

AD-A277 668



AD _____

(2)

MIPR NO: 92MM2594

**TITLE: INTEGRATION OF THE MOLECULAR SIEVE OXYGEN GENERATING
SYSTEM (MSOGS) INTO THE UH-60Q MEDEVAC BLACKHAWK**

PRINCIPAL INVESTIGATOR: John Hight
Orlando Cordero-Montalvo

CONTRACTING ORGANIZATION: SERVAIR
Lexington Bluegrass Army Depot
Lexington, Kentucky 40511 -5125

REPORT DATE: March 11, 1994

TYPE OF REPORT: Final Report

DTIC
ELECTE
MAR 31 1994
S F D

PREPARED FOR: U.S. Army Medical Research, Development,
Acquisition and Logistics Command (Provisional),
Fort Detrick, Frederick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for public release;
distribution unlimited

The views, opinions and/or findings contained in this report are
those of the author(s) and should not be construed as an official
Department of the Army position, policy or decision unless so
designated by other documentation.

94 3 31 036

94-09735
SMP6

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Please respond only for the portion of information requested to answer the following questions, including those data which characterize and complement the field testing, and corroborate and reinforce the conclusion of information. Your comments regarding the subject project or any other project at the conclusion of information, including suggestions for improving the subject to your knowledge and experience, will be greatly appreciated. Your comments regarding the subject project or any other project at the conclusion of information, including suggestions for improving the subject to your knowledge and experience, will be greatly appreciated. Your comments regarding the subject project or any other project at the conclusion of information, including suggestions for improving the subject to your knowledge and experience, will be greatly appreciated. Your comments regarding the subject project or any other project at the conclusion of information, including suggestions for improving the subject to your knowledge and experience, will be greatly appreciated.

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED	
	March 11, 1994	Final Report (8/24/92 - 5/30/93)	
4. TITLE AND SUBTITLE		5. FUNDING NUMBERS	
Integration of the Molecular Sieve Oxygen Generating System (MSOGS) into the UH-60Q Medevac Blackhawk		MIPR No. 92MM2594	
6. AUTHOR(S)		63807A 30463807D836.JC.121 WUDA336079	
John Hight Orlando Cordero-Montalvo			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)		8. PERFORMING ORGANIZATION REPORT NUMBER	
SERVAIR Lexington Bluegrass Army Depot Lexington, Kentucky 40511-5125			
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
U.S. Army Medical Research, Development, Acquisition and Logistics Command (Provisional), ATTN: SGRD-RMI-S Fort Detrick Frederick, Maryland 21702-5012			
11. SUPPLEMENTARY NOTES			
12a. DISTRIBUTION/AVAILABILITY STATEMENT		12b. DISTRIBUTION CODE	
Approved for public release; distribution unlimited			
13. ABSTRACT (Maximum 200 words) A Molecular Sieve Oxygen Generated System (MSOGS) was integrated in the UH-60Q Medevac Helicopter as part of the requirements of this program. Support equipment for the system operation was also integrated in this effort. Problems such as intake air sources, air flow cooling and moisture build-up were addressed. Functional and performance tests were conducted by personnel from the United States Army Aeromedical Research Laboratory. As a result of the integration effort a more simple and efficient method of installing the MSOGS unit and its supporting systems will be developed. Emphasis will be on the servicing of the oxygen lines on the field to make the system user friendly.			
14. SELECT TERMS Oxygen, MSOGS, UH-60Q, RAI, MIPR		15. NUMBER OF PAGES 5	
16. PRICE CODE			
17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	Unlimited

FOREWORD

Opinions, interpretations, conclusions and recommendations are those of the author and are not necessarily endorsed by the US Army.

Where copyrighted material is quoted, permission has been obtained to use such material.

Where material from documents designated for limited distribution is quoted, permission has been obtained to use the material.

 Citations of commercial organizations and trade names in this report do not constitute an official Department of Army endorsement or approval of the products or services of these organizations.

In conducting research using animals, the investigator(s) adhered to the "Guide for the Care and Use of Laboratory Animals," prepared by the Committee on Care and Use of Laboratory Animals of the Institute of Laboratory Resources, National Research Council (NIE Publication No. 86-23, Revised 1985).

For the protection of human subjects, the investigator(s) adhered to policies of applicable Federal Law 45 CFR 46.

In conducting research utilizing recombinant DNA technology, the investigator(s) adhered to current guidelines promulgated by the National Institutes of Health.

In the conduct of research utilizing recombinant DNA, the investigator(s) adhered to the NIE Guidelines for Research Involving Recombinant DNA Molecules.

In the conduct of research involving hazardous organisms, the investigator(s) adhered to the CDC-NIE Guide for Biosafety in Microbiological and Biomedical Laboratories.

Accession For	
NTIS CRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution / _____	
Availability Codes	
Dist	Avail and/or Special
A-1	


Dr. John L. Parker, PI - Signature
3-11-94 Date

Table of contents

Foreword

Introduction

System layout description

Conclusions

Introduction

The UH60Q Proof of Concept medical evacuation helicopter required the installation of a patient, continuous oxygen supply system. The Litton MSOGS (Molecular Sieve Oxygen Generating System) part no. 3261093, used on the F-15E, was selected by the United States Army Medical Research and Development Command to be incorporated in to the UH60Q package. Serv-Air Inc. had the tasking of installing this system on the UH60Q. All the functional and qualifications tests were done by the United States Army Aeromedical Research Laboratory. All the structural modifications and systems integration were done by Serv-Air Inc.

The systems integration performed by SAI included the design of the structural modifications required to install the system, the routing of oxygen lines to the delivery ports, power integration, and intake air supply. Materials selection, hardware and safety requirements such as airworthiness were also addressed. The installation of support systems like a purity sensor, flow regulator, heat exchanger, and shut-off valve were also part of the integration effort.

System layout description

The MSOGS unit is installed between STA 485 and STA 505 on WL 209, LBL 7.0, on the transition area of the aircraft. The unit is mounted on an aluminum honeycomb tray, which is supported by two extruded aluminum angles integrated to the basic airframe. This location was selected for easy maintenance and installation/removal of the unit. Furthermore since the source of air supply is the APU bleed air tube, this location is ideal for that purpose.

In order to keep the intake air at a temperature of at least no more than 80 deg.F, and to reduce moisture build up due to condensation, a heat exchanger was installed. The heat exchanger is composed of a radiator/diffuser with a fan that discharges the warm air outboard. Aluminum extruded shapes are the main structural supports for the system. The heat exchanger is located at STA 468, WL 239, LBL 32.0.

A shut-off valve was installed to cut the air supply to the MSOGS from the APU intake in the event that more power was required to the aircraft engines. It is located at LBL 32.0, STA 468, WL 221. The shut-off valve is held in place by standard aluminum shapes.

An oxygen purity sensor monitors the concentration of oxygen delivered to the patient, which must be at least a 93% concentration of pure oxygen. Another support mechanism is the oxygen flow regulator. Its function is to ensure that oxygen is delivered at a rate of 27 liters per minute. It is located at STA 495, WL 220, RBL 29.5, which is opposite to the oxygen sensor position. The location of these support systems responded mainly to the space available and the routing of the system lines. The supporting structure for these two items consist of extruded aluminum shapes or formed aluminum parts integrated to the airframe and fastened with standard aircraft hardware.

As a result of the amount of equipment installed for other systems, the routing developed for the oxygen lines was based on the space available for routing, but at the same time serviceability was an important factor too. The oxygen lines were made of 5052-0 aluminum tubing with diameters ranging from .50 in. to .375 in. and type 302/304 cres (corrosion resistant steel) with a diameter of .25 in. The fittings used to join the lines are standard AN and MS flared fittings.

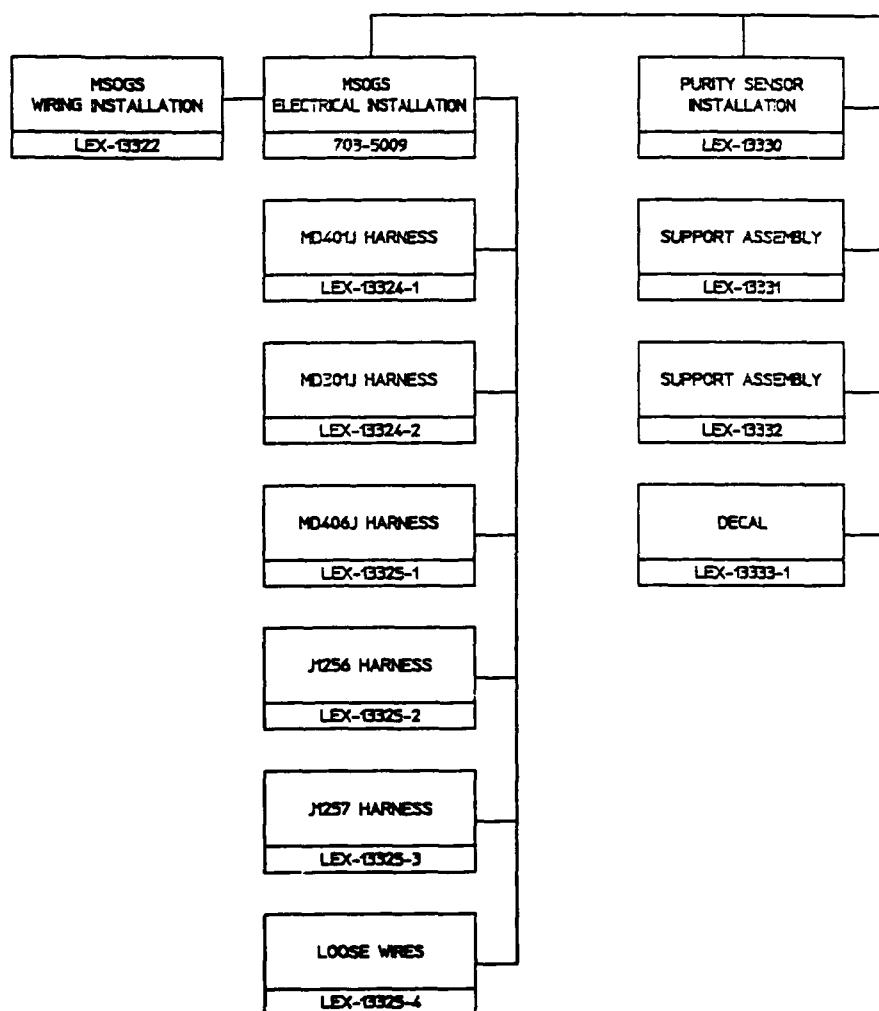
Conclusions

The integration of the MSOGS system on the UH60Q was accomplished without any major difficulties. A more efficient method of installing and servicing the oxygen lines is being explored. All other support systems locations make them user friendly for replacement and servicing.

NOTES

1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12

(1)



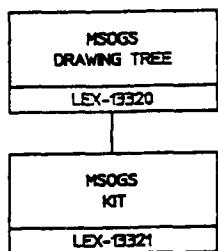
5

4

3

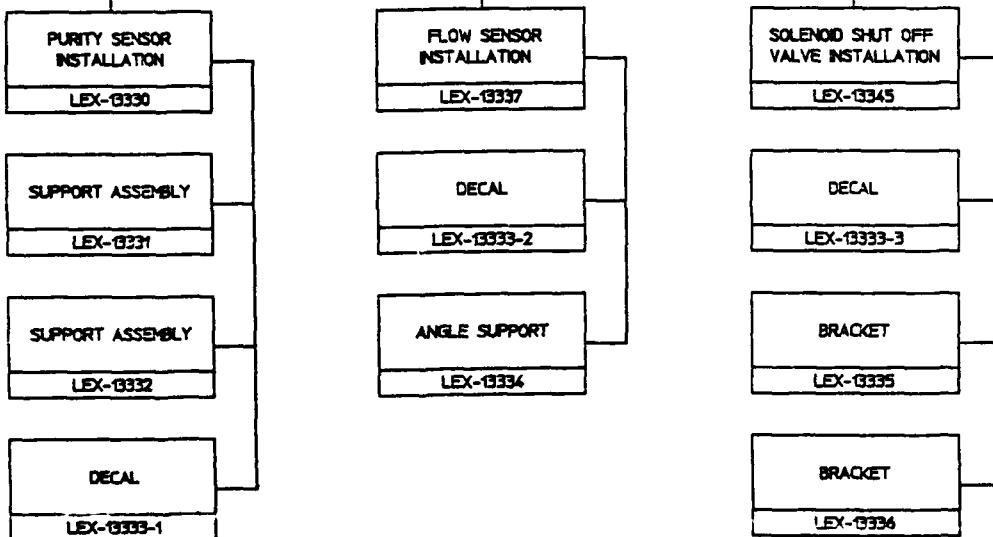
2

CAD GENERATED



2)

SEE SHEET 2 FOR CONTINUATION



A rectangular stamp with a double-line border. The word "REFERENCE" is printed across the top in all-caps. Below it, the date "MAR 1 1 1994" is stamped. At the bottom, the word "ONLY" is written in a larger, bold, handwritten-style font.

6

4

3

6

1

3

2

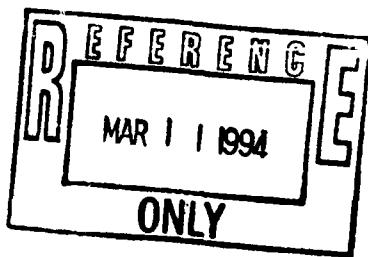
1

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	92-06-12	

三

- SEE SHEET 2 FOR CONTINUATION

SOLENOID SHUT OFF VALVE INSTALLATION	
LEX-13345	
DECAL	
LEX-13333-3	
BRACKET	
LEX-13335	
BRACKET	
LEX-13336	



20M | ZEN

四三

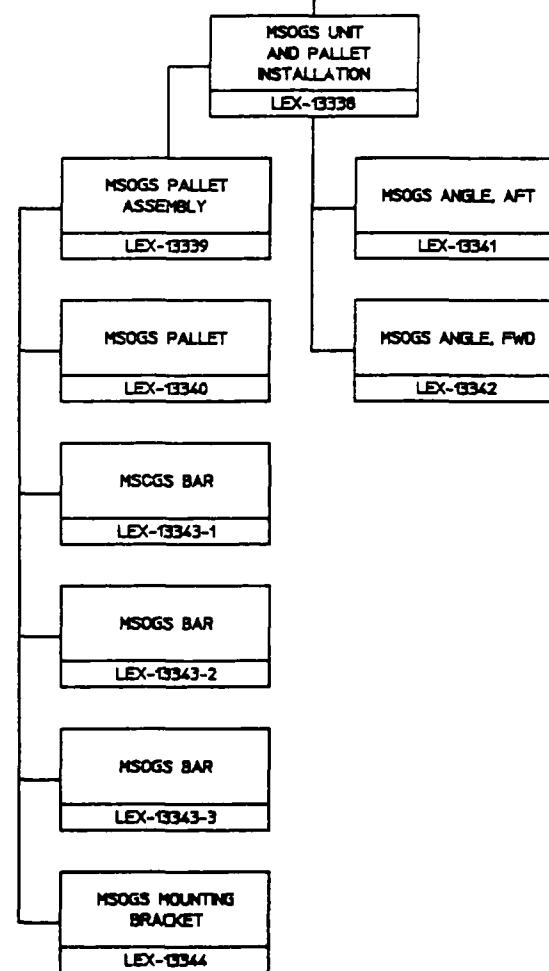
100

320

SYN	NOMENCLATURE	QTY	REF	DESCRIPTIVE NO.	MATERIAL/SPECIFICATION	U/M	ZONE	PRO
5 DASH NO	PARTS LIST							
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES - SURFACES ON DRAWING ARE AS FOLLOWS		CONTRACT NO. DAAB07-90-Z-C008		SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS INC. LEX. LEX. KY.		SOPRA	
• NA	• NA	• NA	SLH	93-06-22	MSOGS			
			LM	93-12-07	DRAWING TREE			
			O.C.M	93-12-07				
LH-600					D 7S976	LEX-13320	1 2	
ON					NONE			
	3		2			1		

(1)

SEE SHEET 1 FOR CONTINUATION

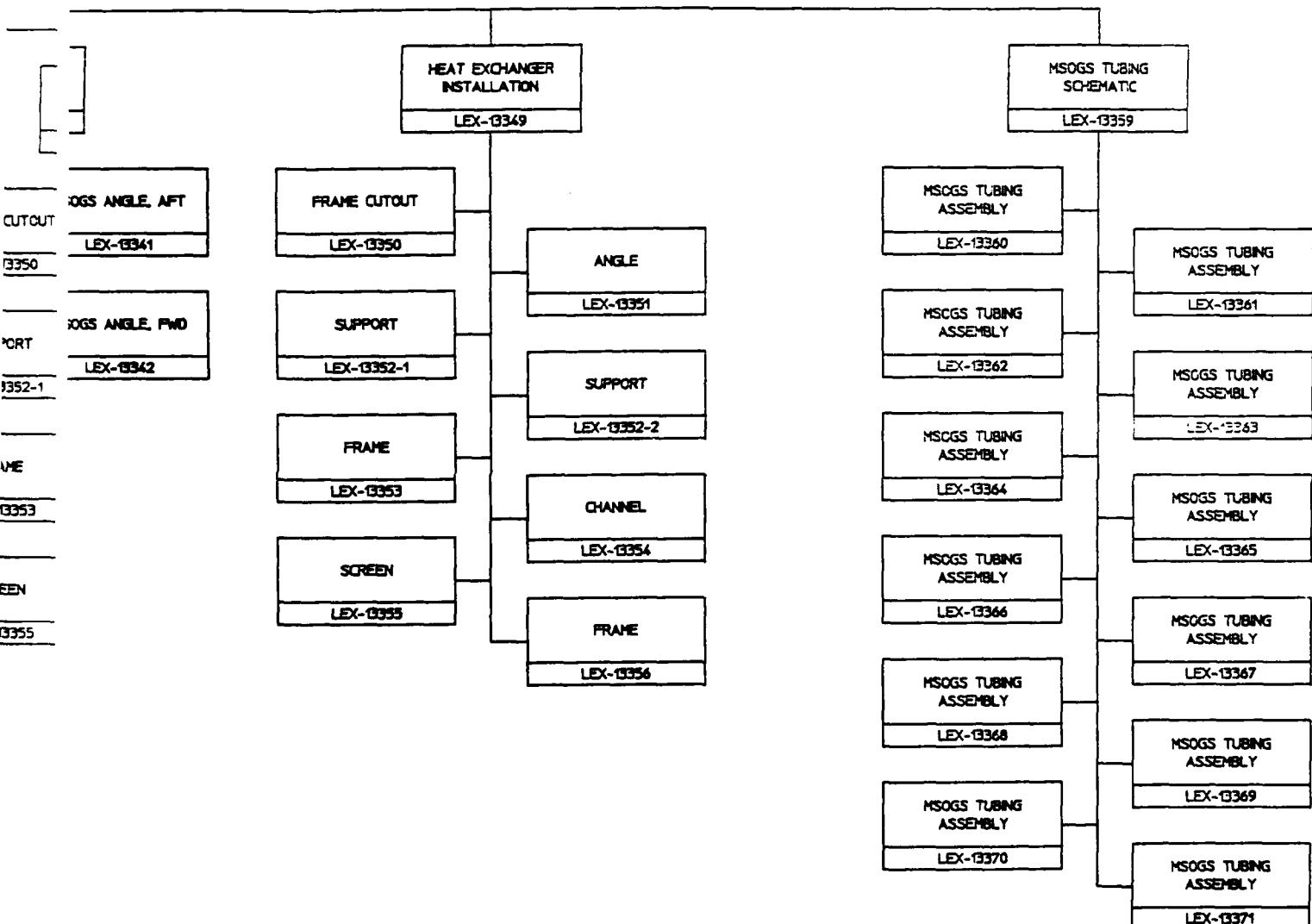


2

3

4

(2)

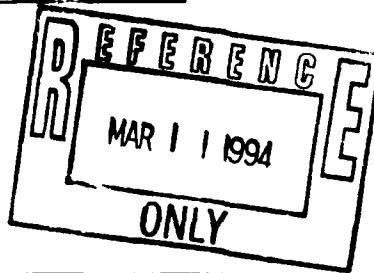
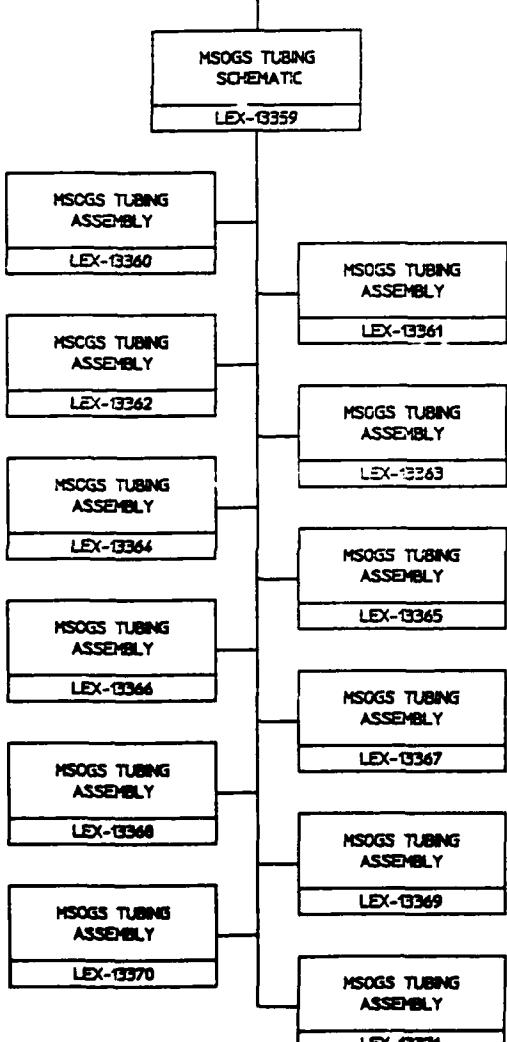


REFEREN
MAR 11 1994
ONLY

S.H.	51-06-2	D	7S976	LEX
L.M.	83-2-07	NONE		

ITEM	REV	DESCRIPTION	DATE	APPROVED
------	-----	-------------	------	----------

(3)



SLN	D	7S976	LEX-13320
LK	03-12-07	NONE	2 - 2

NOTES:

1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12

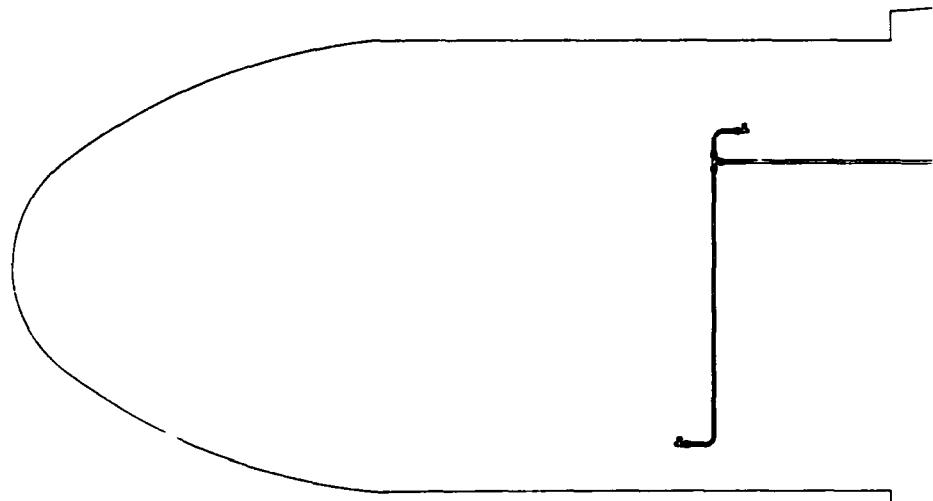
(1)

