDT(A);
   IC = IC + 1;
   END;

PUT SKIP(2) EDIT('SEGMENT RECORDS READ .............................',IC-1)
            (COL(1),A,X(1),P'ZZ,ZZZ,ZZ9');
PUT SKIP    EDIT('TYPE 1 SEGMENTS WRITTEN ................',T1)
            (COL(1),A,X(1),P'ZZ,ZZZ,ZZ9');
PUT SKIP    EDIT('TYPE 9 SEGMENTS WRITTEN ...........',T9)
            (COL(1),A,X(1),P'ZZ,ZZZ,ZZ9');
PUT SKIP    EDIT('TYPE 9 SEGMENTS WRITTEN ..........',T9)
            (COL(1),A,X(1),P'ZZ,ZZZ,ZZ9');
PUT SKIP    EDIT('TOTAL TYPE 1 & 9 WRITTEN ............',OC1)
            (COL(1),A,X(1),P'ZZ,ZZZ,ZZ9');
PUT SKIP(2) EDIT('TYPE 2 SEGMENTS WRITTEN .........',T2)
            (COL(1),A,X(1),P'ZZ,ZZZ,ZZ9');
PUT SKIP    EDIT('TOTAL TYPE 2 WRITTEN .............',OC2)
            (COL(1),A,X(1),P'ZZ,ZZZ,ZZ9');
PUT SKIP(2) EDIT('TYPE 3 SEGMENTS WRITTEN ..........',T3)
            (COL(1),A,X(1),P'ZZ,ZZZ,ZZ9');
PUT SKIP    EDIT('TYPE ODDIS SEGMENTS WRITTEN ........',TD)
            (COL(1),A,X(1),P'ZZ,ZZZ,ZZ9');
PUT SKIP    EDIT('TOTAL TYPE 3 & ODDIS WRITTEN .........',OC3)
            (COL(1),A,X(1),P'ZZ,ZZZ,ZZ9');
PUT SKIP(2) EDIT('TYPE O SEGMENTS WRITTEN ...........',TC)
            (COL(1),A,X(1),P'ZZ,ZZZ,ZZ9');
PUT SKIP    EDIT('TOTAL TYPE O SEGMENTS WRITTEN .........',OC4)
            (COL(1),A,X(1),P'ZZ,ZZZ,ZZ9');
PUT SKIP(2) EDIT('SEGMENT ERRORS - NOT WRITTEN ABOVE ....',NOTYPE)
            (COL(1),A,X(1),P'ZZ,ZZZ,ZZ9');
END SPLIT;
/*
//GO.IN DD DSN=DCIDD.SEN40.PS503,DISP=(,KEEP),UNIT=3400-5,
//        DCB=(LRECL=40,BLKSIZE=32760,RECFM=FB),
//        VOL=SER=(KO5035,K05296,K05450,K05451)
//OUT1   DD DSN=DCIDD.SEN19.PS503,DISP=(,KEEP),UNIT=3400-5,
//        DCB=(LRECL=40,BLKSIZE=32760,RECFM=FB),
//        VOL=SER=(K05505)
//OUT2   DD DSN=DCIDD.SEN02.PS503,DISP=(,KEEP),UNIT=3400-5,
//        DCB=(LRECL=40,BLKSIZE=32760,RECFM=FB),
//        VOL=SER=(K04345,K05504)
//OUT3   DD DSN=DCIDD.SEN30.PS503,DISP=(,KEEP),UNIT=3400-5,
//        DCB=(LRECL=40,BLKSIZE=32760,RECFM=FB),
//        VOL=SER=(K05506,K05507)
//OUT4   DD DSN=DCIDD.SEN00.PS503,DISP=(,KEEP),UNIT=3400-5,
//        DCB=(LRECL=40,BLKSIZE=32760,RECFM=FB),
//        VOL=SER=(K04975,K06715)
//
```

```
//MWS#SPLT JOB (3444,00001),'D.SUPIL',CLASS=#
//*FORMAT PR,DDNAME=,DEST=RMT01
//*MAIN ORG=RMT01,PROC=20,AIV,CHK=0),LINES=50
// EXEC PLIXCLG,REGION=769K
//PLI.SYSIN DD *
 SPLIT : PROC OPTIONS (MAIN) REORDER;
 DCL
 IN FILE RECORD INPUT ENV(BLKSIZE(20496) BUFFERS(1) RECSIZE(344) V,),
 OUTB     FILE RECORD OUTPUT,
 OUTT     FILE RECORD OUTPUT,
 SYSPRINT FILE STREAM PRINT,

 A        CHAR(346) VAR INIT(''),
 T        CHAR(344) BASED(ADDR(T)),

 1   B DEF A POS(3),          /* INPUT RECORD STRUCTURE    */
     2 FIL1     CHAR(14),     /*   1 -  14  FILLER         */
     2 CPTR     FIXED BIN(15), /*  15 -  16  CONTRACT PTR   */
     2 CBX      CHAR(1),      /*        17  COMM BYTE       */
     2 FIL2     CHAR(7),      /*  18 -  24  FILLER         */
     2 DOBY     PIC'99',      /*  25 -  26  DOB YEAR       */
     2 DOBM     PIC'99',      /*  27 -  28  DOB MONTH      */
     2 DOBD     PIC'99',      /*  29 -  30  DOB DAY        */
     2 SSN      CHAR(9),      /*  31 -  39  SSN            */
     2 POB      CHAR(2),      /*  40 -  41  DATE OF BIRTH  */
     2 LLASTX   CHAR(1),      /*        42  LEN LAST NAME  */
     2 VARREC   CHAR(302),    /*  43 - 344  FILLER         */