D

C

B

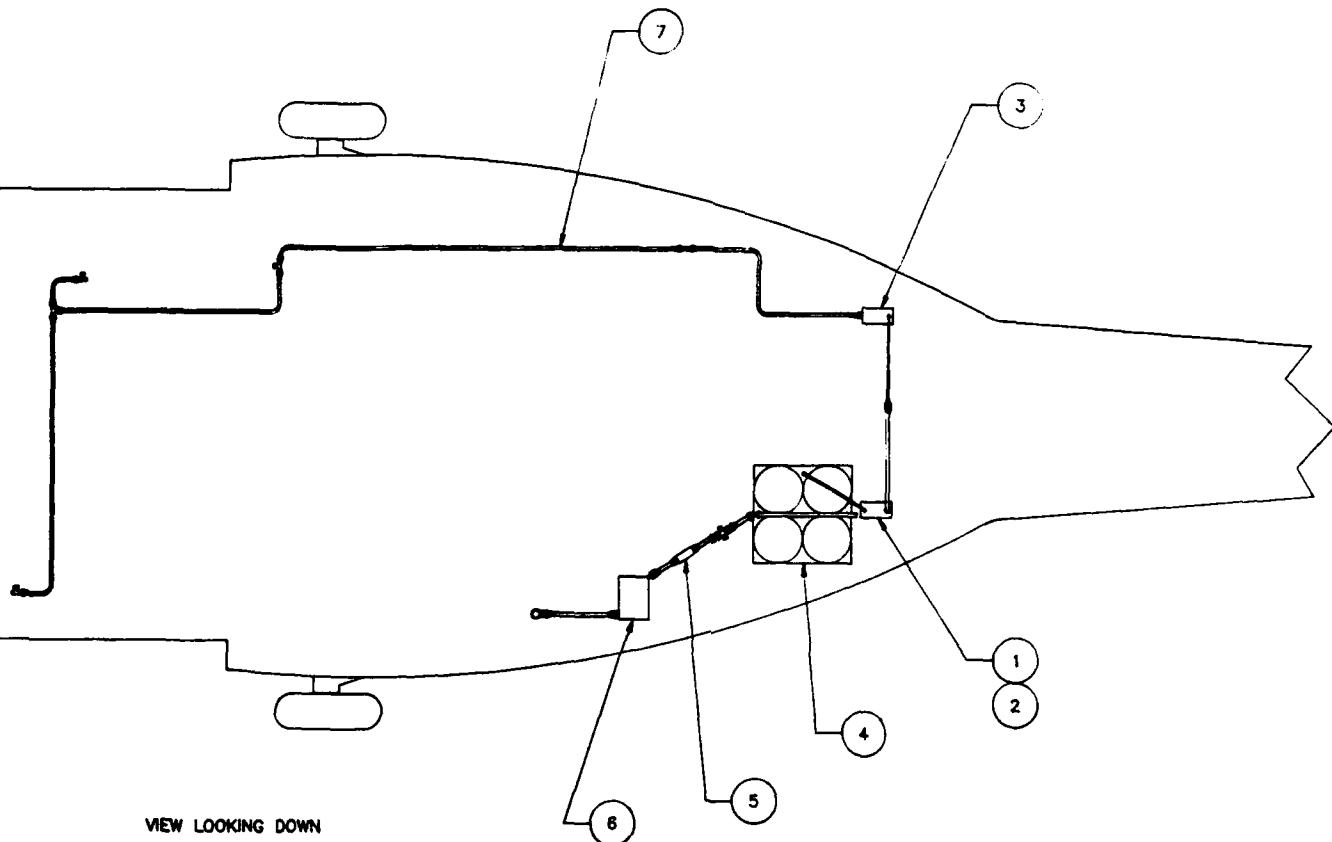
A



VIEW LOCKING

ZONE	REV	
CAD GENERATED		

DESCRIPTION



REF
MAP 1

1	MSOGS TUBING SCHEM	LEX-13359	
1	HEAT EXCHANGE INSTL	LEX-13349	
1	SOLENOID SHUT OFF VALVE INSTL	LEX-13345	
1	MSOG UNIT AND PALLET INSTL	LEX-13338	
1	FLOW SENSOR INSTL	LEX-13337	
1	PURITY SENSOR INSTL	LEX-13330	
1	MSOGS ELEC INSTL	703-5009	
X	MSOGS KIT	LEX-13321	

QTY	NOMENCLATURE	CODE IDENT	IDENTIFYING NO.	MATERIAL SPECIFIC
-----	--------------	------------	-----------------	-------------------

QUANTITY REQUIRED PER DASH NO

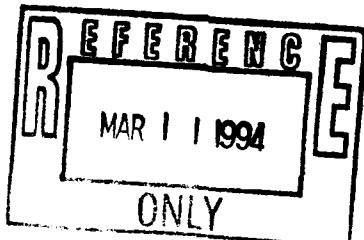
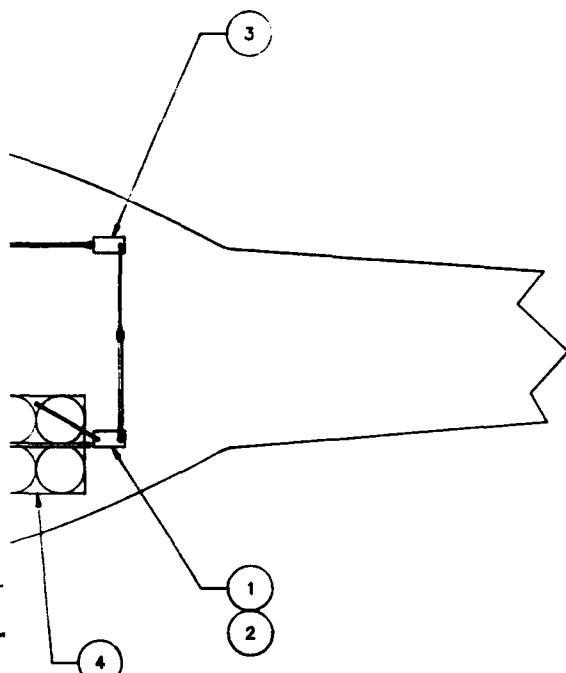
		PARTS LIST	
		COMPONENT NO.	SERV-AIR, A SUBSIDIARY OF E
		DAAB07-92-Z-B506	
		W.B.H. 83-07-07	
		W.L.M. 83-08-18	
		W.L.M.	
		D 7S976	
		NONE	

QUANTITY REQUIRED PER DASH NO

		PARTS LIST	
		COMPONENT NO.	SERV-AIR, A SUBSIDIARY OF E
		DAAB07-92-Z-B506	
		W.B.H. 83-07-07	
		W.L.M. 83-08-18	
		W.L.M.	
		D 7S976	
		NONE	

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-07-07	



1	MSOGS TUBING SCHEM	LEX-13359		EA	7
1	HEAT EXCHANGE INSTL	LEX-13349		EA	6
1	SOLENOID SHUT OFF VALVE INSTL	LEX-13345		EA	5
1	MSOG UNIT AND PALLET INSTL	LEX-13338		EA	4
1	FLOW SENSOR INSTL	LEX-13337		EA	3
1	PURITY SENSOR INSTL	LEX-13330		EA	2
1	MSOGS ELEC INSTL	703-5009		EA	1
X	MSOGS KIT	LEX-13321			
200	MANUFACTURE	CODE DATE	DESCRIPING NO.	MATERIAL/SPECIFICATION	U/M ZONE

PARTS LIST					
 ITEM NUMBER: DAAB07-92-Z-B506	REF ID:	SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. L840 LEX, KY.		S.O.F.S.A.	
	W.B.H.	93-07-07	L.M.	93-08-18	
		MSOGS KIT			
		703-5009	LEX-13321		
		NONE		1 - 1	

(1)

NOTES:

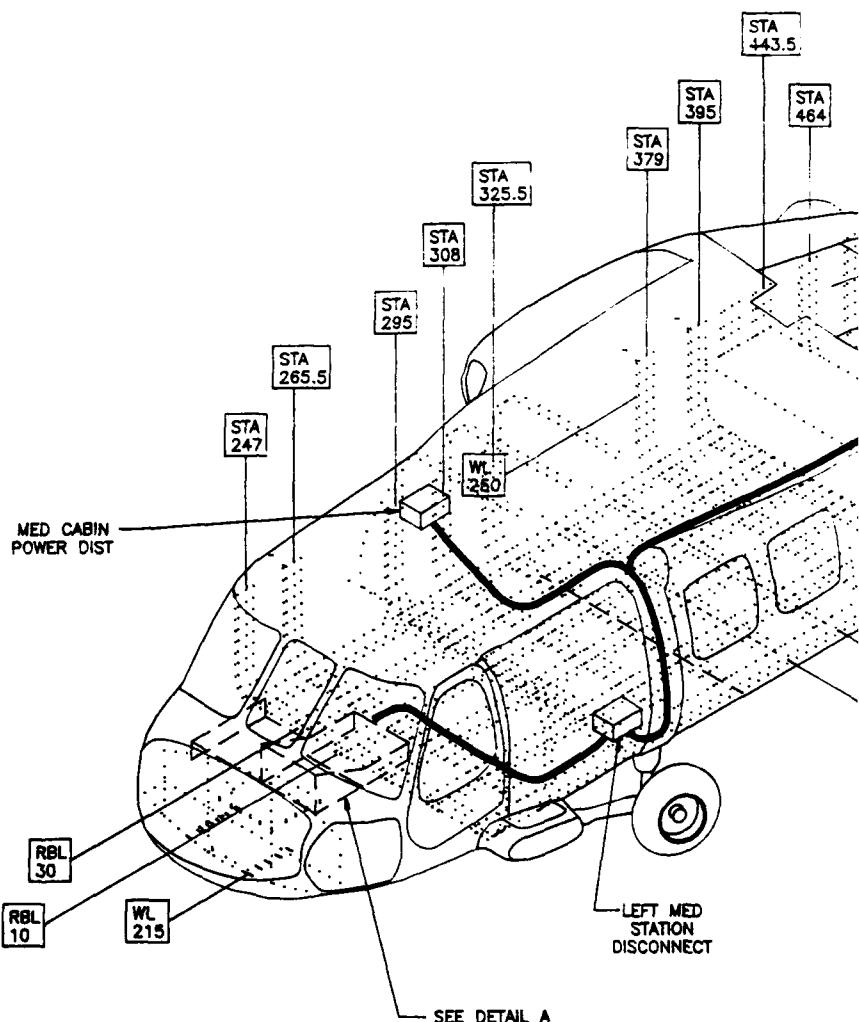
1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REFERENCE ELECTRICAL INSTALLATION, DWG 703-5009 FSCM 99251
4. HARNESS INSTALLATION PER MIL-W-5088K

D

C

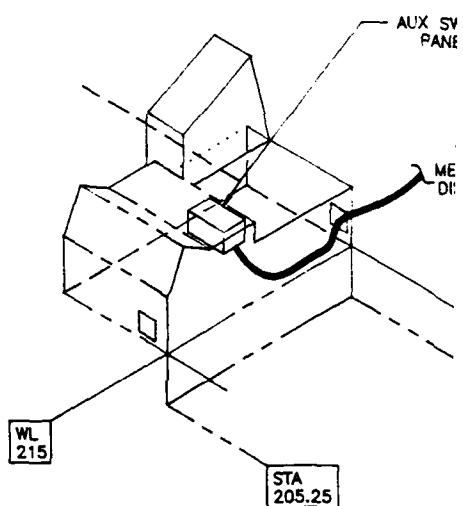
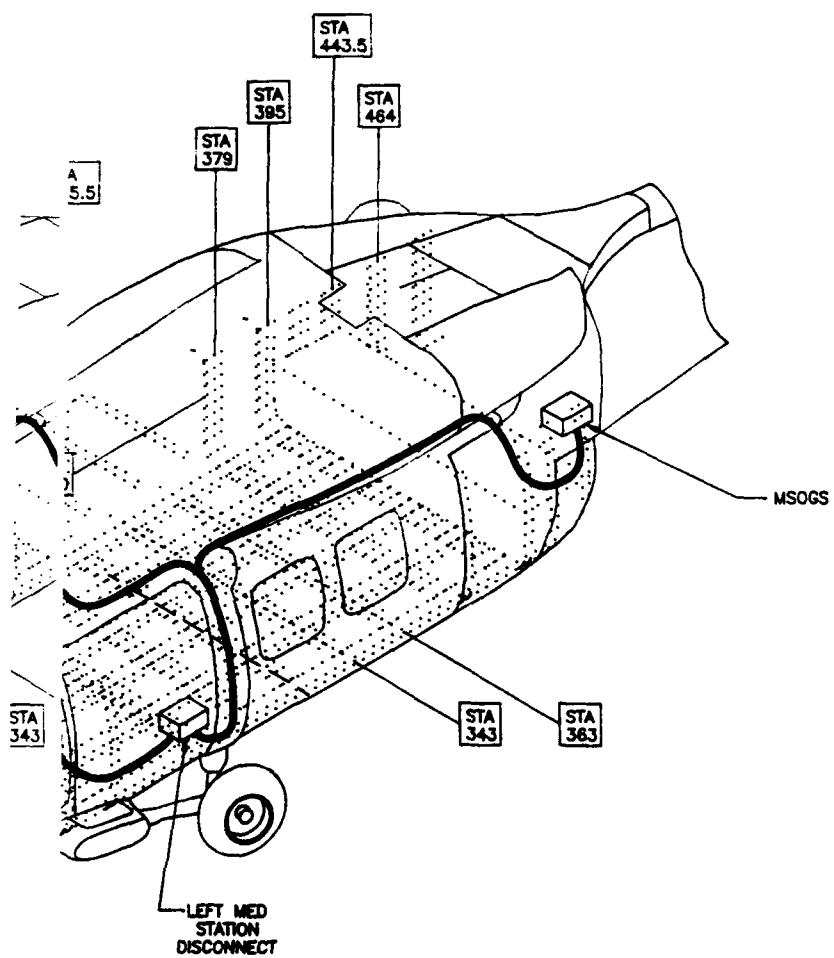
B

A

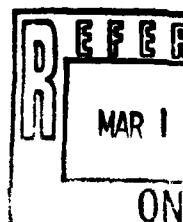


ZONE	REV	DESCRIPTION
		CAD GENERATED

(2)



DETAIL A
LOWER CONSOLE AND
INSTRUMENT PANEL

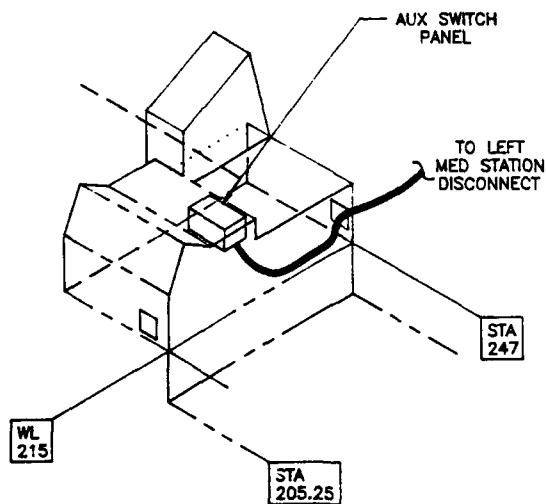


QUANTITY REQUIRED PER DASH NO	SYN	HOMENCLATURE	CODE IDENT	IDENTIFYING NO.	MATERIAL/SPECIFIC
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES-INCHES AND FRAC. INCHES			
		1/8 IN			
		1/4 IN			
		1/2 IN			
		1 IN			
		2 IN			
		3 IN			
		4 IN			
		5 IN			
		6 IN			
		7 IN			
		8 IN			
		9 IN			
		10 IN			
		12 IN			
		14 IN			
		16 IN			
		18 IN			
		20 IN			
		24 IN			
		30 IN			
		36 IN			
		48 IN			
		60 IN			
		72 IN			
		84 IN			
		96 IN			
		108 IN			
		120 IN			
		132 IN			
		144 IN			
		156 IN			
		168 IN			
		180 IN			
		192 IN			
		204 IN			
		216 IN			
		228 IN			
		240 IN			
		252 IN			
		264 IN			
		276 IN			
		288 IN			
		300 IN			
		312 IN			
		324 IN			
		336 IN			
		348 IN			
		360 IN			
		372 IN			
		384 IN			
		396 IN			
		408 IN			
		420 IN			
		432 IN			
		444 IN			
		456 IN			
		468 IN			
		480 IN			
		492 IN			
		504 IN			
		516 IN			
		528 IN			
		540 IN			
		552 IN			
		564 IN			
		576 IN			
		588 IN			
		600 IN			
		612 IN			
		624 IN			
		636 IN			
		648 IN			
		660 IN			
		672 IN			
		684 IN			
		696 IN			
		708 IN			
		720 IN			
		732 IN			
		744 IN			
		756 IN			
		768 IN			
		780 IN			
		792 IN			
		804 IN			
		816 IN			
		828 IN			
		840 IN			
		852 IN			
		864 IN			
		876 IN			
		888 IN			
		896 IN			
		908 IN			
		920 IN			
		932 IN			
		944 IN			
		956 IN			
		968 IN			
		980 IN			
		992 IN			
		1004 IN			
		1016 IN			
		1028 IN			
		1040 IN			
		1052 IN			
		1064 IN			
		1076 IN			
		1088 IN			
		1096 IN			
		1108 IN			
		1120 IN			
		1132 IN			
		1144 IN			
		1156 IN			
		1168 IN			
		1180 IN			
		1192 IN			
		1204 IN			
		1216 IN			
		1228 IN			
		1240 IN			
		1252 IN			
		1264 IN			
		1276 IN			
		1288 IN			
		1296 IN			
		1308 IN			
		1320 IN			
		1332 IN			
		1344 IN			
		1356 IN			
		1368 IN			
		1380 IN			
		1392 IN			
		1404 IN			
		1416 IN			
		1428 IN			
		1440 IN			
		1452 IN			
		1464 IN			
		1476 IN			
		1488 IN			
		1496 IN			
		1508 IN			
		1520 IN			
		1532 IN			
		1544 IN			
		1556 IN			
		1568 IN			
		1580 IN			
		1592 IN			
		1604 IN			
		1616 IN			
		1628 IN			
		1640 IN			
		1652 IN			
		1664 IN			
		1676 IN			
		1688 IN			
		1696 IN			
		1708 IN			
		1720 IN			
		1732 IN			
		1744 IN			
		1756 IN			
		1768 IN			
		1780 IN			
		1792 IN			
		1804 IN			
		1816 IN			
		1828 IN			
		1840 IN			
		1852 IN			
		1864 IN			
		1876 IN			
		1888 IN			
		1896 IN			
		1908 IN			
		1920 IN			
		1932 IN			
		1944 IN			
		1956 IN			
		1968 IN			
		1980 IN			
		1992 IN			
		2004 IN			
		2016 IN			
		2028 IN			
		2040 IN			
		2052 IN			
		2064 IN			
		2076 IN			
		2088 IN			
		2096 IN			
		2108 IN			
		2120 IN			
		2132 IN			
		2144 IN			
		2156 IN			
		2168 IN			
		2180 IN			
		2192 IN			
		2204 IN			
		2216 IN			
		2228 IN			
		2240 IN			
		2252 IN			
		2264 IN			
		2276 IN			
		2288 IN			
		2296 IN			
		2308 IN			
		2320 IN			
		2332 IN			
		2344 IN			
		2356 IN			
		2368 IN			
		2380 IN			
		2392 IN			
		2404 IN			
		2416 IN			
		2428 IN			
		2440 IN			
		2452 IN			
		2464 IN			
		2476 IN			
		2488 IN			
		2496 IN			
		2508 IN			
		2520 IN			
		2532 IN			
		2544 IN			
		2556 IN			
		2568 IN			
		2580 IN			
		2592 IN			
		2604 IN			
		2616 IN			
		2628 IN			
		2640 IN			
		2652 IN			
		2664 IN			
		2676 IN			
		2688 IN			
		2696 IN			
		2708 IN			
		2720 IN			
		2732 IN			
		2744 IN			
		2756 IN			
		2768 IN			
		2780 IN			
		2792 IN			
		2804 IN			
		2816 IN			
		2828 IN			
		2840 IN			
		2852 IN			
		2864 IN			
		2876 IN			
		2888 IN			
		2896 IN			
		2908 IN			
		2920 IN			
		2932 IN			
		2944 IN			
		2956 IN			
		2968 IN			
		2980 IN			
		2992 IN			
		3004 IN			
		3016 IN			
		3028 IN			
		3040 IN			
		3052 IN			
		3064 IN			
		3076 IN			
		3088 IN			
		3096 IN			
		3108 IN			
		3120 IN			
		3132 IN			
		3144 IN			
		3156 IN			
		3168 IN			
		3180 IN			
		3192 IN			
		3204 IN			
		3216 IN			
		3228 IN			
		3240 IN			
		3252 IN			
		3264 IN			
		3276 IN			
		3288 IN			
		3296 IN			
		3308 IN			
		3320 IN	</		

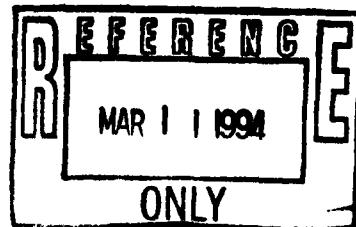
REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-05-13	

(3)



DETAIL A
LOWER CONSOLE AND
INSTRUMENT PANEL



ITEM NO.	REV	DESCRIPTION	CODE SIGN	IDENTIFYING NO.	MATERIAL/SPECIFICATION	U/M	ZONE	RE
<u>PRINTED PER DRAW NO.</u>								
MS. IN		VALVE OPERATOR SPST		DAAB07-92-Z-8506	SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. LEX-13322	S.O.F.S.A.		
S				W.B.H. 93-06-13				
ALLA				L.M. 93-06-20				
-1					MSOGS WIRING INSTALLATION			
PLICATION					D 7S976	LEX-13322		
					NONE		1	1

NOTES:

1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. STAMP CONNECTOR IDENTIFIER(S) AS SHOWN PER MIL-STD-130
4. FABRICATE AND INSPECT PER MIL-W-5080L

(1)

WIRE TABLE

WIRE NO.	FROM	TO	FIND	LENGTH
JMPR7-20	MD401U-AA	SP5-1	3	6'
MED422G16	SP5-1	SP5-5	5	500'
JMPR8-20	MD401U-BB	SP5-1	3	6'
JMPR9-20	MD401U-CC	SP5-2	3	6'
MED422B16	SP5-2	SP5-6	5	500'
JMPR10-20	MD401U-DD	SP5-2	3	6'
JMPR11-20	MD401U-EE	SP5-3	3	6'
MED403G16	SP5-3	SP5-7	5	500'
JMPR12-20	MD401U-FF	SP5-3	3	6'
JMPR13-20	MD401U-GG	SP5-4	3	6'
MED403B16	SP5-4	SP5-8	5	500'
JMPR14-20	MD401U-HH	SP5-4	3	6'
MED401B22	MD401U-T	SP4-1	4	500'
MED417B20	MD401U-U	MD401U-U	7	500'
MED411E20(BLU)	MD401U-V	MD41P	8	500'
MED411F20(NWHT)	MD401U-W	MD41P	8	500'
MED412D20(BLU)	MD401U-X	MD41P	8	500'
MED412F20(NWHT)	MD401U-Y	MD41P	8	500'

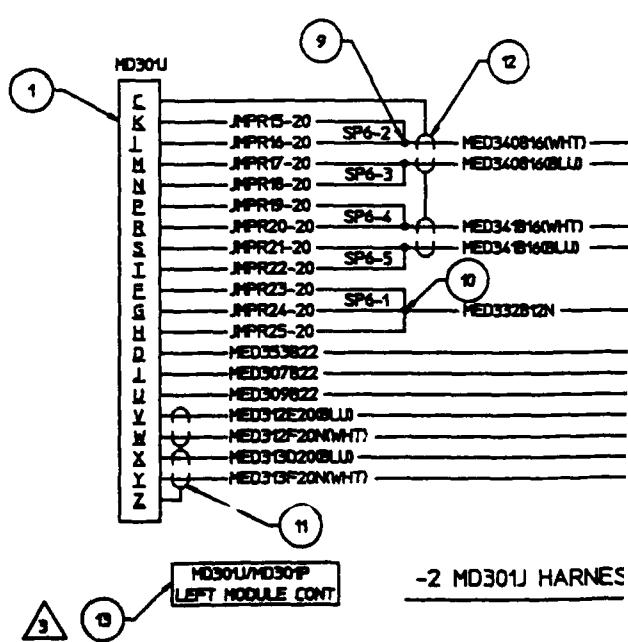
→

WIRE TABLE

WIRE NO.	FROM	TO	FIND	LENGTH
JMPR15-20	MD301U-K	SP6-2	3	6'
JMPR16-20	MD301U-L	SP6-2	3	6'
MED340B16(NWHT)	SP6-2	SP6-7	6	500'
JMPR17-20	MD301U-M	SP6-3	3	6'
MED340B16(BLU)	SP6-3	SP6-8	6	500'
JMPR18-20	MD301U-N	SP6-3	3	6'
JMPR19-20	MD301U-O	SP6-4	3	6'
JMPR20-20	MD301U-P	SP6-4	3	6'
MED341B16(NWHT)	SP6-4	SP6-9	6	500'
JMPR21-20	MD301U-Q	SP6-5	3	6'
MED341B16(BLU)	SP6-5	SP6-10	6	500'
JMPR22-20	MD301U-R	SP6-5	3	6'
JMPR23-20	MD301U-S	SP6-1	3	6'
JMPR24-20	MD301U-T	SP6-1	3	6'
MED353B22	SP6-1	SP6-6	2	500'
JMPR25-20	MD301U-U	SP6-1	3	6'
MED353B22	MD301U-V	MD401U-D	4	500'
MED353B22	MD301U-W	MD302L	4	500'
MED353B22	MD301U-X	SP4-1	4	500'
MED353B22	MD301U-Y	MD303P	8	500'
MED353B22	MD301U-Z	MD303P	8	500'
MED353B22	MD301U-A	MD303P	8	500'
MED353B22	MD301U-B	MD303P	8	500'

3

MD301U

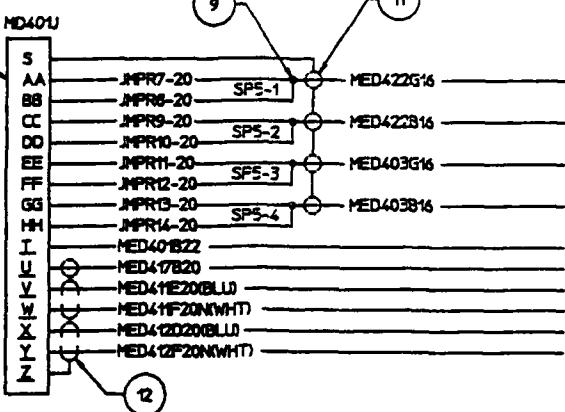


-2 MD301J HARNESS

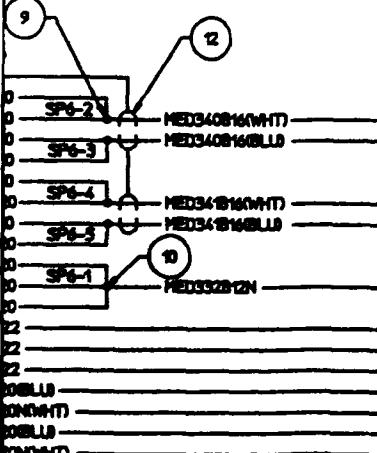
ZONE	REV	DESCRIPTION
		CAD GENERATED

WIRE TABLE			
FROM	TO	FIND	LENGTH
MD401U-AA	SPS-1	3	6"
SPS-1	SPS-5	5	500'
MD401U-BB	SPS-1	3	6"
MD401U-CC	SPS-2	3	6"
SPS-2	SPS-6	5	500'
MD401U-DD	SPS-2	3	6"
MD401U-EE	SPS-3	3	6"
SPS-3	SPS-7	5	500'
MD401U-FF	SPS-3	3	6"
MD401U-GG	SPS-4	3	6"
SPS-4	SPS-8	5	500'
MD401U-HH	SPS-4	3	6"
MD401U-I	SP4-1	4	500'
MD401U-J	MD406J-L	7	500'
MD401U-V	MD41P	8	500'
MD401U-W	MD41P	8	500'
MD401U-X	MD41P	8	500'
MD401U-Y	MD41P	8	500'

1

MD401J/MD401P
RIGHT MODULE CONT

-1 MD401J HARNESS



-2 MD301U HARNESS

CONT

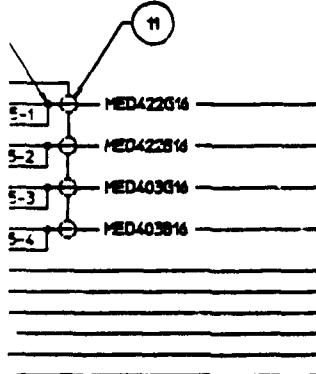
ONT

INT

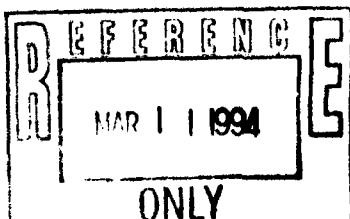
1
3
6

REF ID	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-02-16	

(3)



-1 MD401J HARNESS



167	84	I.D. SLEEVE	H23053/5-10-9	HL-I-23053	N	13
2	3	SHIELD TERMINATOR	H85519/2-10	HL-S-85519	EA	12
2	4	SHIELD TERMINATOR	H85519/2-8	HL-S-85519	EA	11
1		SPICE	06090 D-436-53		EA	10
4	4	SPICE	H81824/1-2	HL-S-81824	EA	9
1000	1000	CABLE, SHIELDED	H27500-208P2823	HL-C-27500	N	8
500		CABLE, SHIELDED	H27500-208P1823	HL-C-27500	N	7
1000		CABLE, SHIELDED	H27500-148P2823	HL-C-27500	N	6
2000		CABLE, SHIELDED	H27500-148P1823	HL-C-27500	N	5
1500	500	WIRE, 22 AWG	H22750/43-22-9	HL-W-22750	N	4
46	48	WIRE, 20 AWG	H22750/43-20-9	HL-W-22750	N	3
500		WIRE, 12 AWG	H22750/43-12-9	HL-W-22750	N	2
1	1	CONNECTOR	H83122822-35P	HL-W-22750	EA	1
		MD301U HARNESS	LEX-13324-2			-
		MD401U HARNESS	LEX-13324-1			-
ZONE #		ESTM. MANUFACTURER	MANUFACTURE NO.	PART NUMBER	MANUFACTURER	MANUFACTURER
00PSA						
LOAD LEX.		UNITS OF MEASURE	CONTRACT NO.	SERV-AIR, INC.	MSOGS	
		NUMBER OF UNITS	DAAB07-92-Z-8506	A SUBSIDIARY OF SYSTEMTECH LOAD LEX, INC.	HARNESS	
		PRINTED	SLM 93-02-16	D	7S976	LEX-13324
			LIN 93-02-17			
			OCA 93-02-17			

1	3	2	1
4	5	6	7
8	9	10	11
12	13	14	15
16	17	18	19
20	21	22	23
24	25	26	27
28	29	30	31
32	33	34	35
36	37	38	39
40	41	42	43
44	45	46	47
48	49	50	51
52	53	54	55
56	57	58	59
60	61	62	63
64	65	66	67
68	69	70	71
72	73	74	75
76	77	78	79
80	81	82	83
84	85	86	87
88	89	90	91
92	93	94	95
96	97	98	99
100	101	102	103
104	105	106	107
108	109	110	111
112	113	114	115
116	117	118	119
120	121	122	123
124	125	126	127
128	129	130	131
132	133	134	135
136	137	138	139
140	141	142	143
144	145	146	147
148	149	150	151
152	153	154	155
156	157	158	159
160	161	162	163
164	165	166	167
168	169	170	171
172	173	174	175
176	177	178	179
180	181	182	183
184	185	186	187
188	189	190	191
192	193	194	195
196	197	198	199
200	201	202	203
204	205	206	207
208	209	210	211
212	213	214	215
216	217	218	219
220	221	222	223
224	225	226	227
228	229	230	231
232	233	234	235
236	237	238	239
240	241	242	243
244	245	246	247
248	249	250	251
252	253	254	255
256	257	258	259
260	261	262	263
264	265	266	267
268	269	270	271
272	273	274	275
276	277	278	279
280	281	282	283
284	285	286	287
288	289	290	291
292	293	294	295
296	297	298	299
298	299	300	301
302	303	304	305
306	307	308	309
310	311	312	313
314	315	316	317
318	319	320	321
322	323	324	325
326	327	328	329
330	331	332	333
334	335	336	337
338	339	340	341
342	343	344	345
346	347	348	349
350	351	352	353
354	355	356	357
358	359	360	361
362	363	364	365
366	367	368	369
370	371	372	373
374	375	376	377
378	379	380	381
382	383	384	385
386	387	388	389
390	391	392	393
394	395	396	397
398	399	400	401
402	403	404	405
406	407	408	409
410	411	412	413
414	415	416	417
418	419	420	421
422	423	424	425
426	427	428	429
430	431	432	433
434	435	436	437
438	439	440	441
442	443	444	445
446	447	448	449
450	451	452	453
454	455	456	457
458	459	460	461
462	463	464	465
466	467	468	469
470	471	472	473
474	475	476	477
478	479	480	481
482	483	484	485
486	487	488	489
490	491	492	493
494	495	496	497
498	499	500	501
502	503	504	505
506	507	508	509
510	511	512	513
514	515	516	517
518	519	520	521
522	523	524	525
526	527	528	529
530	531	532	533
534	535	536	537
538	539	540	541
542	543	544	545
546	547	548	549
550	551	552	553
554	555	556	557
558	559	560	561
562	563	564	565
566	567	568	569
570	571	572	573
574	575	576	577
578	579	580	581
582	583	584	585
586	587	588	589
590	591	592	593
594	595	596	597
598	599	600	601
602	603	604	605
606	607	608	609
610	611	612	613
614	615	616	617
618	619	620	621
622	623	624	625
626	627	628	629
630	631	632	633
634	635	636	637
638	639	640	641
642	643	644	645
646	647	648	649
650	651	652	653
654	655	656	657
658	659	660	661
662	663	664	665
666	667	668	669
670	671	672	673
674	675	676	677
678	679	680	681
682	683	684	685
686	687	688	689
690	691	692	693
694	695	696	697
698	699	700	701
702	703	704	705
706	707	708	709
710	711	712	713
714	715	716	717
718	719	720	721
722	723	724	725
726	727	728	729
730	731	732	733
734	735	736	737
738	739	740	741
742	743	744	745
746	747	748	749
750	751	752	753
754	755	756	757
758	759	760	761
762	763	764	765
766	767	768	769
770	771	772	773
774	775	776	777
778	779	780	781
782	783	784	785
786	787	788	789
790	791	792	793
794	795	796	797
798	799	800	801
802	803	804	805
806	807	808	809
810	811	812	813
814	815	816	817
818	819	820	821
822	823	824	825
826	827	828	829
830	831	832	833
834	835	836	837
838	839	840	841
842	843	844	845
846	847	848	849
850	851	852	853
854	855	856	857
858	859	860	861
862	863	864	865
866	867	868	869
870	871	872	873
874	875	876	877
878	879	880	881
882	883	884	885
886	887	888	889
890	891	892	893
894	895	896	897
898	899	900	901
902	903	904	905
906	907	908	909
910	911	912	913
914	915	916	917
918	919	920	921
922	923	924	925
926	927	928	929
930	931	932	933
934	935	936	937
938	939	940	941
942	943	944	945
946	947	948	949
950	951	952	953
954	955	956	957
958	959	960	961
962	963	964	965
966	967	968	969
970	971	972	973
974	975	976	977
978	979	980	981
982	983	984	985
986	987	988	9

NOTES:

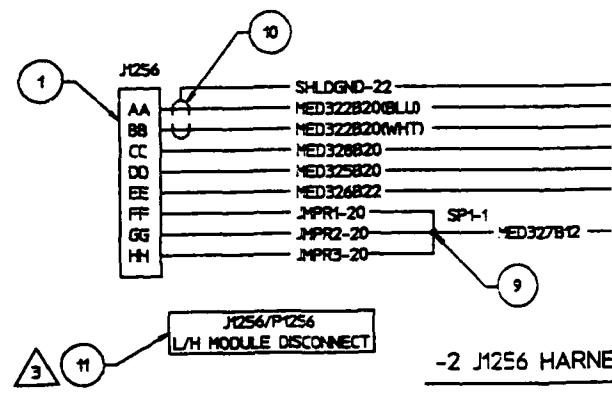
1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. STAMP CONNECTOR IDENTIFIER(S) AS SHOWN PER MIL-STD-130
4. FABRICATE AND INSPECT PER MIL-W-5088L

(1)

WIRE TABLE

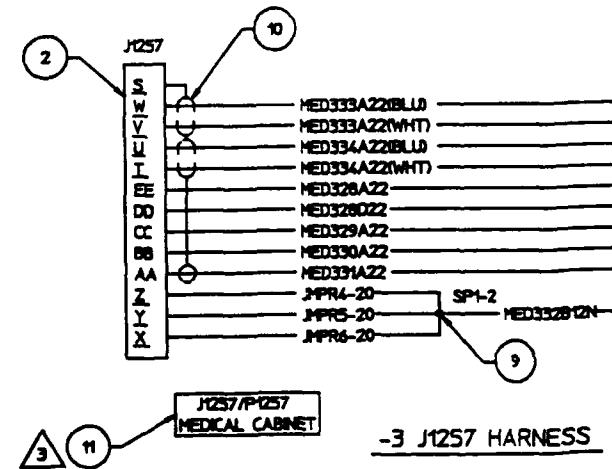
WIRE NO.	FROM	TO	FINO
MED413B22	MD406J-I	SP4-1	5
MED417G20(BLU)	MD406J-V	MD413P	7
MED417H20(NWHT)	MD406J-W	MD413P	7
MED418D20(BLU)	MD406J-X	CAP	7
MED418E20(NWHT)	MD406J-Y	CAP	7

WIRE TABLE				
WIRE NO.	FROM	TO	FINO	LENGTH
SHLDGND-22	SHIELD	GND	5	72"
MED322B20(BLU)	J1256-AA	RELAY	7	500"
MED322B20(NWHT)	J1256-BB	RELAY	7	500"
MED328B20	J1256-CC	RELAY-X1	4	500"
MED325B20	J1256-DD	P1259-A	4	500"
MED324B22	J1256-EE	P1260-3	5	500"
JMPR1-20	J1256-FF	SP1-1	4	6"
JMPR2-20	J1256-GG	SP1-1	4	6"
MED327B12	SP1-1	SP1-2	3	500"
JMPR3-20	J1256-HH	SP1-1	4	6"



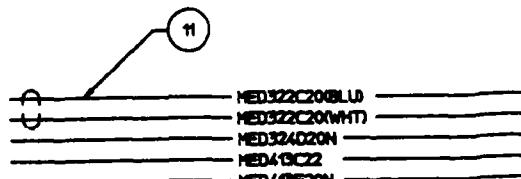
-2 J1256 HARNE

WIRE TABLE				
WIRE NO.	FROM	TO	FINO	LENGTH
MED333A22(BLU)	J1257-W	P1261-2	8	500"
MED333A22(NWHT)	J1257-Y	P1261-10	8	500"
MED333A22(BLU)	J1257-U	P1261-2	8	500"
MED334A22(NWHT)	J1257-I	P1261-1	8	500"
MED328A22	J1257-EZ	ENSW-1	5	500"
MED326D22	J1257-DD	RELAY-X2	5	500"
MED329A22	J1257-CC	P1258-2	5	500"
MED330A22	J1257-BB	P1259-C	5	500"
MED334A22	J1257-AA	P1259-D	6	500"
JMPR4-20	J1257-Z	SP1-2	4	6"
JMPR5-20	J1257-Y	SP1-2	4	6"
MED332B12N	SP1-2	MEDTB-3	3	500"
JMPR6-20	J1257-X	SP1-2	4	6"



-3 J1257 HARNESS

WIRE TABLE				
WIRE NO.	FROM	TO	FINO	LENGTH
MED322C20(BLU)	RELAY	P1258-12	7	72"
MED322C20(NWHT)	RELAY	P1258-13	7	72"
MED324D20N	ENSW-2	GND	4	72"
MED413C22	SP4-1	P1068-J	5	500"
MED413P20N	GND	P1068-K	4	500"

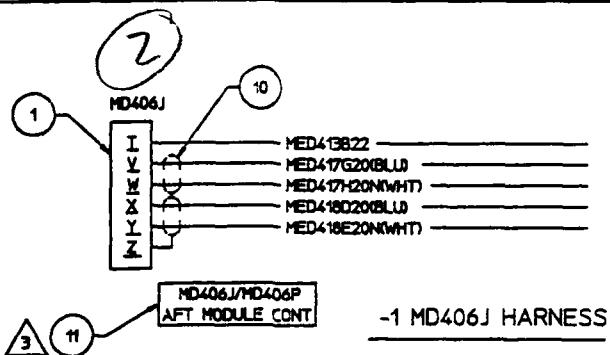


-4 LOOSE WIRES

ITEM	REV	DESCRIPTION
		CAD GENERATED

WIRE TABLE

ID.	FROM	TO	FIND	LENGTH
2	MD406J-I	SP4-1	5	500'
JBLU	MD406J-V	MD413P	7	500'
JNWHT	MD406J-W	MD413P	7	500'
JBLU	MD406J-X	CAP	7	500'
JNWHT	MD406J-Y	CAP	7	500'



- SHLDGND-22
- MED322B20NBLU
- MED322B20NWHT
- MED320B20
- MED325B20
- MED326B22
- JPR1-20
- JPR2-20
- JPR3-20
- SP1-1
- MED327B12

1256
DISCONNECT

-2 J1256 HARNESS

- MED333A22BBLU
- MED333A22NWHT
- MED334A22BBLU
- MED334A22NWHT
- MED328A22
- MED328D22
- MED329A22
- MED330A22
- MED331A22
- JPR4-20
- SP1-2
- JPR5-20
- JPR6-20
- MED332B12N

7
NET

-3 J1257 HARNESS

- MED322C20NBLU
- MED322C20NWHT
- MED324D20N
- MED419C22
- MED419P20N

-4 LOOSE WIRES

REFER

MAR 1 1994

ONLY

6	84	42	84		ID. SLEEVE		M23053/5-104-9	MIL-I-23053
	3	1	2		SHIELD TERMINATOR		M83519/2-8	MIL-S-83519
	1	1			SPLICE	04090	D-434-53	
72	500	1000			CABLE, SHIELDED		M27500-22SP2S23	MIL-C-27500
	500				CABLE, SHIELDED		M27500-20SP2S23	MIL-C-27500
500	2000	572	500		WIRE, 22 AWG		M22759/43-22-9	MIL-W-22759
572	18	1018			WIRE, 20 AWG		M22759/43-20-9	MIL-W-22759
	500	500			WIRE, 12 AWG		M22759/43-12-9	MIL-W-22759
	1				CONNECTOR		MS3122E22-553	
		1	1		CONNECTOR		MS3122E22-55P	
					LOOSE WIRES		LEX-13325-4	
					J1257 HARNESS		LEX-13325-3	
					J1256 HARNESS		LEX-13325-2	
					MD406J HARNESS		LEX-13325-1	

QUANTITY	REQUIRED	PER DASH NO.	SYN	NOMENCLATURE	SIZE/DEBT	IDENTIFYING NO.	MATERIAL/SPECIFICATION						
							PARTS LIST						
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES; TOLERANCES ARE INCHES													
FINISH:													
<table border="1"> <tr> <td>SLH</td> <td>93-01-16</td> </tr> <tr> <td>LH</td> <td>93-12-07</td> </tr> <tr> <td>O.C.H.</td> <td>93-12-07</td> </tr> </table>								SLH	93-01-16	LH	93-12-07	O.C.H.	93-12-07
SLH	93-01-16												
LH	93-12-07												
O.C.H.	93-12-07												
<table border="1"> <tr> <td>703-5009</td> <td>UH-600</td> </tr> <tr> <td>APPLICATION</td> <td></td> </tr> </table>								703-5009	UH-600	APPLICATION			
703-5009	UH-600												
APPLICATION													
<table border="1"> <tr> <td>D</td> <td>7S976</td> <td>LEX-</td> </tr> <tr> <td colspan="2">NCNE</td> <td></td> </tr> </table>								D	7S976	LEX-	NCNE		
D	7S976	LEX-											
NCNE													

SERV-AIR, INC.
A SUBSIDIARY OF E-SYSTEMS

MSOGS
HARNES

1

2

1

1-16

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-01-16	

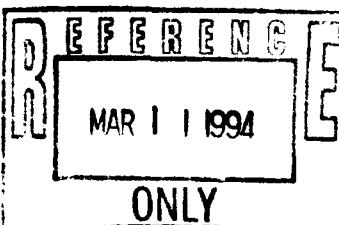
10

(3)

MED43822
 MED417G201BLU
 MED417H201WHT
 MED418D201BLU
 MED418E201WHT

506J/MD406P
MODULE CONT

-1 MD406J HARNESS



U/M ZONE	6	84	42	84	10	I.D. SLEEVE	11	MIL-I-23053	U/M	ZONE
A	3	1	2			SHIELD TERMINATOR		MIL-S-83519	EA	10
A	1	1				SPICE	06090	D-436-53	EA	9
I	1000					CABLE, SHIELDED		MIL-C-27500	N	8
I	2	500	1000			CABLE, SHIELDED		MIL-C-27500	N	7
I	500					CABLE, SHIELDED		MIL-C-27500	N	6
100	2000	572	500			WIRE, 22 AWG		MIL-W-22759	N	5
I	72	18	1010			WIRE, 20 AWG		MIL-W-22759	N	4
I	500	500				WIRE, 12 AWG		MIL-W-22759	N	3
A	1					CONNECTOR		MS3122E222-553	EA	2
A		1	1			CONNECTOR		MS3122E222-55P	EA	1
X						LOOSE WIRES		LEX-13325-4		-
X						J257 HARNESS		LEX-13325-3		-
X						J256 HARNESS		LEX-13325-2		-
X						MD406J HARNESS		LEX-13325-1		-
U/M ZONE	-4	-3	-2	-1	SYN	NOMENCLATURE	REF. DATE	IDENTIFYING NO.	MATERIAL/SPECIFICATION	U/M ZONE
SOPSA	NOTED FOR DATA SHEET				PARTS LIST					
LEAD LEX	UNLESS OTHERWISE SPECIFIED ITEMS ARE IN CONFORMITY WITH THE SPECIFICATIONS AND STANDARDS AS STATED ON THIS DRAWING				CONTRACT NO.	SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS INC., LEAD LEX, KY.				
					DAAB07-92-Z-8506					
					SLH 93-01-16					
					LM 93-12-07					
					O.C.M. 93-12-07					
25	UH-600					MSOGS HARNESS				
1	LOCATION				D 7S976	LEX-13325				
1					NCNE	1 1 1				

3

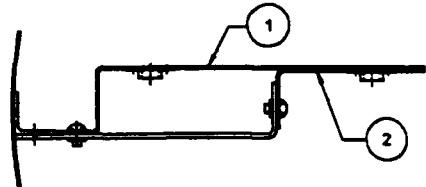
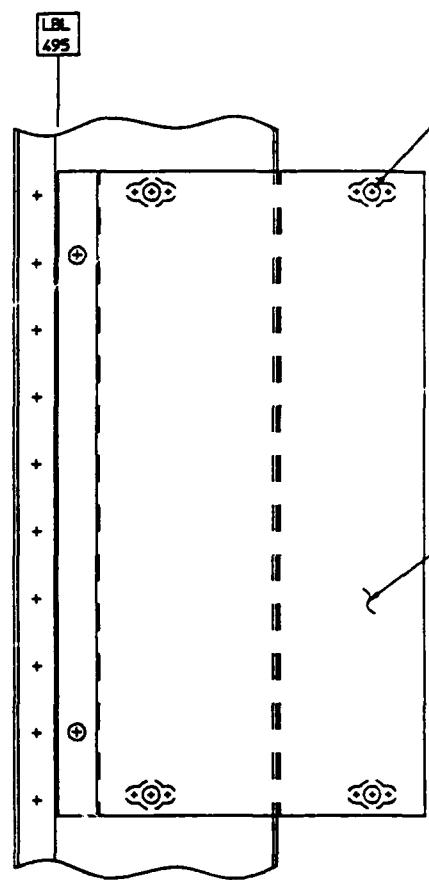
2

1

NOTES.

1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
 2. INTERPRET ABBREVIATIONS PER MIL-STD-12
 3. REMOVE BURRS AND BREAK ALL SHARP EDGES
 4. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
 5. IDENTIFICATION CODE OF FASTENERS PER NAS 523
 6. INSTALLATION OF FASTENERS PER MIL-STD-1515

SKIN REMOVED FOR CLARITY



5

4

3

2

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

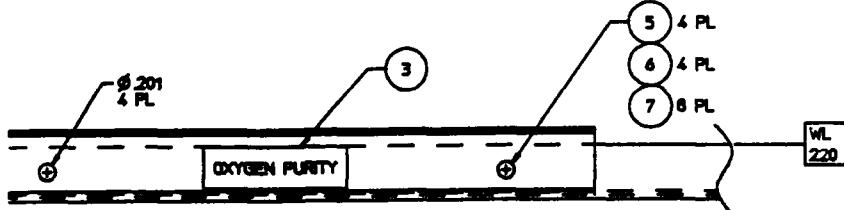
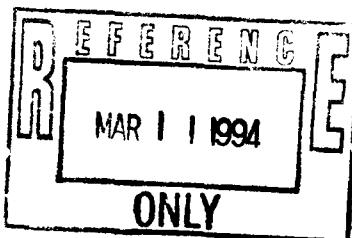
3

2

1

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-04-13	

3



3

12	WASHER	MS15795-808		EA	7
8	SCREW	MS15958-43		EA	6
4	NUT	MS21042L3		EA	5
1	OXYGEN PURITY	708-1019-00		EA	4
1	DECAL	LEX-13335-1		EA	3
1	SUPPORT ASSY	LEX-13332		EA	2
1	SUPPORT ASSY	LEX-13331		EA	1

PURITY SENSOR INSTALLATION

D 7S976 LEX-13330

11

1

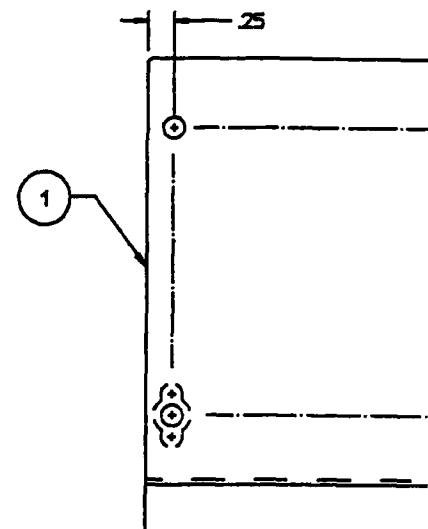
1

1

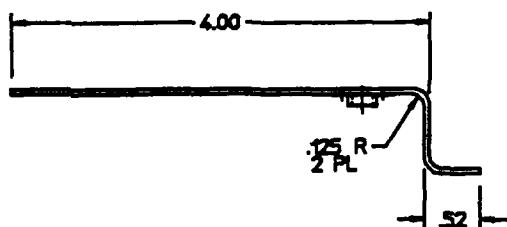
NOTES.