 1   BASE ALIGNED,           /* MAIN RECORD OUTPUT STRUCTURE */
     2 SSN      CHAR(9),      /*   1 -   9  SSN            */
     2 SEGNO    FIXED BIN(31), /*  10 -  13  SEQUENCE NUMBER */
     2 COMMB    PIC'99',      /*  14 -  15  COMM BYTE      */
     2 DOBY     PIC'99',      /*  16 -  17  DOB YEAR       */
     2 DOBM     PIC'99',      /*  18 -  19  DOB MONTH      */
     2 DOBD     PIC'99',      /*  20 -  21  DOB DAY        */
     2 POB      CHAR(2),      /*  22 -  23  DATE OF BIRTH  */
     2 LAST     CHAR(20),     /*  24 -  43  LAST NAME      */
     2 FIRST    CHAR(10),     /*  44 -  53  FIRST NAME     */
     2 MIDDLE   CHAR(10),     /*  54 -  63  MIDDLE NAME    */

 1   SEG,                     /* SEGMENT OUTPUT RECORD STRUCTURE */
     2 SSN      CHAR(9),      /*   1 -   9  SSN            */
     2 SEGNO    FIXED BIN(31), /*  10 -  13  SEQUENCE NUMBER */
     2 SEGMENT  CHAR(27),     /*  14 -  40  SEGMENT        */

 LNAME CHAR(20),
 FNAME CHAR(10),
 MNAME CHAR(10),

 (ADDR,LENGTH,SUBSTR,MOD) BUILTIN,
 (LA,LV,LN,PI,SP,SNC,FN,MN) FIXED BIN(15) INIT(0),
 (SEGERRORS,IC,OCB,OCT) FIXED BIN(31) INIT(0),
 PIU    CHAR(1) DEF PI POS(2),
 EOF    BIT(1) ALIGNED INIT('0'B);

 ON ENDFILE(IN) EOF = '1'B;

 OPEN FILE (IN) INPUT,
      FILE (OUTB) OUTPUT,
      FILE (OUTT) OUTPUT,
      FILE (SYSPRINT) LINESIZE(132) PAGESIZE(75);

 /* FIRST READ TO GET RID OF GARBAGE RECORD */
 READ FILE (IN) INTO (A);

 READ FILE (IN) INTO (A);
 IC = IC + 1;

 IF EOF THEN
 DO;
   PUT SKIP LIST('NO DATA READ (IN) - CORRECT AND RESUBMIT');
   STOP;
 END;

 DO WHILE (¬EOF);
```

```
BASE = B, BY NAME;
PIU = CSX;
COMME = PI;

LNAME = (20)' ';
PIU = LLASTX;
LN = 43;
LNAME = SUBSTR(T,LN,PI);

FNAME = (10)' ';
LN = LN + PI;
PIU = SUBSTR(T,LN,1);
LN = LN + 1;
FNAME = SUBSTR(T,LN,PI);

MNAME = (10)' ';
LN = LN + PI;
PIU = SUBSTR(T,LN,1);
MNAME = SUBSTR(T,LN,PI);

LAST = LNAME;
FIRST = FNAME;
MIDDLE = MNAME;
BASE.SEGNO = IC;
WRITE FILE (OUTB) FROM (BASE);
OC3 = OC3 + 1;

LA = LENGTH(A);
LV = LA - B.CPTR;
IF LV > C THEN SNO = LV/27;

IF (SNO > 12 | (MOD(LV,27) > 0)) THEN
DO;
   SEGERRORS = SEGERRORS + 1;
   GOTO READIT;
   END;

DO SP = (B.CPTR + 1) TO LA BY 27;
   SEG.SSN = B.SSN;
   SEG.SEGNO = IC;
   SEG.SEGMENT = SUBSTR(T,SP,27);
   WRITE FILE (OUTT) FROM (SEG);
   OCT = OCT + 1;
   END;

READIT:
A = '';
READ FILE (IN) INTO (A);
IC = IC + 1;
END;

PUT SKIP LIST(IC-1      ||' RECORDS READ');
PUT SKIP LIST(OC3       ||' BASE RECORDS WRITTEN');
PUT SKIP LIST(OCT       ||' SEGMENT RECORDS WRITTEN');
PUT SKIP LIST(SEGERRORS ||' SEGMENT ERRORS ENCOUNTERED');
END SPLIT;
/*
//GO.IN DD DSN=INVDT.BACKM.P2503,UNIT=3-00-5,DISP=SHR,
//          DCB=(LRECL=344,BLKSIZE=6864,BUFF=VBS),
//          VOL=SER=(KU2396,KU4149,KU4173,KU4232,KU4295,
//          KU4433,KU4453,KU4520,KU4691,KU4764,KU4851)
//OUTB DD DSN=DCIDD.SSN45.P2503,DISP=(,KEEP),UNIT=3400-5,
//          DCB=(LRECL=63,BLKSIZE=6760,RECFM=F,),
//          VOL=SER=(KC1471,KC1691,KD3058,KD3721,KU4345,KU4675)
//OUTT DD DSN=DCIDD.SSN40.P2503,DISP=(,KEEP),UNIT=3400-5,
//          DCB=(LRECL=40,BLKSIZE=6627,RECFM=F,),
//          VOL=SER=(KU5005,KU5556,KU5400,KU5451,KU5504,
//    KU5505,KU5506,KU5507)
//          KU5907,KC6715,KU6221,KU6230)
```

END

FILMED

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DTIC