1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
 2. INTERPRET ABBREVIATIONS PER MIL-STD-12
 3. REMOVE BURRS AND BREAK ALL SHARP EDGES
 4. MARK PARTS PER MIL-STD-130
 5. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
 6. IDENTIFICATION CODE OF FASTENERS PER NAS 523
 7. INSTALLATION OF FASTENERS PER MIL-STD-1515

8. CHEMICAL CONVERSION COAT PER MIL-C-5541, CLASS 1A
EPOXY POLYAMIDE PRIME PER MIL-P-23377 TYPE I, 2 COATS



8



A

BASIC CODE	NAS 523 FASTENER CODE			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES-TOLERANCE ON PRECISION
BB - K22042MAD	INSTALL RIVETS PER NAS135			X = .1 + NA .03 - .10 0000 .010
	BASIC CODE	DASH NO. FOR DIA N - HPS HEAD N/S P - HPS HEAD P/S		
	C - COUNTERBINK BOTH SIDES CSK 120° AND SWING FLUSH	DASH NO. FOR LENGTH		FINISH:
			LEX-10330	UH-600
			APPLICANT	APPLICANT
			APPLICANT	APPLICANT

3

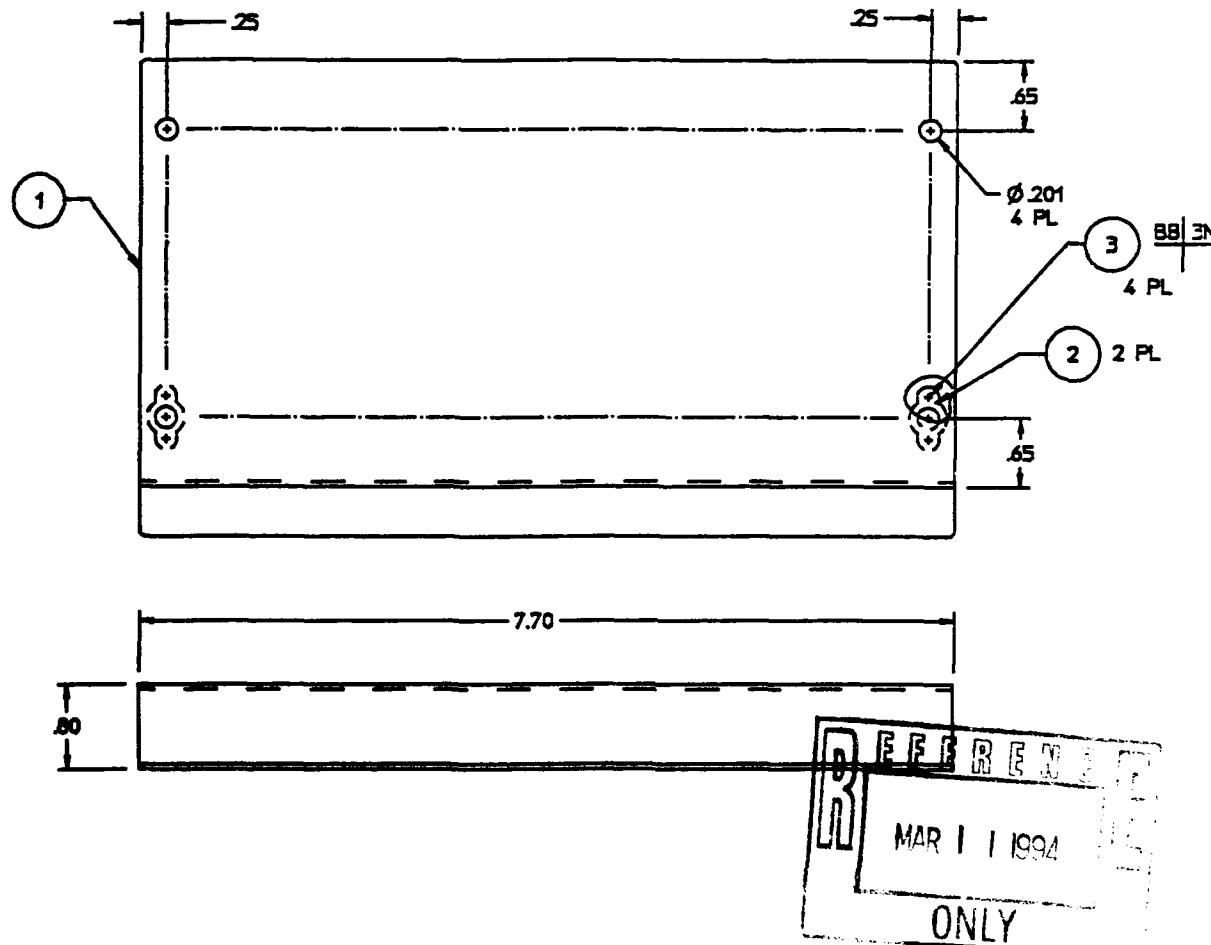
2

1

2

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-04-13	

(2)



4	RIVET	MS24026AD3		EA		3
2	NUTPLATE	MS21075L3		EA		2
1	SUPPORT	LEX-13331-1	.050x.55x7.95 2024-T3 AL ALY QQ-A-250/5	EA		1

SYN	NOMENCLATURE	CODE/NR	IDENTIFYING NO.	MATERIAL/SPECIFICATION	U/M	ZONE/PNO NO.
-----	--------------	---------	-----------------	------------------------	-----	--------------

EQUITY REQUIRED PER DRAW NO.

PARTS LIST

RACI	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES-TOLERANCE ON DIMENSIONS ARE AS FOLLOWS:	CONTRACT NO.	SERV-AIR, INC.
DAA	x .1 + .03 -.010	DAAB07-92-Z-8506	SOPSA A SUBSIDIARY OF E-SYSTEMS INC. LBAD LEX, KY.
LH	FINISH	SLH 93-04-13	
M		LM 93-12-07	
ILD		VLD 93-12-10	
13330 UH-400			SUPPORT ASSEMBLY
APPLICATION			C 7S976 LEX-13331
3		1/1	1 - 1
2			

A

4

3

1

NOTES:

1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
 2. INTERPRET ABBREVIATIONS PER MIL-STD-12
 3. REMOVE BURRS AND BREAK ALL SHARP EDGES
 4. MARK PARTS PER MIL-STD-190
 5. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
 6. IDENTIFICATION CODE OF FASTENERS PER NAS 523
 7. INSTALLATION OF FASTENERS PER MIL-STD-1515
 8. CHEMICAL CONVERSION COAT PER MIL-C-5541, CLASS 1A
EPOXY POLYAMIDE PRIME PER MIL-P-23377 TYPE L, 2 COATS

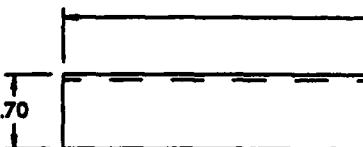
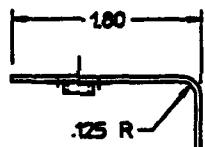


- CHEMICAL CONVERSION COAT PER MIL-C-5541, CLASS 1A
EPOXY POLYAMIDE PRIME PER MIL-P-23377 TYPE L, 2 COATS**

2

9

A



A technical drawing showing a bracket assembly. It consists of a central vertical plate with two horizontal arms extending to the right. A dimension of 25 is shown above the top arm, and a dimension of 65 is shown below the bottom arm. A small circular detail with four cross-hairs is centered between the two arms.

4	RIVET
2	NUTPLATE
1	SUPPORT

					SYM	NOMENCLATURE
QUANTITY REQUIRED PER DASH NO.						

BASIC CODE	NAS 523 FASTENER CODE			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES - TOLERANCES ON DIMENSIONS ARE AS FOLLOWS:
BB - H230GMAD	INSTALL. RIVETS PER NAS515			X .1 +0.03 -0.010
		DASH NO. FOR DIA N = MFG HEAD N/S F = MFG HEAD F/S		+ .1 +0.03 -0.010
	BASIC CODE			FINISH:
C = COUNTERSINK BOTH SIDES CSK 10° AND GRIND FLUSH	C	DASH NO. FOR LENGTH		
			LIX-13330 UH-300	
			APPLICATION	

1

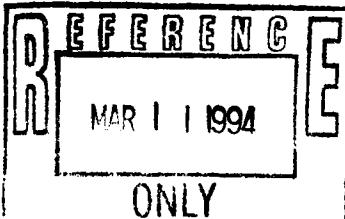
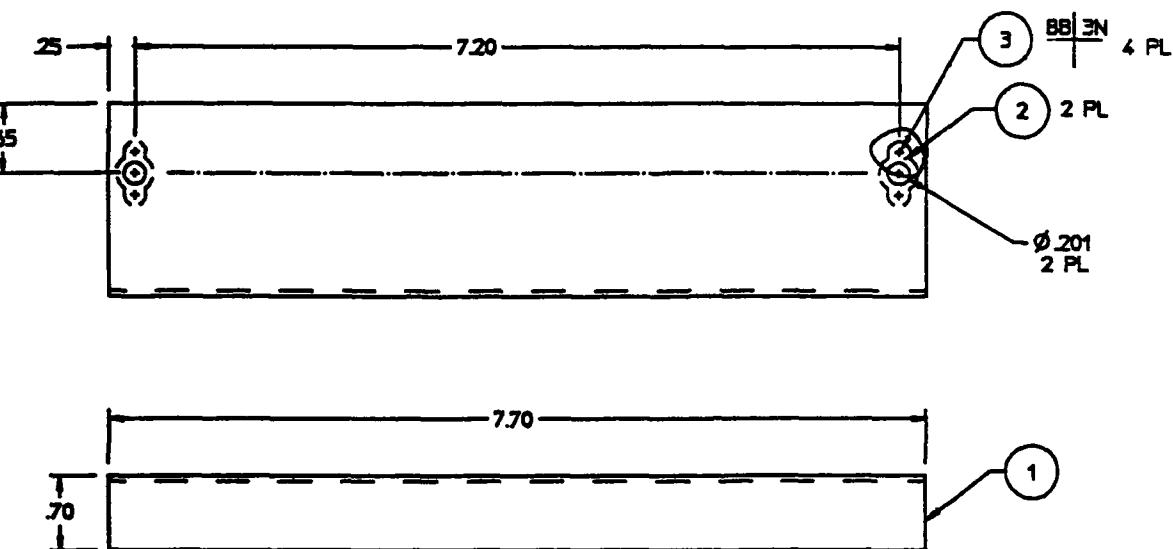
1

2

2

6

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-04-13	



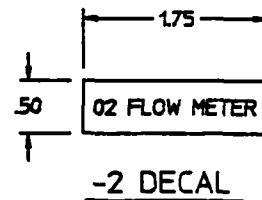
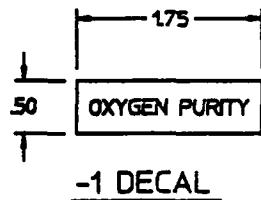
NOTES:

1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
5. DECAL HAS DOUBLE FACED ADHESIVE BACKING PER MIL-P-19834
TYPE 1 STYLE 3 QQ-A-250/1

C

B

A

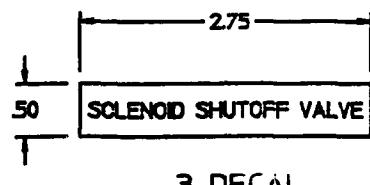
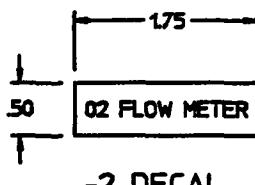
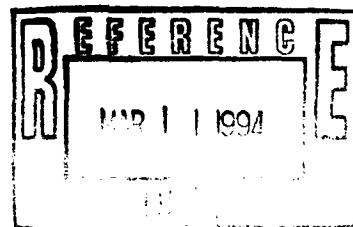


					DECAL
					DECAL
					DECAL
		-3	-2	-1	SYM NAME

QUANTITY REQUIRED PER DASH NO.

					UNLESS OTHERWISE DIMENSIONS ARE IN INCHES PRICES
					x .1
					• NA .00 .01
					.000 .01
					FINISH:
	LEX-19350	UH-600			
	DRY	WET			
	APPLICATION				

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-04-16	

-2 DECAL-3 DECAL

TURE RED PER DASH LINE	SYM	NOMENCLATURE	CODE REF	IDENTIFYING NO.	PARTS LIST		U/M	ZONE	PRO ID
					MATERIAL/SPECIFICATION	QTY			
		DECAL		LEX-13333-3	.012x.50x2.75 PHOTOSENSITIZED 2024-T3 AL ALY QQ-A-250/5				-
		DECAL		LEX-13333-2	.012x.50x1.75 PHOTOSENSITIZED 2024-T3 AL ALY QQ-A-250/5				-
		DECAL		LEX-13333-1	.012x.50x1.75 PHOTOSENSITIZED 2024-T3 AL ALY QQ-A-250/5				-
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE AS PER ASME Y14.5M-1994									
CONTRACT NO. DAAB07-92-Z-8506									
<p>• 1° • NA .03 • 1° .010</p> <p>FINISH:</p> <p>SLH. 93-04-16 LM. 93-12-07 VLD. 93-12-10</p> <p>DECAL</p> <p>C 7S976 LEX-13333</p>									
SERV-AIR, INC. SOPS A SUBSIDIARY OF E-SYSTEMS INC. LBAD LEX. KY.									
1/1 1 = 1									

1

4

3



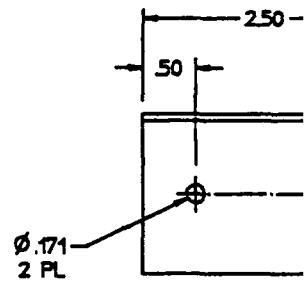
C

NOTES:

1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
6. CHEMICAL CONVERSION COAT PER MIL-C-5541, CLASS 1A
EPOXY POLYAMIDE PRIME PER MIL-P-23377 TYPE I 2 COATS

B

A



		ANGLE SUP
SYM	NOMENCL	
QUANTITY REQUIRED PER DASH NO.		
		UNLESS OTHERWISE DIMENSIONS ARE IN INCHES PRICES PER UNIT
		xx .1 xxx .03 xxxx .010
		FINISH:
		6
	LEX-13337	UH-600
DISPENSE ONE DASH	ONE DASH	ONE DASH
		APPLICATION

4

3

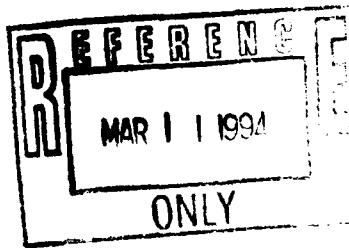
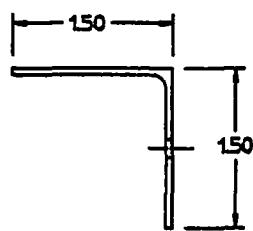
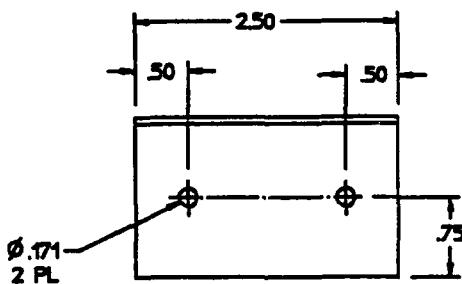


2

2

1

REMARKS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-04-16	



1

4

3

8

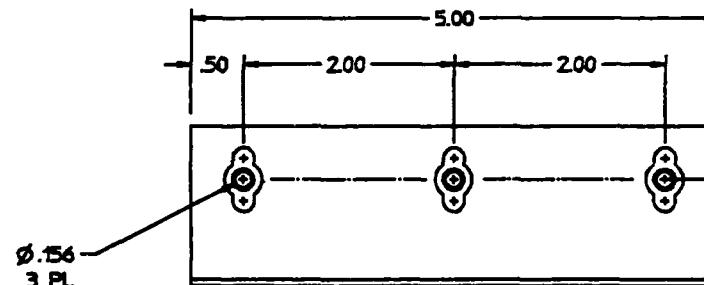
NOTES:

1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
 2. INTERPRET ABBREVIATIONS PER MIL-STD-12
 3. REMOVE BURRS AND BREAK ALL SHARP EDGES
 4. MARK PARTS PER MIL-STD-130
 5. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
 6. IDENTIFICATION CODE OF FASTENERS PER NAS 523
 7. INSTALLATION OF FASTENERS PER MIL-STD-155

8. CHEMICAL CONVERSION COAT PER MIL-C-5541, CLASS 1A
EPOXY POLYAMIDE PRIME PER MIL-P-23377 TYPE I, 2 COATS



8



1

4

1

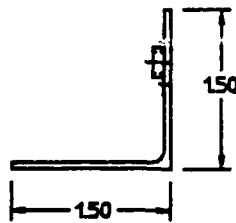
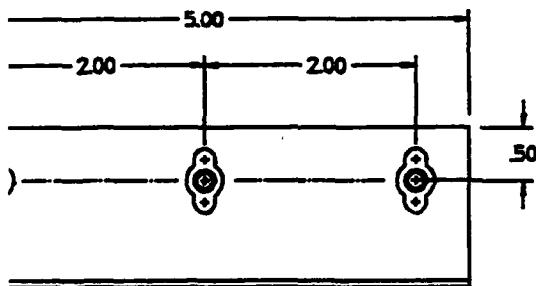
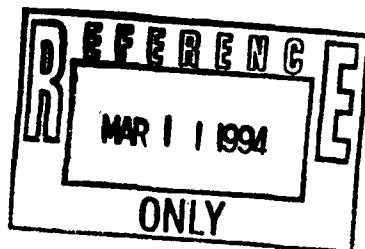


2

2

1

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-04-16	



CODE		BRACKET	LEX-13335-1	MS14284D293 x 5.2 LONG 2024-T8511 AL ALY QO-A-200/3		-						
SYN	NOMENCLATURE	CODE B&M	IDENTIFYING NO.	MATERIAL/SPECIFICATION	U/M	ZONE PRO ID						
REQUISITE PER DASH NO.												
CONTRAL												
D.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES-TOLERANCE ON PRECISION INCHES			CONTRACT NO.	SERV-AIR, INC.							
SLI	NA	.03	.010	DAAB07-92-Z-8506	SOPSA							
LM	• T			SLH. 92-06-06	A SUBSIDIARY OF E-SYSTEMS, INC. LOCATED LEX. KY.							
V.L.	FINISH			LM. 93-12-07								
				VLD. 93-12-10								
43	UH-600											
APPLICATION												
 <p>BRACKET</p>												
<table border="1"> <tr> <td>C</td> <td>7S976</td> <td>LEX-13335</td> </tr> <tr> <td colspan="2">1/1</td> <td>1 • 1</td> </tr> </table>							C	7S976	LEX-13335	1/1		1 • 1
C	7S976	LEX-13335										
1/1		1 • 1										

1

4

3

↓

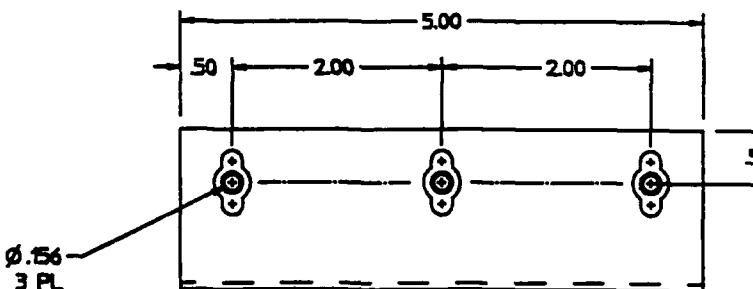
NOTES:

1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
 2. INTERPRET ABBREVIATIONS PER MIL-STD-12
 3. REMOVE BURRS AND BREAK ALL SHARP EDGES
 4. MARK PARTS PER MIL-STD-130
 5. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
 6. IDENTIFICATION CODE OF FASTENERS PER NAS 523
 7. INSTALLATION OF FASTENERS PER MIL-STD-1515
- 8.** CHEMICAL CONVERSION COAT PER MIL-C-5541, CLASS 1A
EPOXY POLYAMIDE PRIME PER MIL-P-23377 TYPE I, 2 COATS

C

B

A



				BRACKET	
				SYM	NOMENCLATURE
		QUANTITY REQUIRED PER DASH NO.			
BASIC CODE	NAS 523 FASTENER CODE				
MJ - M220470AD BB - M220436AD	INSTALL RIVETS PER MIL-S-5				
	BASIC CODE	DASH NO. FOR DIA			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES - TOLERANCES IN MILS
		N - HPS HEAD N/3			x .1
		F - HPS HEAD F/3			• NA .03 .010
	C - COUNTERSINK BOTH SIDES CSK 100° AND GRIND FLUSH	DASH NO. FOR LENGTH			• T 2000 .010
					FINISH:
				LEX-13345	UH-600
				ONE SIDE	ONE SIDE
				APPLICATION	

4

3

8

↑

3

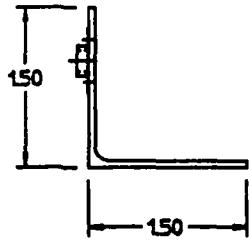
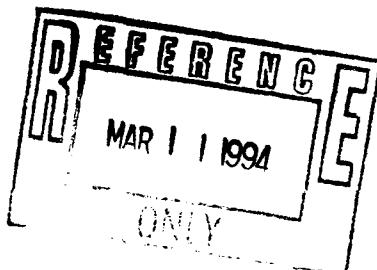
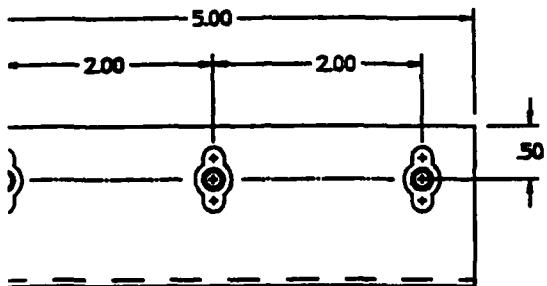
2

1

2

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-04-16	

.TS



CODE DE		BRACKET		LEX-13336-1	MS14284D293 x 5.2 2024-T0511 AL ALY 00-A-200/3		-
CONTRACT	SYN	NOMENCLATURE	CODE DENT	IDENTIFYING NO.	MATERIAL/SPECIFICATION		
DAV					U/M ZONE FND NO.		
LANTITY REQUIRED PER DASH NO.	PARTS LIST						
DAV	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES-REFERENCE NO. PROCESSES			CONTRACT NO.	SERV-AIR, INC. SOFSA		
SLH	NA	x .1	x .03	DAAB07-92-Z-B506	A SUBSIDIARY OF E-SYSTEMS, INC. LEAD LEX, KY.		
LM		x .010		SLH 92-08-06			
VLD				LM 93-12-07			
				VLD 93-12-10			
					BRACKET		
EX-13345	UH-600				C 7S976	LEX-13336	
APPLICATION					11	1 - 1	

NOTES:

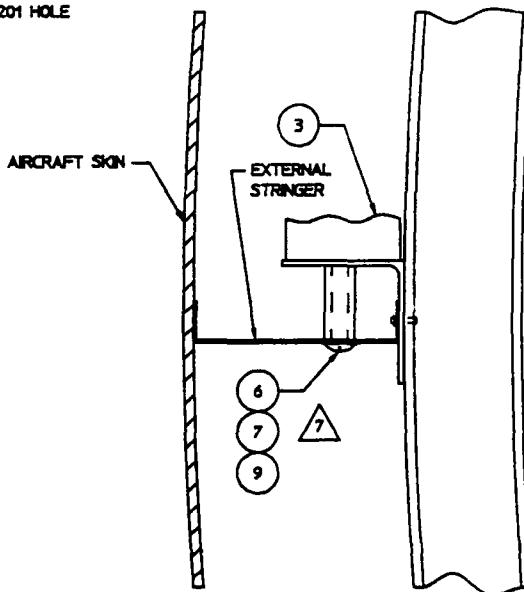
1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
5. INSTALLATION CODE OF FASTENERS PER MIL-STD-1515
6. DRILL (2) ϕ .171 HOLES IN EXISTING STRINGER AFTER LEX-13334 (FIND NO. 2 IS POSITIONED)
7. USE FIND NO. 3 AS TEMPLATE TO LOCATE ϕ .201 HOLE THROUGH EXISTING STRINGER

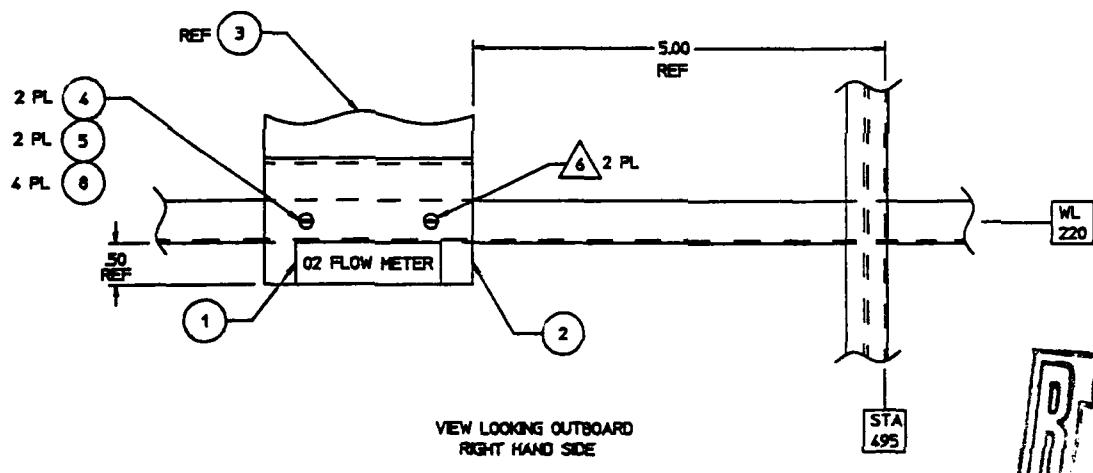
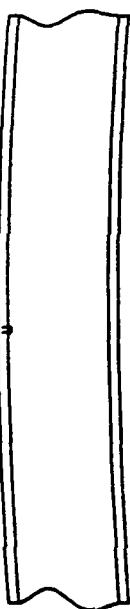


DRILL (2) ϕ .171 HOLES IN EXISTING STRINGER AFTER LEX-13334 (FIND NO. 2 IS POSITIONED)



USE FIND NO. 3 AS TEMPLATE TO LOCATE ϕ .201 HOLE THROUGH EXISTING STRINGER





R
SERV-AIR
MAR 1
ON

1	WASHER	AN960KDM10L	
4	WASHER	MST5795-807	
1	SPACER	NAS43003-44	
1	SCREW	MSS1958-69	
2	SCREW	MSS1957-43	
2	NUT	MS21042-08	
1	FLOW METER	8C816 5860E	
1	ANGLE SUPPORT	LEX-13334	
1	DECAL	LEX-13333-2	

QUANTITY REQUIRED PER DASH NO.	SYM	NONENCLATURE	LINE DENT	IDENTIFYING NO.	MATERIAL/SPECIFC
					PARTS LIST
					SERV-AIR A SUBSIDIARY OF
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES-ALTERNATIVE UNITS IN MILLIMETERS		CONTRACT NO. DAAB07-92-Z-8504	
		• NA • 23 • 010	• T	• S.L.H. 93-05-16	
				• L.M. 93-12-07	
				• V.L.D. 93-12-10	
		FINISH			
		LIX-13331 UH-600			
		APPLICATION			
	D	7S976			
			V1		

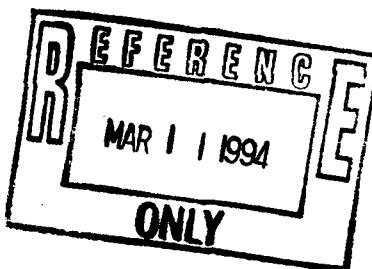
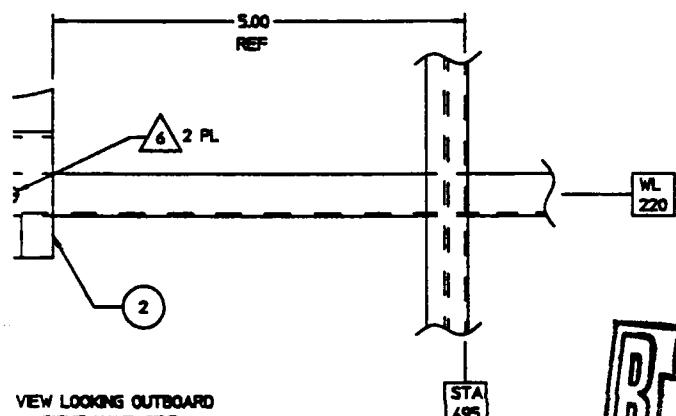
3

2

1

3

REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
		CAD GENERATED	93-05-10



1	WASHER	ANS60KD10L		EA	9
4	WASHER	M35795-007		EA	8
1	SPACER	NAS43003-64		EA	7
1	SCREW	M331958-69		EA	6
2	SCREW	M331957-43		EA	5
2	NUT	MS21042-06		EA	4
1	FLOW METER	8C916 5860E		EA	3
1	ANGLE SUPPORT	LEX-13334		EA	2
1	DECAL	LEX-13333-2		EA	1

ITEM	SYN. Nomenclature	REF. NO.	IDENTIFYING NO.	MATERIAL/SPECIFICATION	U/M	ZONE PRO NO.
PARTS LIST						
ST. XSL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE IN THOUSANDS OF INCHES.	CONTRACT NO.	DAA807-92-Z-0306	SERV-AIR, INC.	308A	
ENS	• NA .00 .03 .010 • T			A SUBSIDIARY OF E-SYSTEMS INC. LEX. KY.		
AT		• SLH	93-05-10			
X-1		• LM	93-12-07			
TON		• VLD	93-12-10			
				FLOW SENSOR INSTALLATION		
				D 7S976 LEX-13337		
				V1		1 - 1

3

2

1

(1)

NOTES:

1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12

D

C

B

A

BASIC CODE	INSTN
B1-4520470AD	
BASH	
O-COUNT BOTH	1
CIRK 1	
GRIND	

5

4

3

2

2

ZONE REV DESCRIPTION
_____ CAD GENERATED

176

CAD GENERATED

1

RE
MI

S/N	ITEM DESCRIPTION	CODE IDENT	DESCRIPTION NO.
1	MSOGS UNIT	99251	3261093
53	RIVET		MS20470AD
10	WASHER		MS51958-809
10	BOLT		AN4C7A
1	MSOGS ANGLE, FWD		LEX-13342
1	MSOGS ANGLE, AFT		LEX-13341
1	MSOGS PALLET ASSY		LEX-13339
X	MSOGS PALLET INSTL		LEX-13338

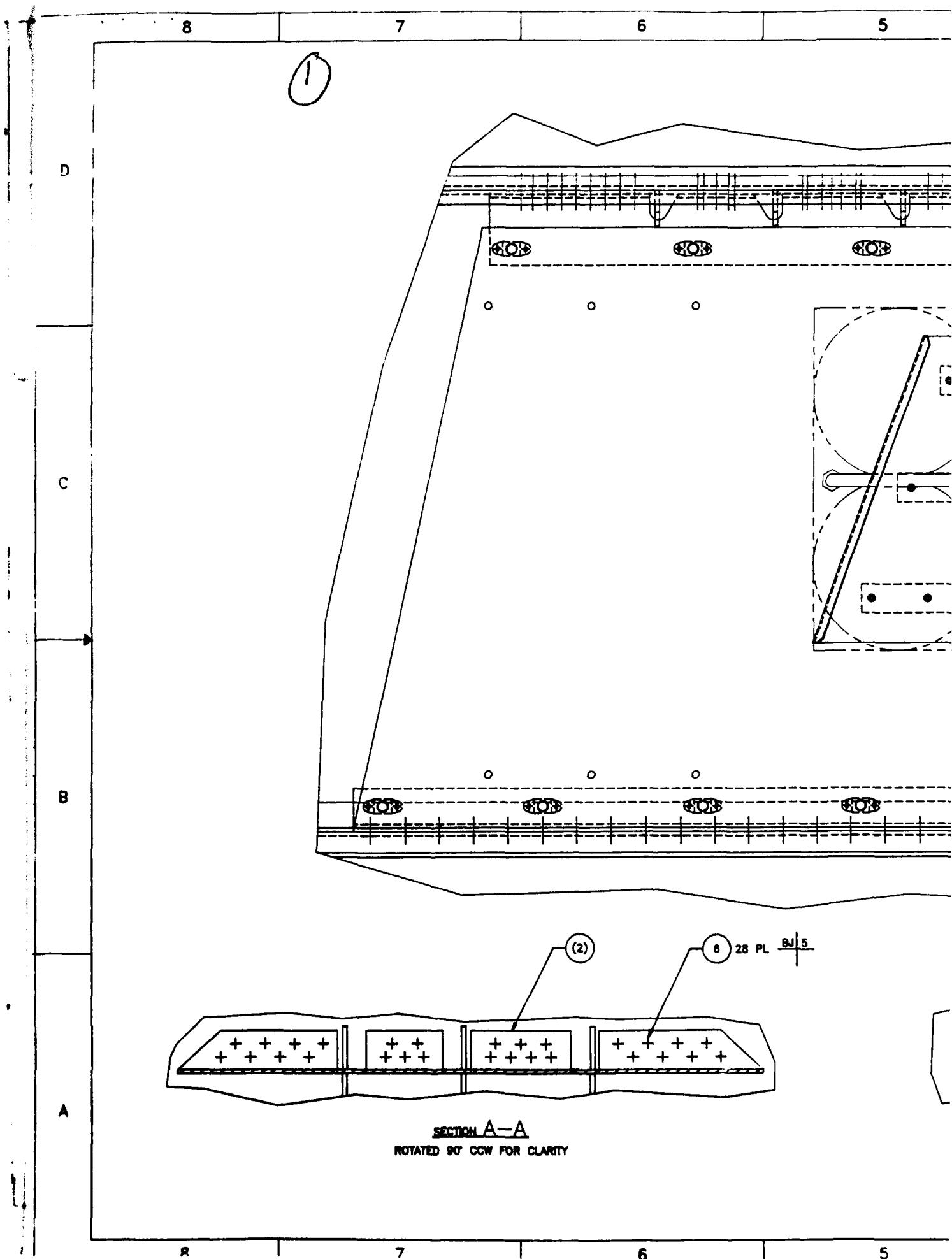
BASIC CODE	NHS 823 FASTENER CODE
S4-488204700	REINFORCEMENT
	DASH NO FOR DIA N=MFG HEAD N/S P=MFG HEAD P/S
C-COUNTERSINK BOTH SIDES COK 100° AND BLIND FLUSH	DASH NO FOR LENGTH

5

1

3

2



6

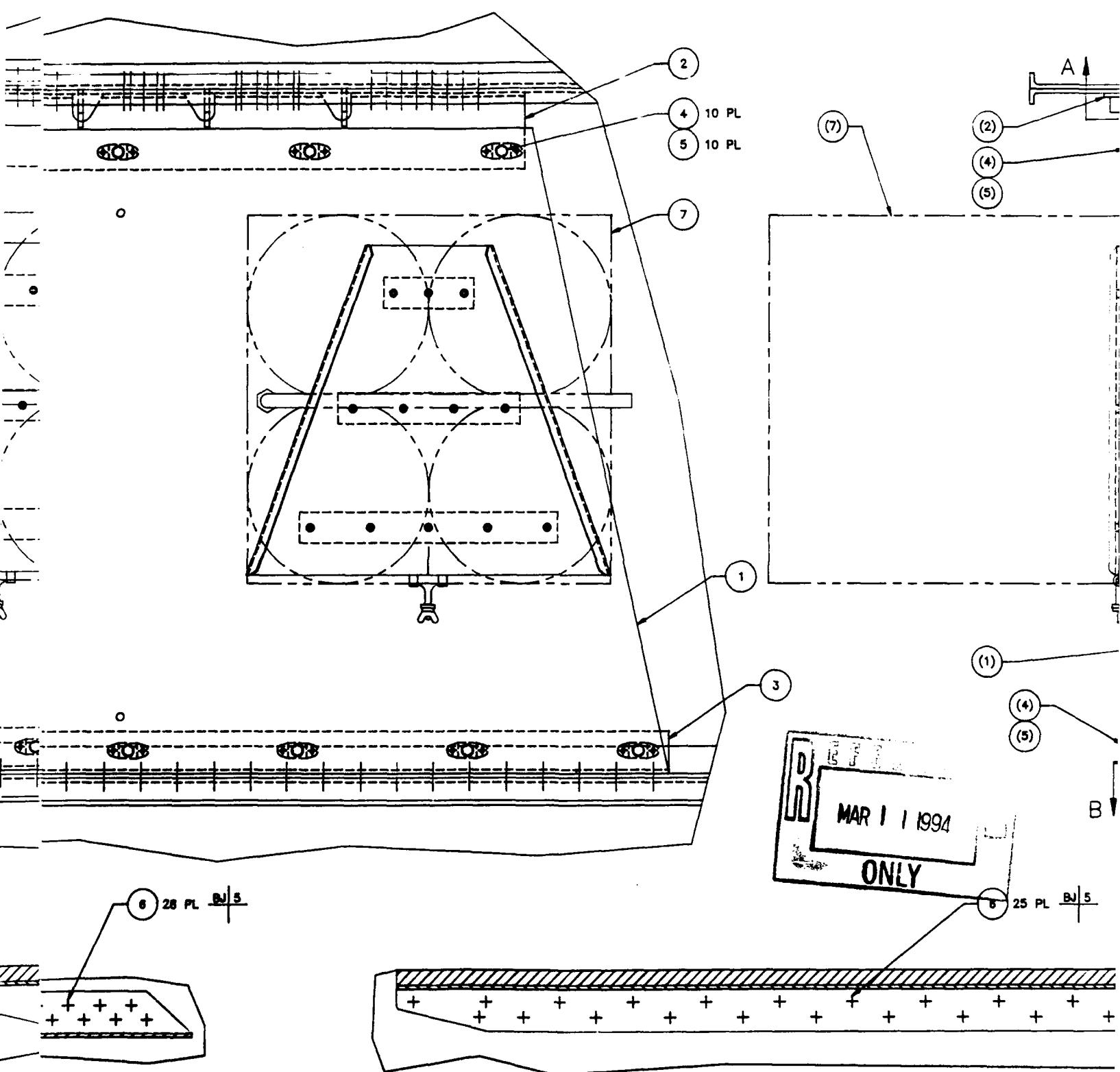
5

4

3

2

ZONE	REV	CAD GENERATE
------	-----	--------------



SECTION B-B
ROTATED 90° CCW FOR CLARITY

DAAB07-92-Z-B506
W.B.H. 83-07-21
L.M. 83-08-00

6

5

4

3

2

3

2

1

REVISIONS

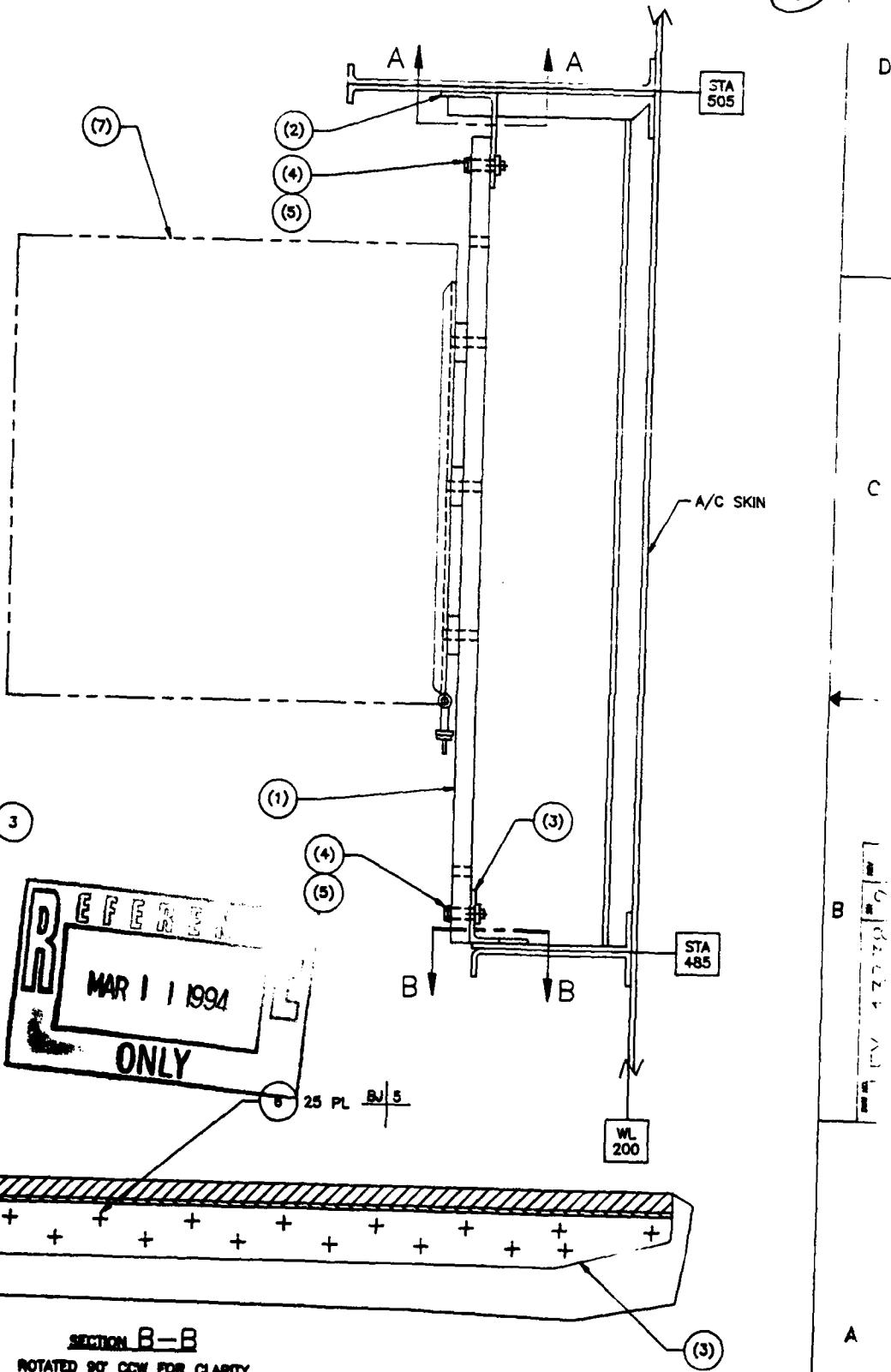
ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-07-21	

(3)

2

4 10 PL
5 10 PL

7



3

2

1

DAAB07-92-Z-8508	DATE ISSUED: 03-07-21	ISSUED BY: D	7S976	REVISED BY: LEX-13338
W.S.M.	03-08-04	L.M.	1/2	2

D

C

B

A

NOTES:

1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12

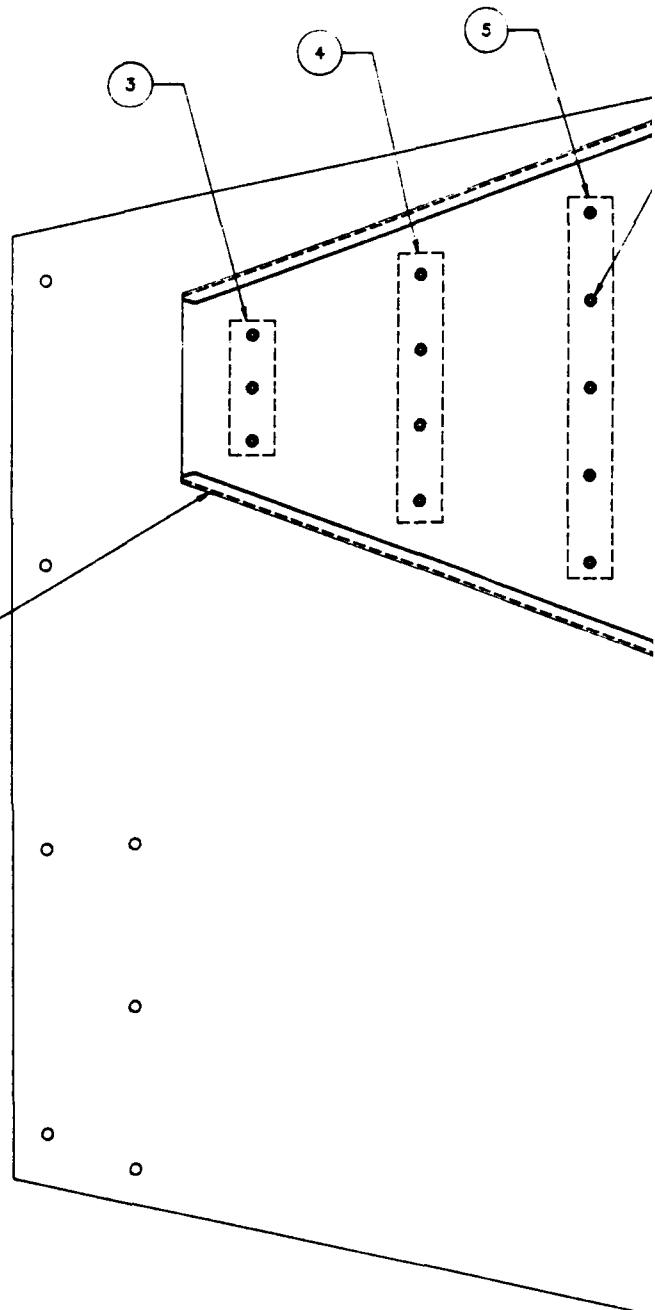
1

2

3

4

5



6

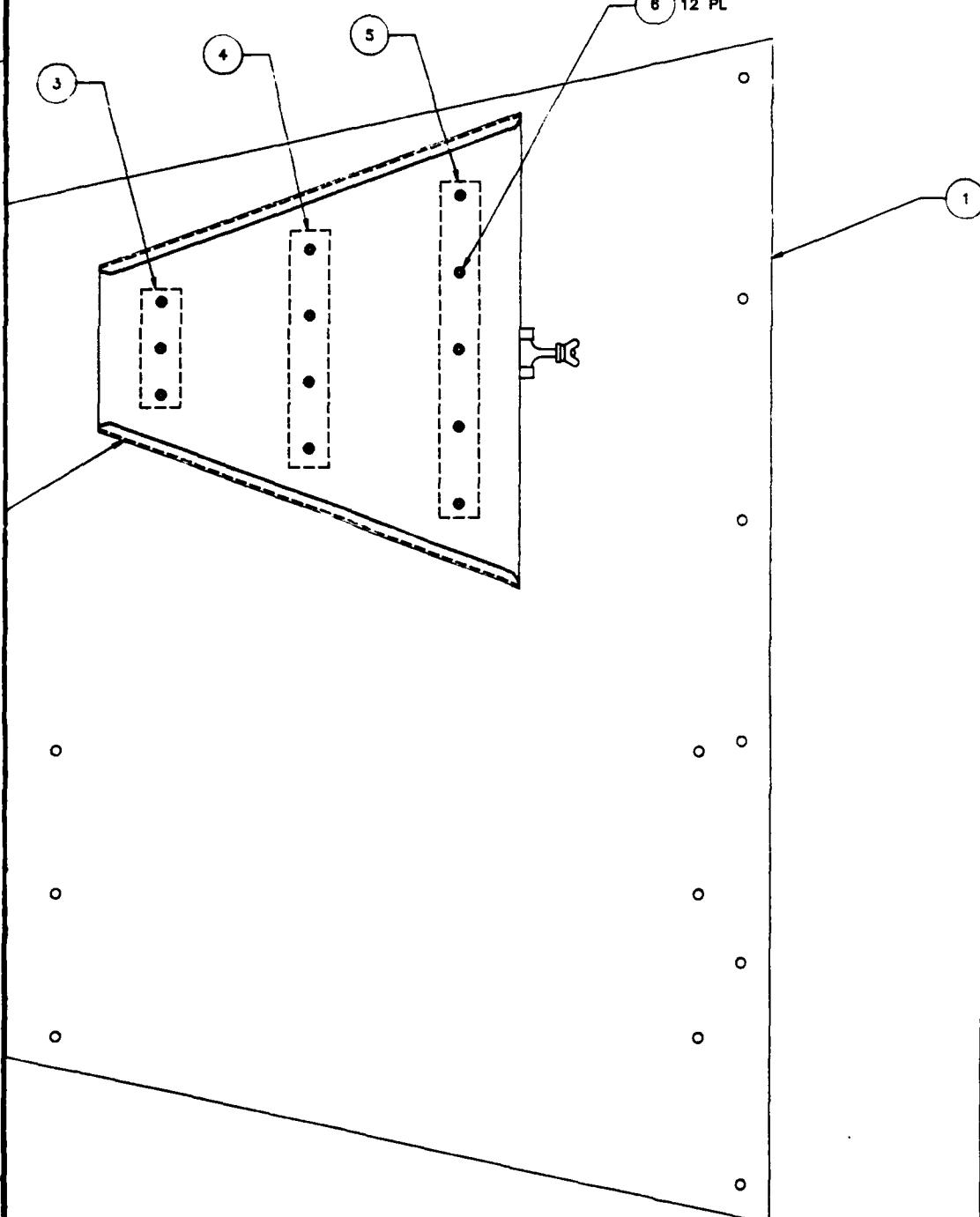
5

1

4

3

ZONE	REV
	C



12	SCREW		NASS
1	BAR		LEX-
1	BAR		LEX-
1	BAR		LEX-
1	MOUNTING BRACKET		LEX-
1	PALLET		LEX-
X	MSOGS PALLET ASSY		LEX-

		SYN	NOMENCLATURE	CODE IDENT
QUANTITY REQUIRED PER DASH NO		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS OR INCHES LENGTHS ARE IN MILLIMETERS DIA. 2 MM .079 1.5 MM 25 MM 1.000 25 MM 250 G 250 G		DRAWER NO. DAAB07-92- BY W.B.H. FOR L.M. USE
LEX-13339		UH-800		
SPEC SHEET		SPEC SHEET		
APPLICATION				

3

2

1

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	83-07-20	

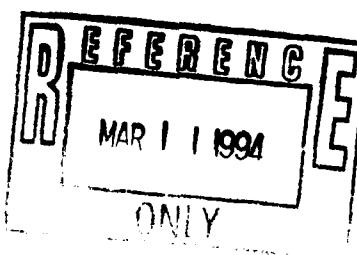
(3)

1

C

B

A



12	SCREW	NAS517-3-7	EA	6
1	BAR	LEX-13343-3	EA	5
1	BAR	LEX-13343-2	EA	4
1	BAR	LEX-13343-1	EA	3
1	MOUNTING BRACKET	LEX-13344	EA	2
1	PALLET	LEX-13340	EA	1
X	MSOGS PALLET ASSY	LEX-13339		

ITEM NUMBER
DESCRIPTION
CODE IDENTIFICATION NO.
MATERIAL/SPECIFICATION
U/N ZONE

I.D.	PARTS NO.	PARTS LIST	
		REF. NO.	MANUFACTURER
16	DAAB07-92-Z-8506	SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. LBAO LEX, KY.	S.O.F.S.A.
18	W.B.H. 83-07-20	MSOGS	
20	L.M. 83-08-06	PALLET	
22		ASSY	
D	D 7S976	LEX-13339	
DN	1/2	1 - 1	

3

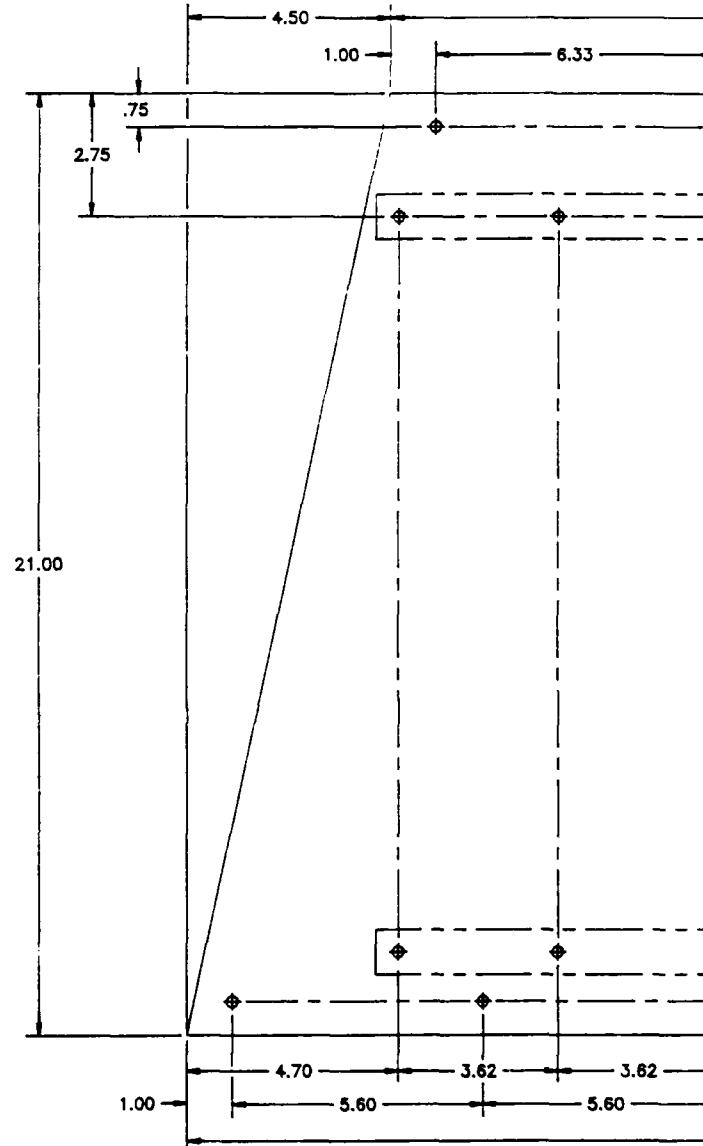
2

1

2

NOTES:

1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
6. AFTER CUTTING HONEYCOMB PANEL FILL EDGES WITH EA934 OR EQUIVALENT
7. ELECTRICAL BONDING PER MIL-B-5087



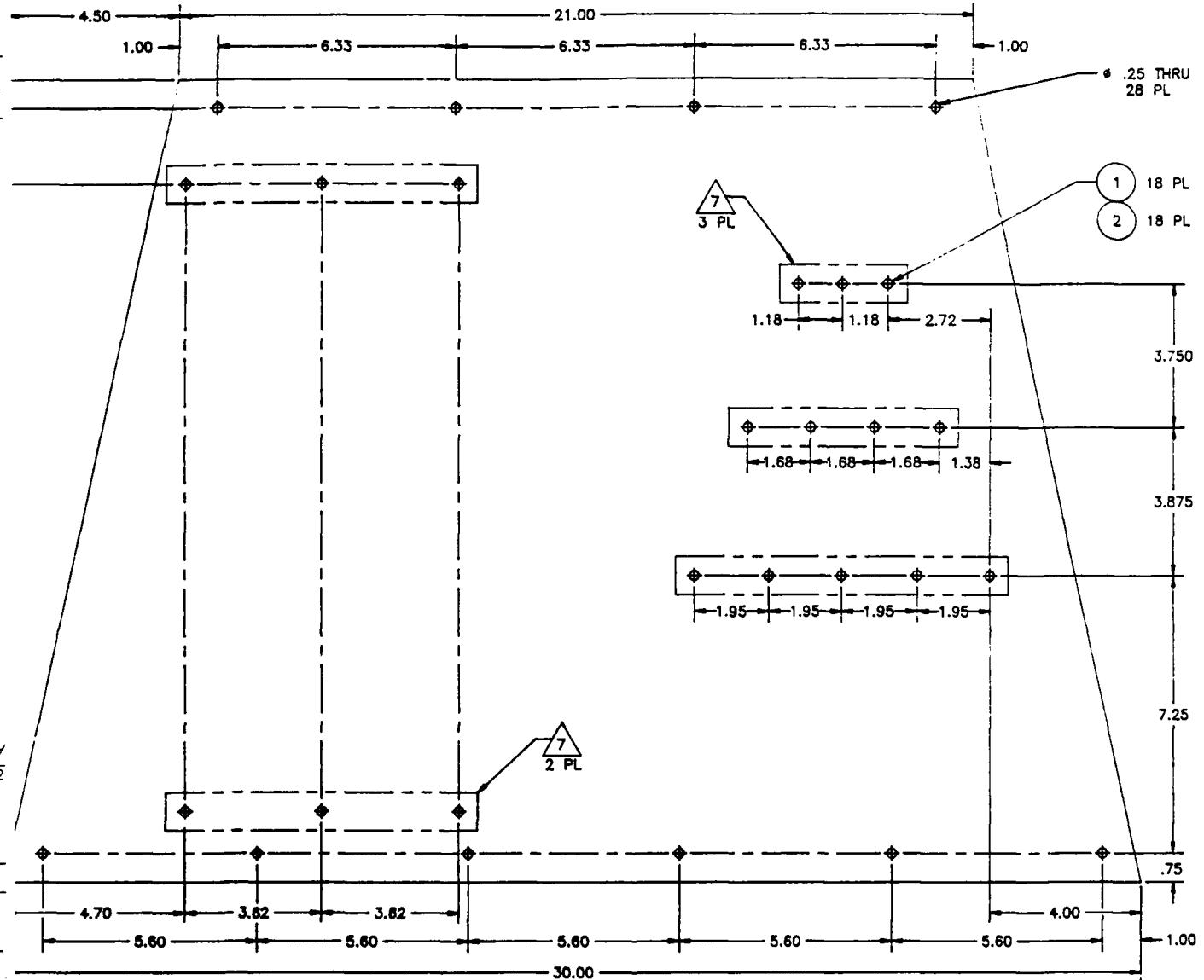
D

C

B

A

ZONE	REV	
		CAD GENER



8 7 8 5 ↑

3

2

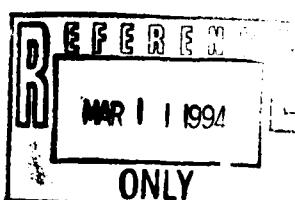
1

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
	CAD	GENERATED	93-06-28	

This technical drawing illustrates a mechanical assembly with various dimensions and part numbers:

- Top Section:** A horizontal line at the top has a dimension of **1.00**. A callout indicates a thickness of **.25 THRU 28 PL**.
- Middle Section:** A horizontal line features three diamond-shaped holes. The distance between the first two is **1.18**, and the distance from the first to the third is **2.72**. To the right, vertical dimensions are listed as **3.750** and **3.875**.
- Bottom Section:** A horizontal line contains three diamond-shaped holes. The distance between the first two is **1.68**, and the distance from the first to the third is **1.38**. To the right, a vertical dimension is given as **7.25**.
- Bottom-most Section:** A horizontal line features two diamond-shaped holes. The distance between them is **4.00**. To the right, a vertical dimension is given as **.75**.
- Bottom Reference Line:** A horizontal line at the very bottom is labeled **5.60** on the left and **1.00** on the right.
- Callouts:** Two circles labeled **1** and **2** point to specific features on the middle section of the assembly.



AR	ADHESIVE	33584	EA934		EA	2
18	INSERT		NAS1833-3- 500		EA	1
X	PALLET		LEX-11340	.50x21.25x30.25 HONEYCOMB P/N 810-11233-500		

NO. _____

PARTS LIST

SERV-AIR, INC. S.O.F.S.A.
A SUBSIDIARY OF E-SYSTEMS, INC. LIAUD LEX KY.

PALLET

1 FX-13340

D 7S976

1

1

1

- 1/2

1

3

2

1

(1)

NOTES:

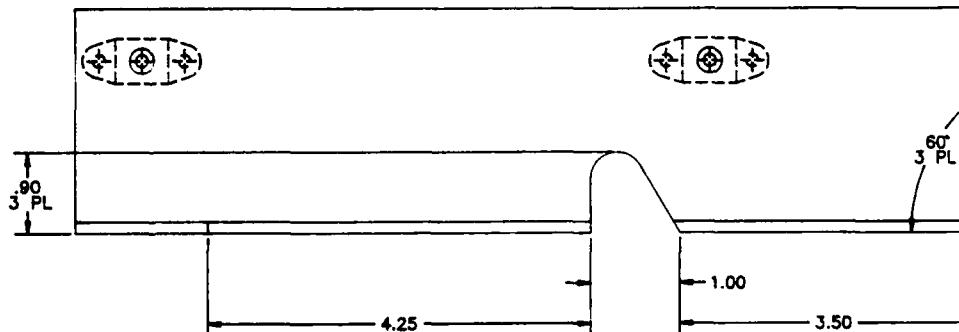
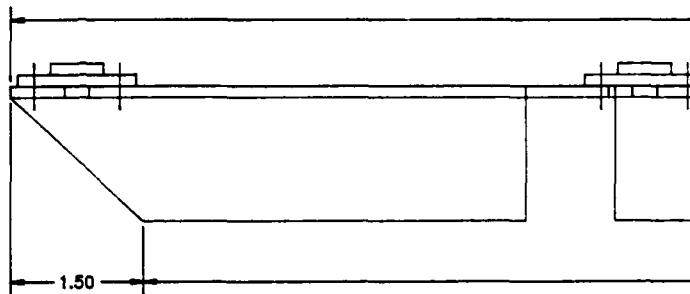
1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-130
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
6. CHEMICAL CONVERSION COAT PER MIL-C-5541, CLASS 1A EPOXY POLYAMIDE PRIME PER MIL-P-23377 TYPE 1 OR TT-P-1757, 2 COATS
7. LOCATE ITEM 1 NUTPLATES BY USING LEX-13340 PALLET AS TEMPLATE

D

C

B

A



BASIC CODE	NAS 823
BB-40320428AD	INSTALL
	BASIC C
C-COUNTER BOTH SIDES CSK 100 GRIND FL	

ZONE	REV	
		CAD GENERA

CAD GENERA

2

- 20,50 -

-17.50-

- 1.00

60
3 PI

- 34

— 1.00

— 1.00

1

1

.30 R
3 PL

.30 R
3 PL

1

MAR 1 1 1994

ONLY

REFERENCE

8	RIVET	MS20426ADJ
4	NUTPLATE	MS21076L4
X	MSOGS ANGLE, AFT	LEX-13341

QUANTITY REQUESTED PER CARD NO.

UNLESS OTHERWISE SPECIFIED
ITEMS ARE TO BE SHIPPED
IN QUANTITY

SEARCH 03-5-2000

© 1998 by **John Wiley & Sons, Inc.**

L.M. 93-08-06

BASIC CODE	NAB 523 FASTENER CODE				
RE-MS2045840	INSTALL. METHOD PER MS21518				
	<table border="1"> <thead> <tr> <th>BASIC CODE</th><th>DASH NO FOR NUTMING HEAD N/A F=FLG HEAD P/F</th></tr> </thead> <tbody> <tr> <td>C=COUNTERSINK BOTH SIDES CIR 100° AND GRIND FLUSH</td><td>DASH NO FOR LENGTH</td></tr> </tbody> </table>	BASIC CODE	DASH NO FOR NUTMING HEAD N/A F=FLG HEAD P/F	C=COUNTERSINK BOTH SIDES CIR 100° AND GRIND FLUSH	DASH NO FOR LENGTH
BASIC CODE	DASH NO FOR NUTMING HEAD N/A F=FLG HEAD P/F				
C=COUNTERSINK BOTH SIDES CIR 100° AND GRIND FLUSH	DASH NO FOR LENGTH				

APPLICATION

3

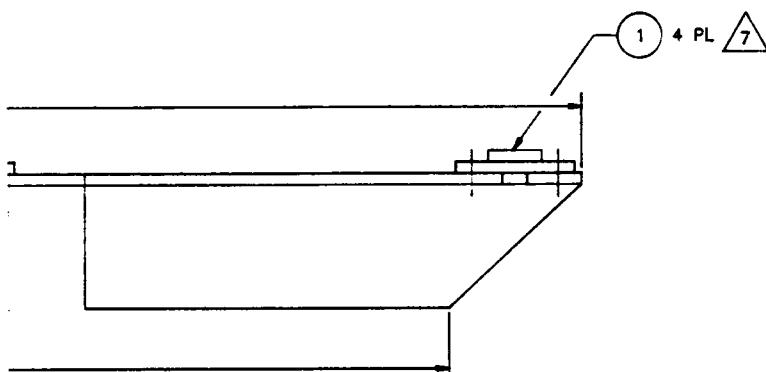
2

1

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-06-28	

3



✓ • .281 THRU
4 PL

.30 R

This technical drawing shows a component with several dimensions and a reference date. The top left dimension is .30 R 3 PL. A callout circle indicates a feature with a diameter of 2 and a thickness of .8 PL, labeled 8 PL BB 3N. To the right is a vertical slot with a height of 2.50 and a width of 1.50. A horizontal dimension of 1.00 is also present. A large rectangular area contains the text 'B D F E R E N C E' and 'MAR 1 1 1994'.

1

8

A

8	RIVET		MS20426AD3		EA	2
4	NUTPLATE		MS21076L4		EA	1
X	M5005 ANGLE, AFT		LEX-13341	60-14835 X 20.70 LONG 7075-T8511 AL QQ-A-200/11		
	ITEM NO.	DESCRIPTION	QUANTITY	MANUFACTURER NO.	MANUFACTURER DATE	W/L NO.

PARTS LIST

ERV-AIR, INC. S.O.F.S.A.
SUBSIDIARY OF E-SYSTEMS, INC. LEBANON, KY.

MSOGS
ANGLE, AFT

D 7S976 LEX-13341

1/1

2025 RELEASE UNDER E.O. 14176

6

2442620

(1)

NOTES:

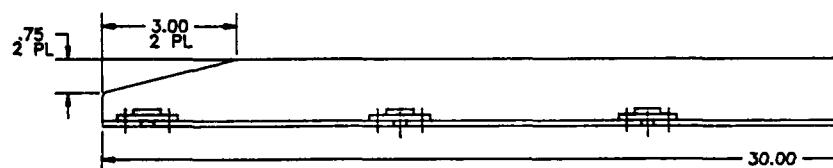
1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
6. CHEMICAL CONVERSION COAT PER MIL-C-5541, CLASS 1A EPOXY POLYAMIDE PRIME PER MIL-P-23377 TYPE 1 OR TT-P-1757, 2 COATS
7. TO LOCATE ITEM 1 NUTPLATES USE LEX-13340 PALLET AS TEMPLATE

D

C

B

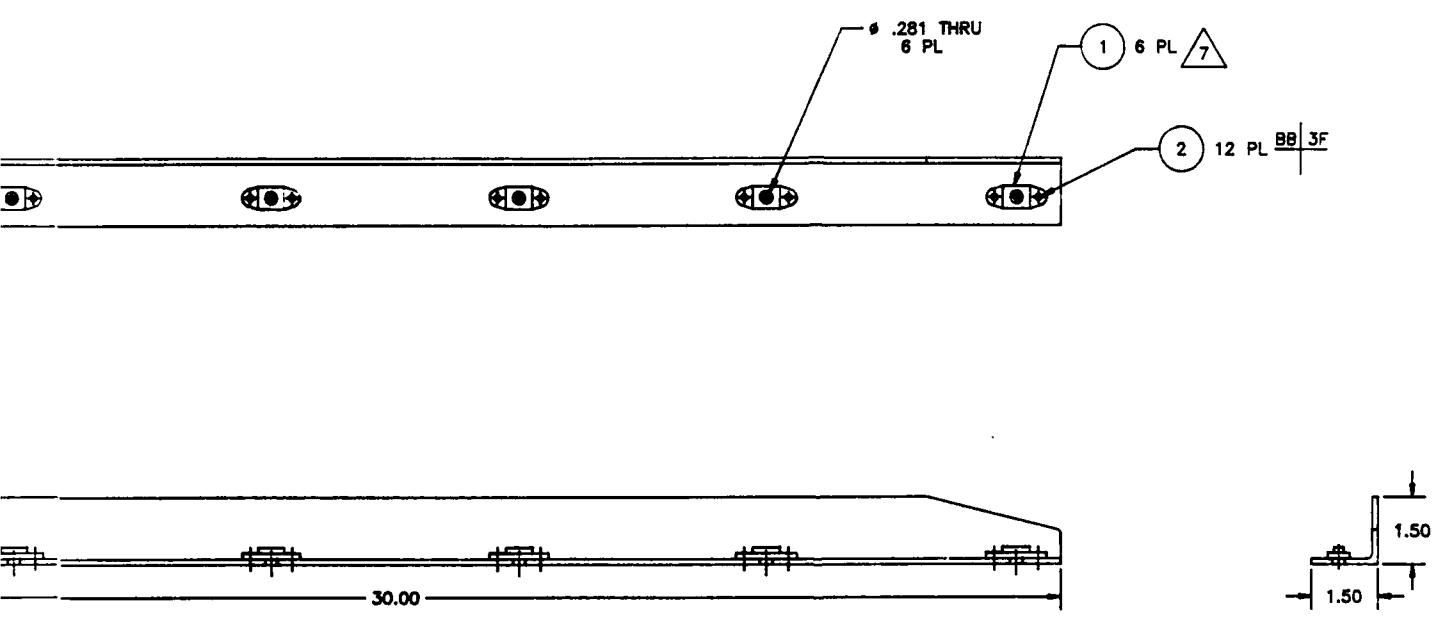
A



BASIC CODE	NAS 5
80-MS20428AD	INSTALL
	BOTH S
C-COUNTS CSK 10 GRIND 1	

2

REV CAD GENERATED



12	RIVET		MS20426AD3	
6	NUTPLATE		MS21076L4	
X	MSOGS ANGLE		LEX-13342	AND1013 7075-T65

DASH LENGTH
DASH PATTERN

3

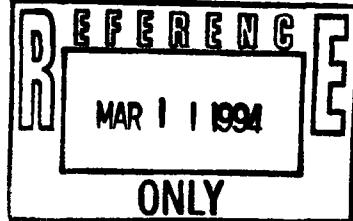
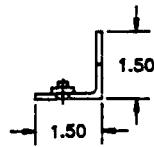
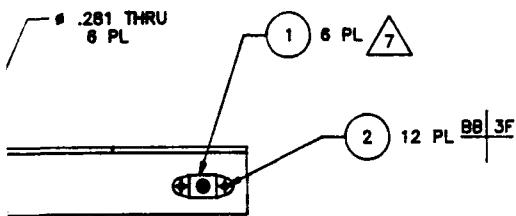
2

1

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-06-29	

(3)



12	RIVET	MS20426AD3	EA	2
6	NUTPLATE	MS21076L4	EA	1
X	MSOGS ANGLE	LEX-13342	AND10133-1403 X 30.2 LONG 7075-T6511 AL ALY QQ-A-200/11	
3 X 30.2 ALY QQ-A- SPECIFICATION	MM INCHES/INCHES	CODE IDENT	MANUFACTURER NO.	MATERIAL/SPECIFICATION
REQUIRED PER DRAWN NO				U/N ZONE
IR, IN CF E-SY	VALVE OPERATING SPECIFICATIONS AS SHOWN ON THE DRAWING	DAAB07-92-Z-B506	SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. L8AD LEX, KY.	S.O.F.S.A.
MSO GLE,	FINISH:	W.B.H. 93-06-29 L.M. 93-06-06	MSOGS ANGLE, FWD	
L	UN-555	D 7S976	LEX-13342	
APPLICATION		1/1		1 1

1

NOTES:

- 1: INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
 2. INTERPRET ABBREVIATIONS PER MIL-STD-12
 3. REMOVE BURRS AND BREAK ALL SHARP EDGES
 4. MARK PARTS PER MIL-STD-130
 5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982

6.  CHEMICAL CONVERSION COAT PER MIL-C-5541,
CLASS 1A EPOXY POLYAMIDE PRIME PER
MIL-P-23377 TYPE 1 OR TT-P-1757, 2 COATS

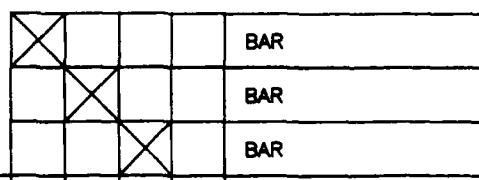
6. CHEMICAL CONVERSION COAT PER MIL-C-5541,
CLASS 1A EPOXY POLYAMIDE PRIME PER
MIL-P-23377 TYPE 1 OR TT-P-1757, 2 COATS

C

8

A

	A
-1	8.50
-2	6.00
-3	3.00



CHARTERED MEMBER, FED. BANK. NO.

QUANTITY REQUIRED PER DASH NO			
REMARKS	ITEM NO.	DESCRIPTION	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS OR FRACTION INCHES DECIMALS ± MM X ± 1 ± ° ± IN .005 .010 ± IN .005 .010
FINISH:			
LEX-13339		UH-60Q	
PRINT NUMBER		USED ON	
APPLICATION			
DRAWN BY NAME		APPROVED BY NAME	

2

1

REVISIONS

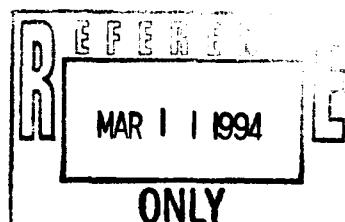
ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-07-20	

2

8

4

1



1

0000 NO. **FX-13343** **ST** **1** **REV**

			BAR		LEX-13343-3	.313x1.2x3.2 6061-T6 AL ALY QQ-A-250/11			
X			BAR		LEX-13343-2	.313x1.2x6.2 6061-T6 AL ALY QQ-A-250/11			
	X		BAR		LEX-13343-1	.313x1.2x8.7 6061-T6 AL ALY QQ-A-250/11			
-6	-1	SYM	NOMENCLATURE	CODE IDENT	IDENTIFYING NO.	MATERIAL/SPECIFICATION	U/M	ZONE	P/R NO.

PARTS LIST

A

CONTRACT NO.

SERV-AIR, INC.

S.O.F.S.A.

A SUBSIDIARY OF E-SYSTEMS, INC. LBAD LEX, KY.

BAR

6 78876

LEX-13343

2

1

D

C

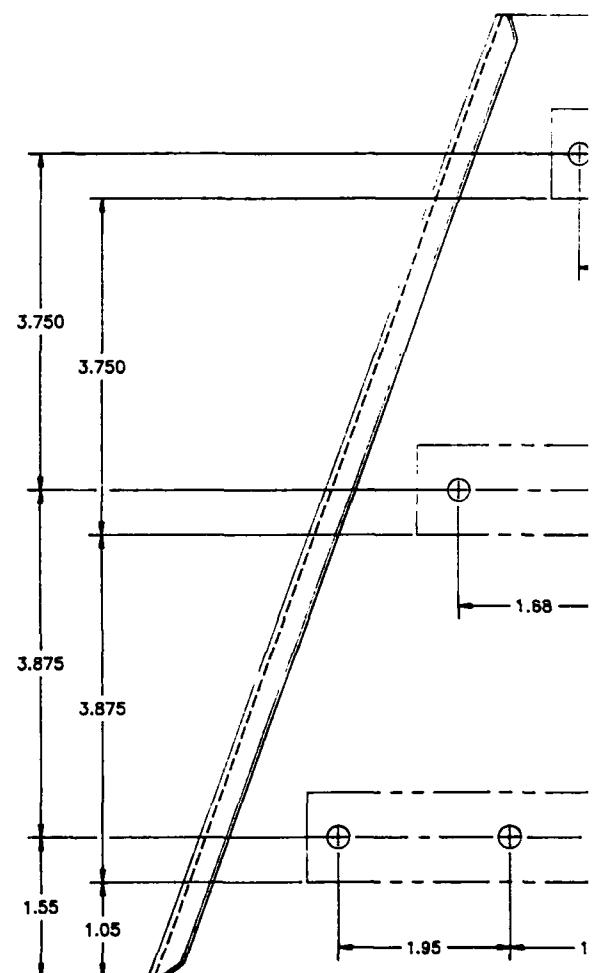
B

A

(1)

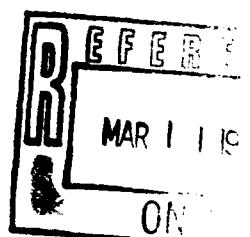
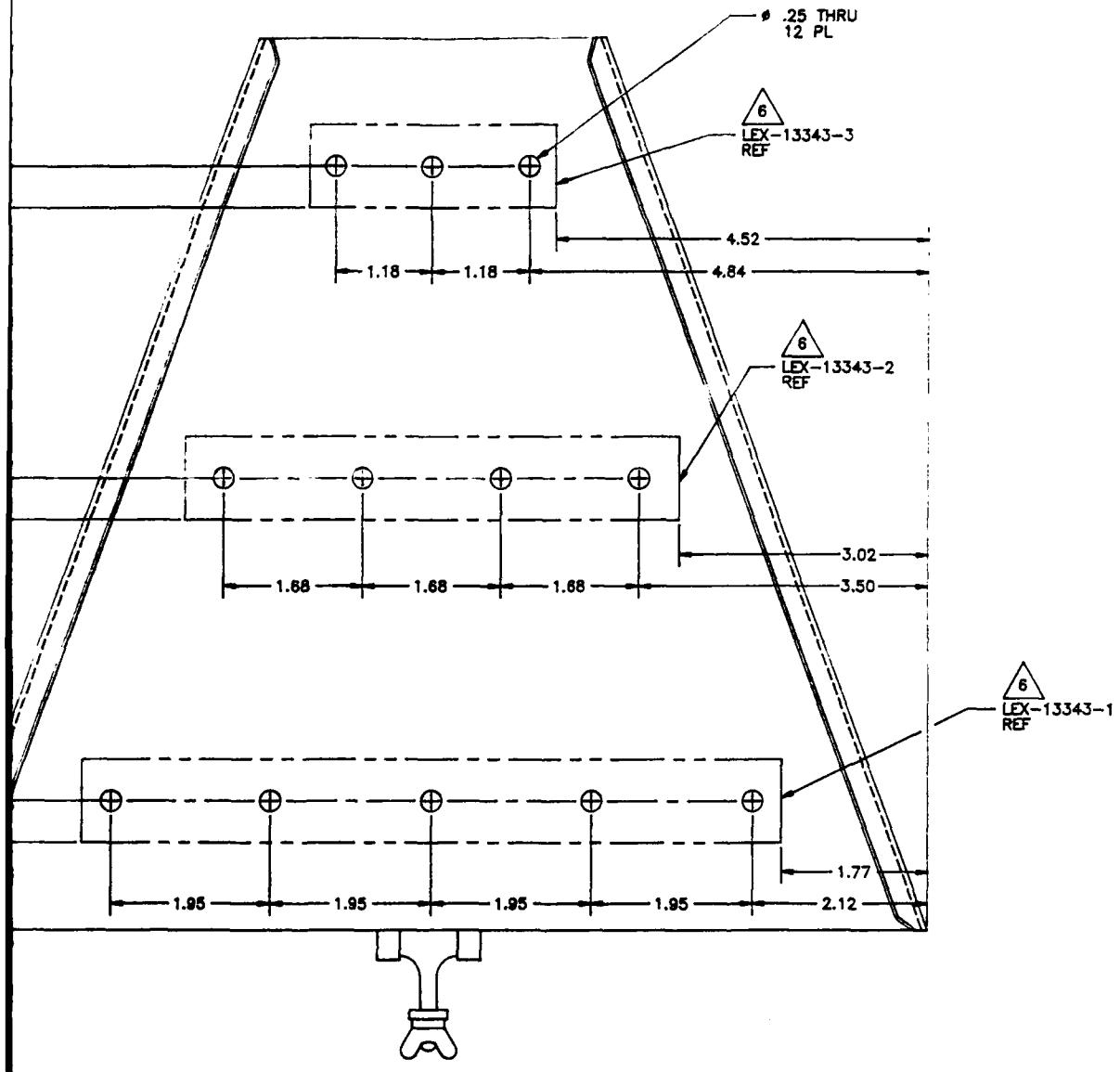
NOTES:

1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982
6. LOCATE LEX-13343-1, -2, & -3 AS SHOWN
& MATCH DRILL



(2)

REVIS	
ZONE	REV
	CAD GENERATED



QUANTITY REQUIRED PER DASH NO	SYM	NOMENCLATURE	CODE IDENT	PARTS LIST	
				IDENTIFYING NO.	MATE
		UNLESS OTHERWISE SPEC'D DIMENSIONS ARE IN INCHES ALL ANGLES ARE IN DEGREES MIN. 1/8 IN. MAX. 1/4 IN.		DAAB07-92-Z-B506	SERV A SUBSIDIARY
				RE. W.B.H. 03-07-20	
				RE. I.M. 03-08-06	
				RE. S.A.	
				D 7S97E	DATE 03-08-06
		APPLICATION			1/1

REVISIONS

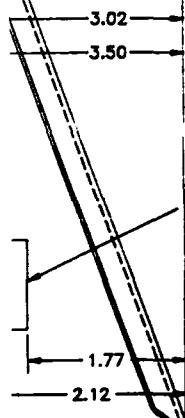
ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-07-20	

(3)

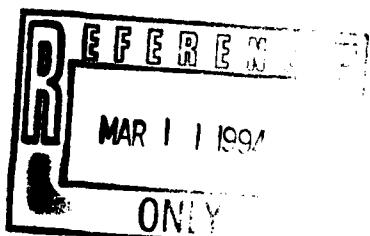
.25 THRU
12 PL

-13343-3

6
- LEX-13343-2
REF



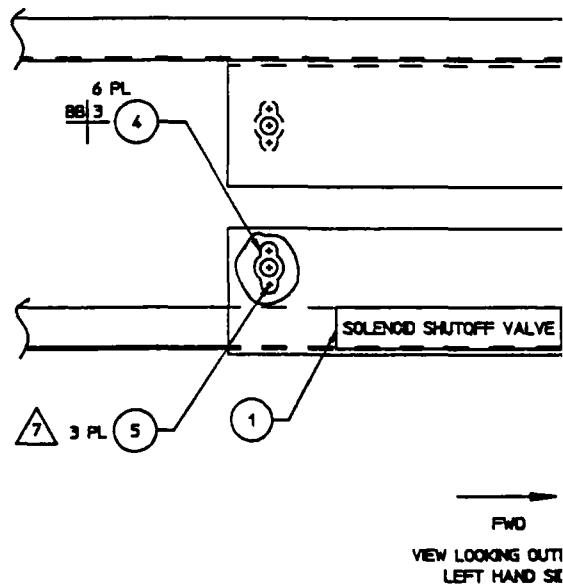
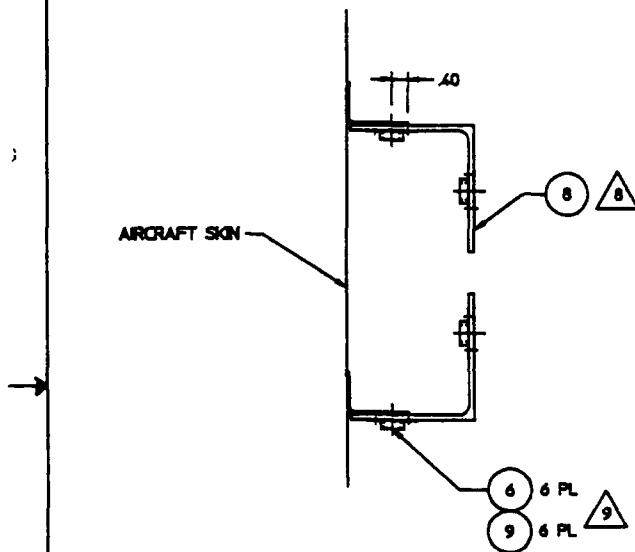
6
LEX-13343-1
REF



<input checked="" type="checkbox"/>	MSOGS MOUNTING BRACKET	CODE IDENT	LEX-13344	IDENTIFYING NO.	MS90341	U/N	ZONE	SP
PARTS LIST								
E-SYSTEMS, INC. MSOGS MOUNTING BRACKET REF. NO. DAAB07-92-Z-B506 W.B.H. 93-07-20 L.M. 93-08-08		SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. LIND LEX, KY. MSOGS MOUNTING BRACKET D 7S976 LEX-13344 1/1 1						

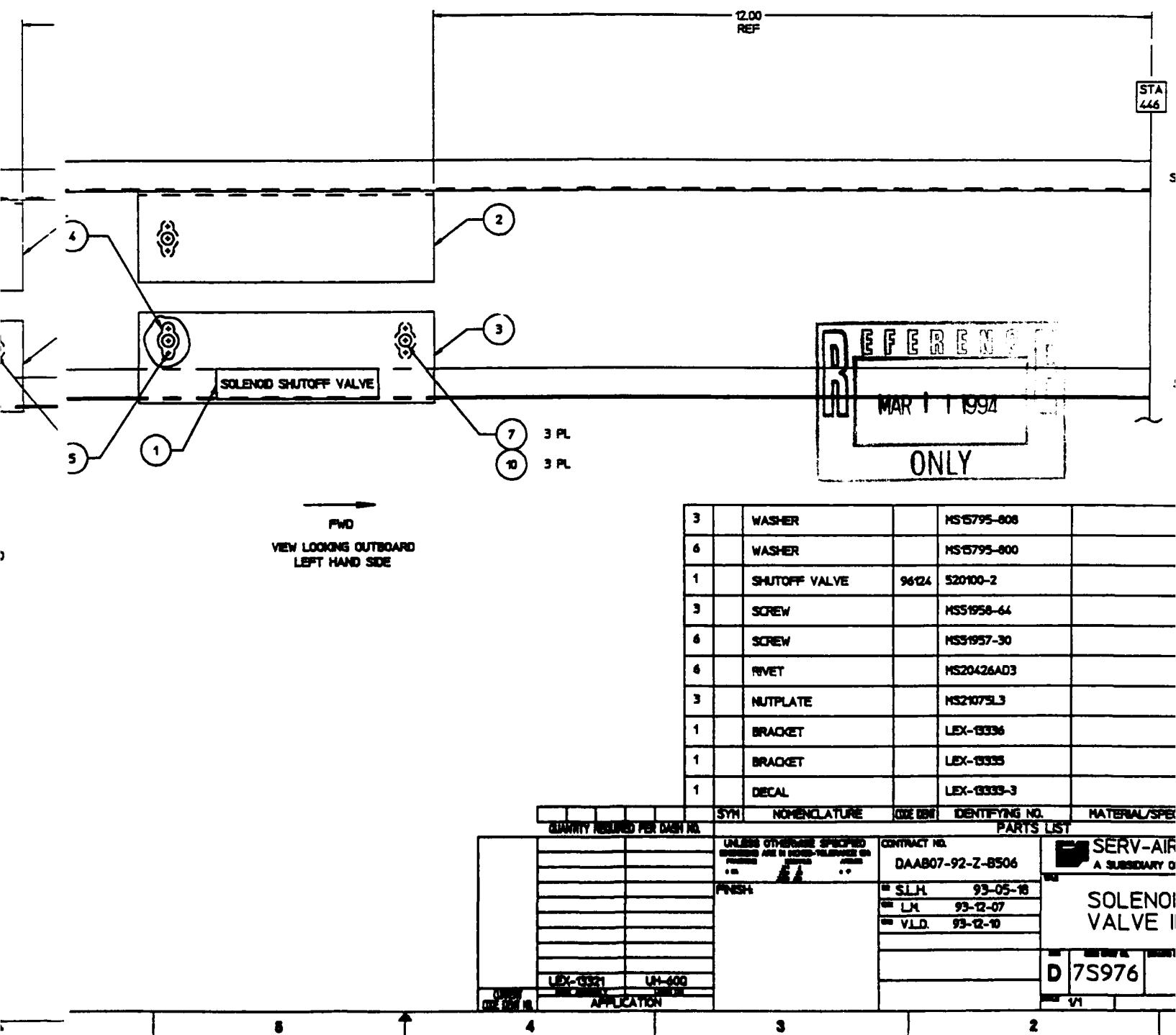
NOTES:

- 1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100**
 - 2. INTERPRET ABBREVIATIONS PER MIL-STD-12**
 - 3. REMOVE BURRS AND BREAK ALL SHARP EDGES**
 - 4. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982**
 - 5. IDENTIFICATION CODE OF FASTENERS PER NAS 523**
 - 6. INSTALLATION OF FASTENERS PER MIL-STD-1515**
 - 7. LOCATE FIND NUMBER 4, 3 PL. AS SHOWN USING SOLENOID
SHUTOFF VALVE AS TEMPLATE TO LOCATE HOLES**
 - 8. SHUT OFF VALVE NOT SHOWN FOR CLARITY**
 - 9. USE LEX-13335 AND LEX-13336 BRACKETS FOR TEMPLATES FOR
Ø .156 HOLES**



VIEW LOOKING OUT
LEFT HAND SIDE

(2)



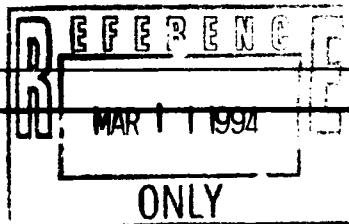
DATE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-05-10	

(3)

12.00
REFSTA
446

STRINGER 14

STRINGER 15



3	WASHER		MS15795-808		EA	10
6	WASHER		MS15795-800		EA	9
1	SHUTOFF VALVE	96124	S20100-2		EA	8
3	SCREW		MS31958-64		EA	7
6	SCREW		MS31957-30		EA	6
6	RIVET		MS20426A03		EA	5
3	NUTPLATE		MS2107SL3		EA	4
1	BRACKET		LEX-13336		EA	3
1	BRACKET		LEX-13335		EA	2
1	DECAL		LEX-13333-3		EA	1

SYN	NONENCLATURE	QTY/REV	IDENTIFYING NO.	MATERIAL/SPECIFICATION	U/M	ZONE	PRO NO.
PARTS LIST							
UNLESS OTHERWISE SPECIFIED	CONTRACT NO.			SERV-AIR, INC.	SOPSA		
			DAAB07-92-Z-8506	A SUBSIDIARY OF E-SYSTEMS INC. LIAO LEX, NY.			
FINISH				SOLENOID SHUT OFF VALVE INSTALLATION			
UM-400				D 7S976 LEX-13345			
LOCATION				1/1	1	• 1	

(1)

NOTES:

- 1: INTERPRET DRAWING PER MIL-T-31C00 AND MIL-STD-100
- 2: INTERPRET ABBREVIATIONS PER MIL-STD-12
3. PICK-UP EXISTING RIVET PATTERN. NUMBER OF RIVETS MAY VARY AMONG AIRCRAFT
4. RIVET THROUGH ITEM 3 FRAME, ITEM 4 SCREEN, A/C SKIN AND ITEMS 6-7 SUPPORTS RESPECTIVELY
5. RIVET THROUGH EACH ITEM 5 ANGLE AND EXISTING STRINGER 2 PLACES AND THROUGH EACH ITEM 5 ANGLE AND ITEMS 6-7 2 PLACES
6. AFTER INSTALLATION TOUCH-UP EXTERIOR WITH CARC PAINT PER MIL-C-46168 CC #34031

D

C

B

A

BASIC CODE	NAS 52
ARH=CR3213 BJ=MS20470AD	INSTALL
C=COUNTER BOTH SIDE CSK 100 GRIND FL	BASIC

5

4

3

2

2

ZONE	REV	DESCRIPTION
		CAD GENERATED

REVISIONS

DESCRIPTION

D GENERATED

REFERENCE

MAR 1 1 1999

ONLY

28	RIVET		MS20426AD5	
56	RIVET	11815	CR3213-5	
32	RIVET	11815	CR3213-4	
2	WASHER		AN960C8L	
2	SCREW		MS51957-57	
8	WASHER		MS515795-808	
8	SCREW		MS51958-63	
1	FRAME		LEX-13353	
2	CHANNEL		LEX-13354	
2	SUPPORT		LEX-13352-2	
2	SUPPORT		LEX-13352-1	
8	ANGLE		LEX-13351	
1	SCREEN		LEX-13355	
1	FRAME		LEX-13356	
1	FAN	2W924	PASPT 1624	
1	HEAT EXCHANGER	16630	6501-12	
☒	HEAT EXCHANGER INSTALLATION		LEX-13349	
SYN	NOMENCLATURE	CODE IDENT	IDENTIFYING NO.	MATERIAL/SP

PARTS LIST

— 1 —

5

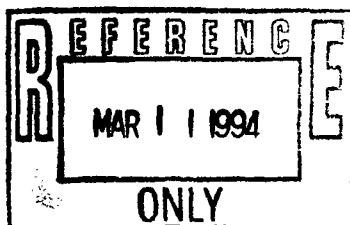
4

3

2

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	CAD GENERATED		03-08-09	

3



28	RIVET		MS20426AD5				16
56	RIVET	11815	CR3213-5				15
32	RIVET	11815	CR3213-4				14
2	WASHER		AN960C8L				13
2	SCREW		MS51957-57				12
8	WASHER		MS515795-808				11
8	SCREW		MS51958-63				10
1	FRAME		LEX-13353				9
2	CHANNEL		LEX-13354				8
2	SUPPORT		LEX-13352-2				7
2	SUPPORT		LEX-13352-1				6
8	ANGLE		LEX-13351				5
1	SCREEN		LEX-13355				4
1	FRAME		LEX-13356				3
1	FAN	2W924	PASPT 1624				2
1	HEAT EXCHANGER	16630	6501-12				1
X	HEAT EXCHANGER INSTALLATION		LEX-13349				
SYN	NONREVERSIBLE	CODE FRONT	IDENTIFYING NO.	MATERIAL / SPECIFICATION	U/N	TIME	DIS

RED PER DASH NO		PARTS LIST	
MS	UNLESS OTHERWISE SPECIFIED ITEMS ARE TO BE SUPPLIED BY THE CONTRACTOR	SERV-AIR, INC.	
		S.O.F.S.A. A SUBSIDIARY OF E-SYSTEMS, INC. LBAO LEX, KY.	
ITEM NO. DAAB07-92-Z-B5C6		HEAT EXCHANGER INSTALLATION	
MR. W.B.H. 93-08-09 L.M. 93-08-10 		D 7S976 LEX-13349	
		1/1	
		1 - 3	

8

7

6

5

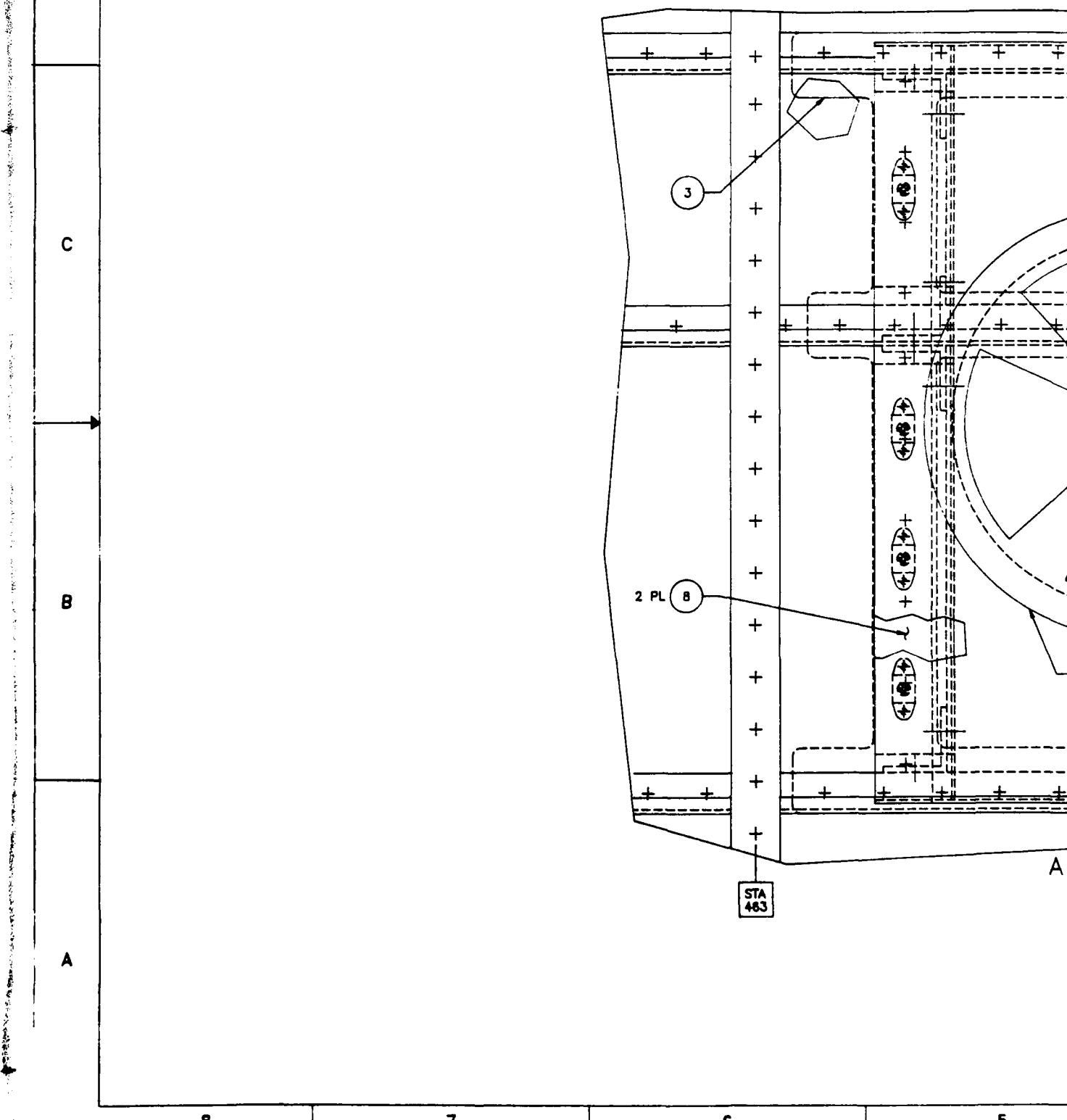
D

C

B

A

(1)



8

7

6

5

6

5

1

4

3

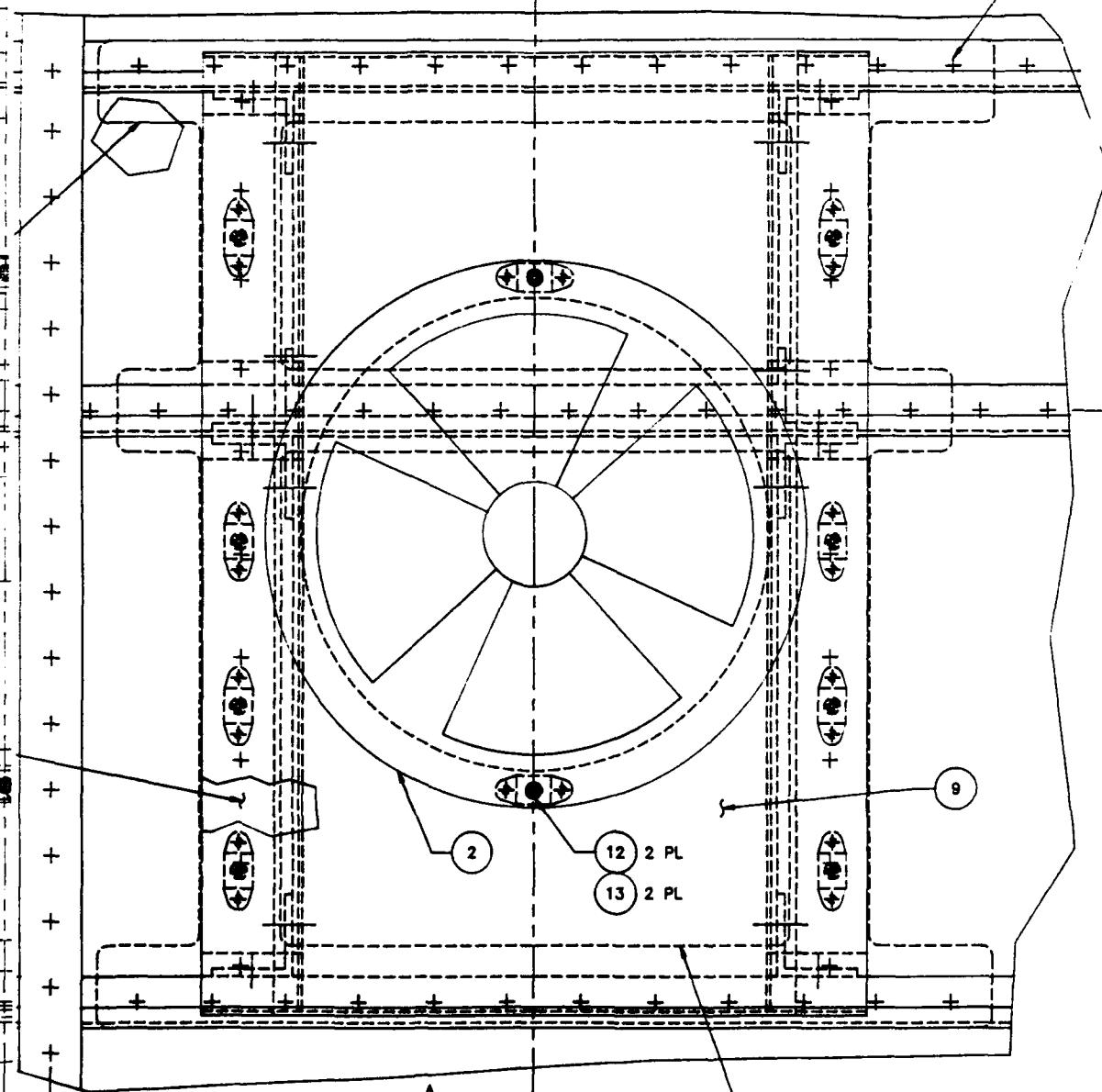
2

ZONE	REV	CAD GENERATED
------	-----	---------------

(2)

UP
FWD

A ←



I-PILOT
LOOKING
STA 463

M 4 S
ED FOR

CO-PILOT SIDE
LOOKING OUTWD
ITEM 4 SCREEN
OMITTED FOR CLARITY

FOR CUTOUTS
SEE LEX-13350

SR

5

4

3

2

REF ID:	DAAB07-92-Z-0506
ISSUED BY:	W.B.H.
DATE ISSUED:	93-08-10
RECORDED BY:	L.M.
DATE RECORDED:	93-08-16

D

3

2

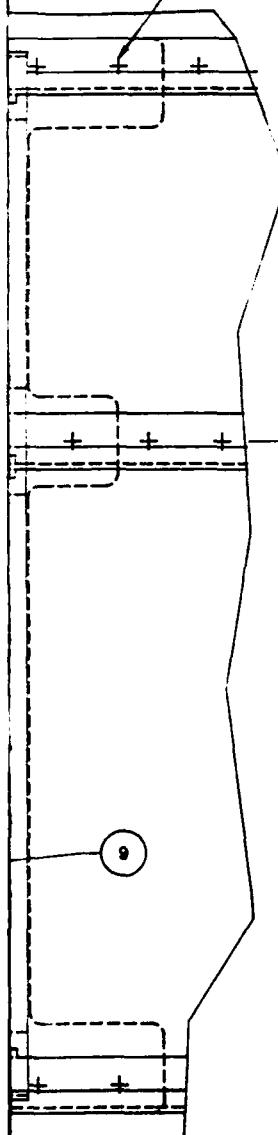
1

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-08-10	

(3)

15 56 PL ARN 5N + 3 4

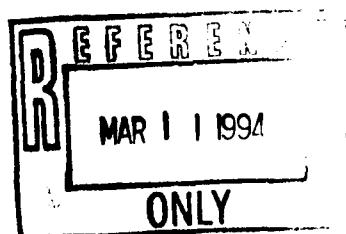


D

C

B

A

UTOUTS
X-13349

DAAB07-92-Z-8506	D	7S976	LEX-13349
W.S.H.	93-08-10		
L.M.	93-08-10		

3

2

1

8

7

6

5

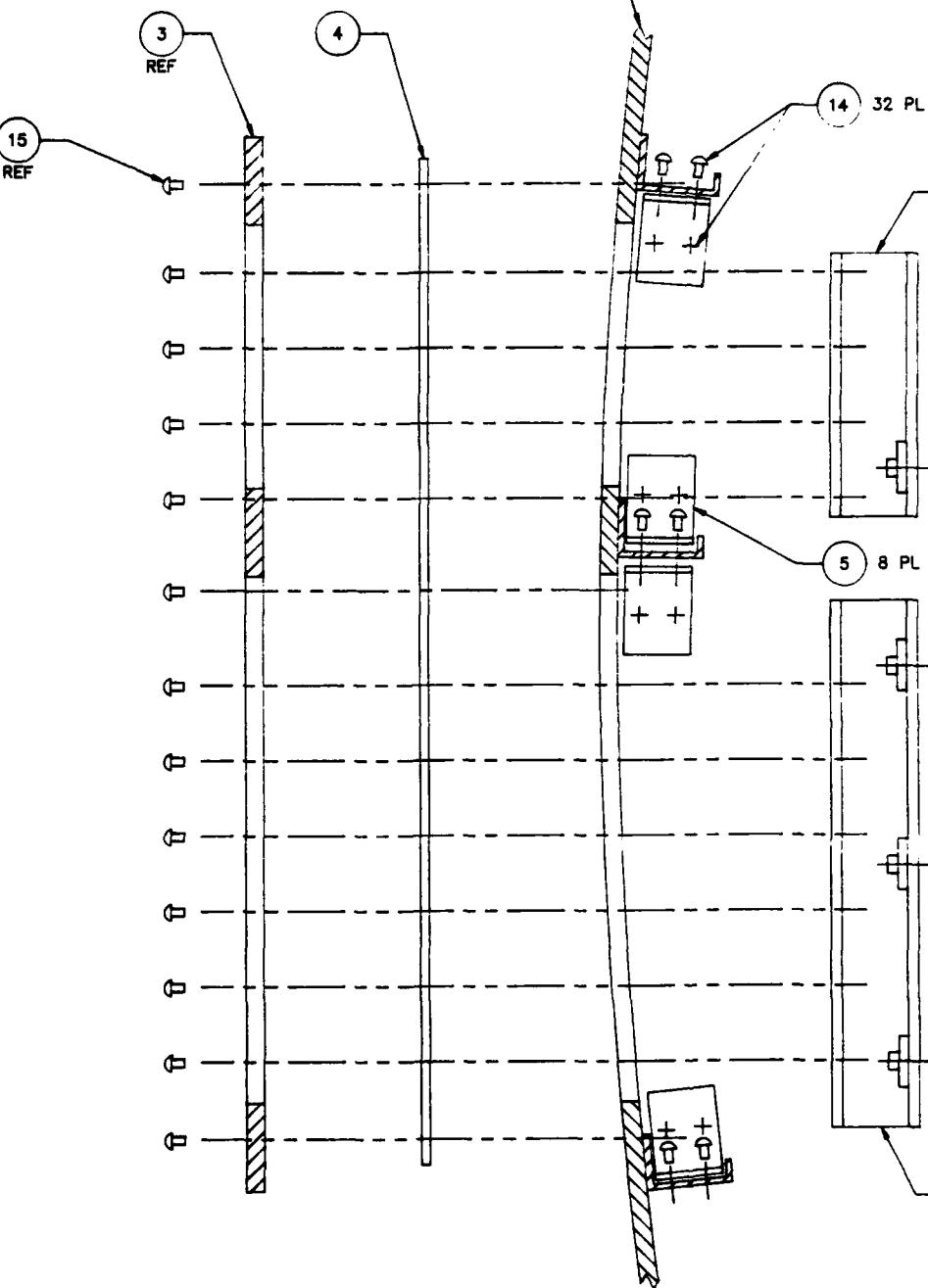
D

C

B

A

1



5

1

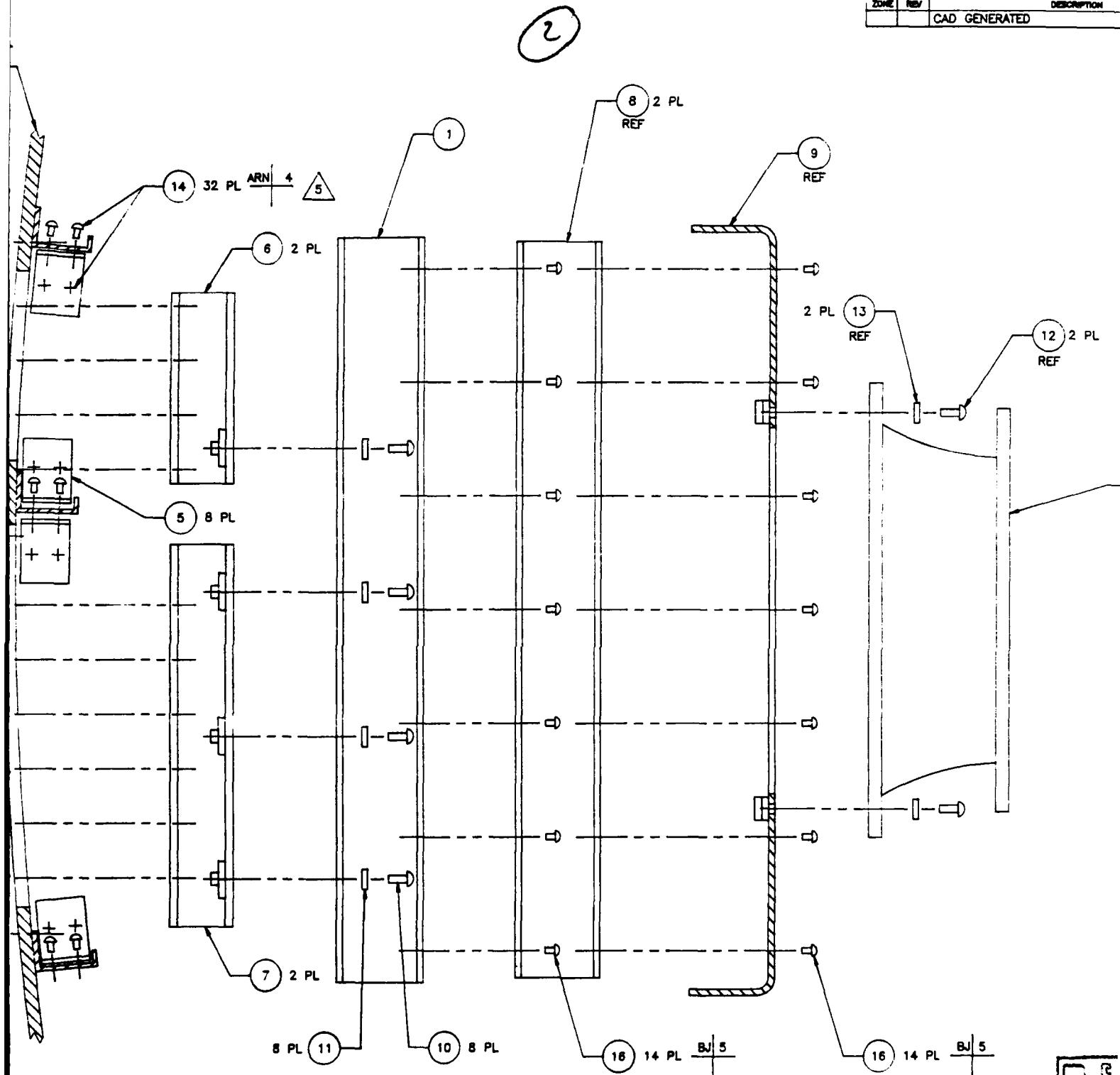
4

3

2

REVISION

ZONE	REV	DESCRIPTION
		CAD GENERATED



DAAB07-92-Z-B506	D	7S976
W.B.H.	93-08-11	
W.L.M.	93-08-16	NONE

3

2

1

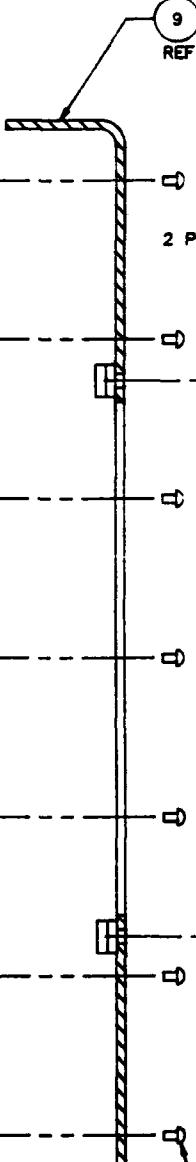
REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	83-08-11	

(3)

8 2 PL
REF

9 REF

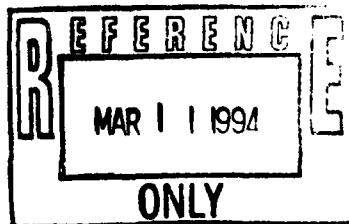


2 REF

C

B

A



DAAB07-92-Z-8508	D 7S976	LEX-13349
W.B.H. 83-08-11		
F.L.M. 83-08-16	NONE	3 3

ONLY

LEX

3

2

1

D

NOTES:

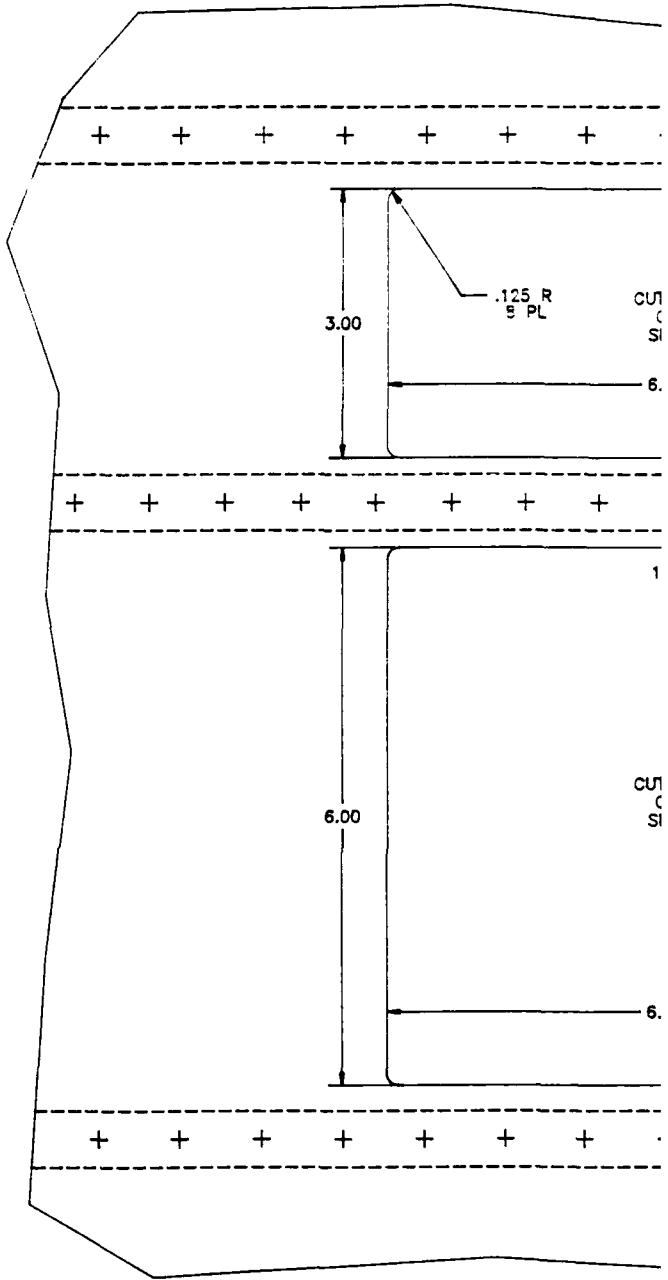
1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
5. AFTER CUTTING APPLY MIL-C-5541 CLASS 1A ALODINE, THEN PRIME PER MIL-P-23377, TYPE 1 OR TI-P-1757 2 COATS. PAINT PER MIL-C-46168 CC #34031

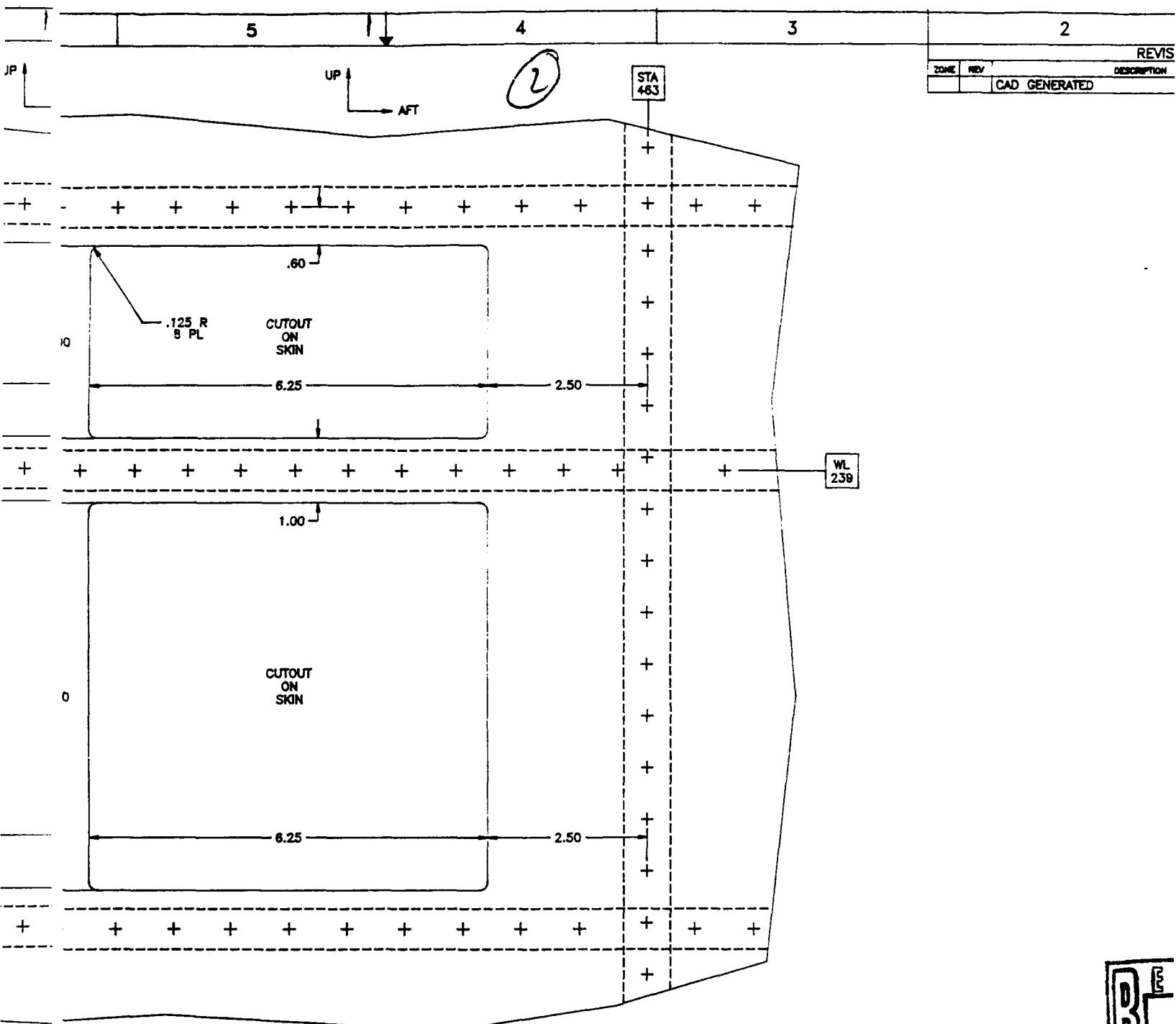
(1)

C

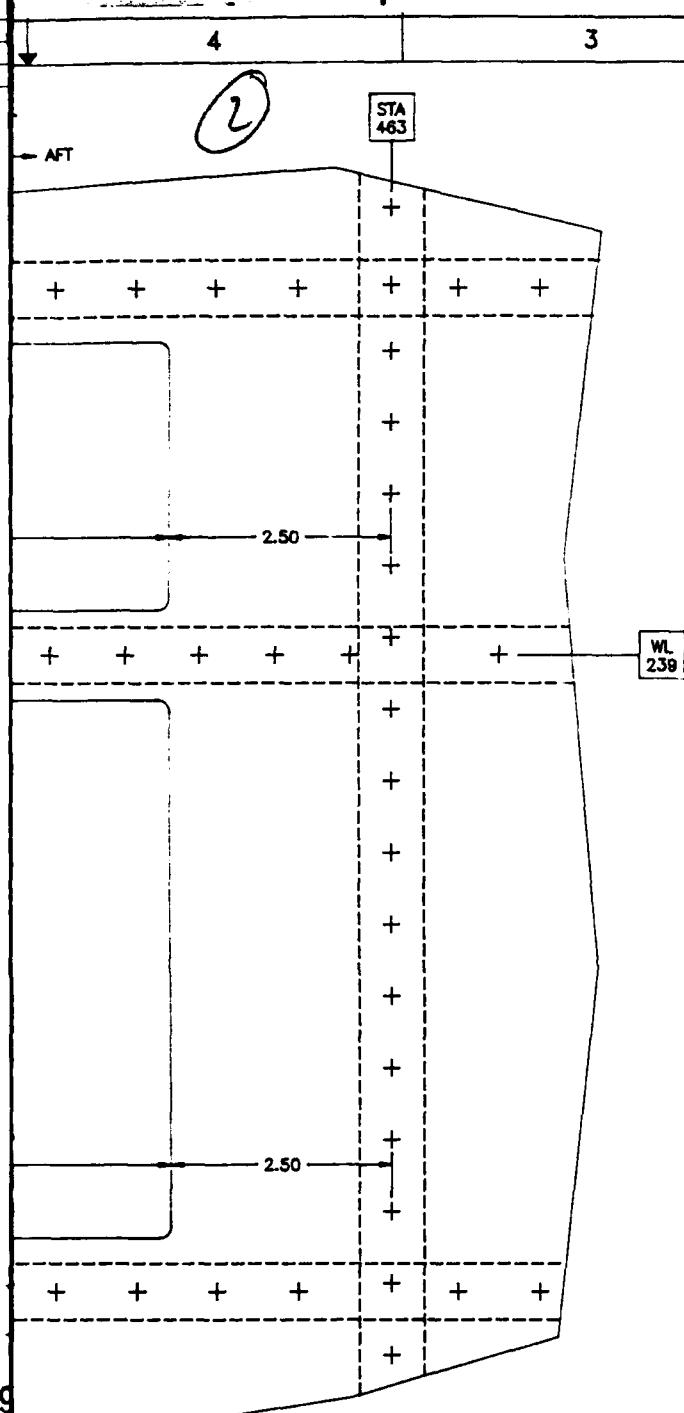
B

A





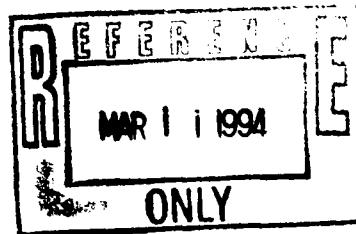
		FRAME CUTOUT	LEX-13350			
		SYN	NOMENCLATURE	CODE IDENT	IDENTIFYING NO.	MATERIAL
QUANTITY REQUIRED PER DASH NO		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES-MILLIMETERS PROPORTIONAL S. IN. M. MM.		DRAWING NO. DAAB07-92-Z-8506		PARTS LIST
		FINISH:		SERV- A SUBSIDIARY		
		5				
LEX-13350		UN-600				
REV. ADDRESS		PRINTED				
APPLICATION						
				D 7S976		
				1/1		



REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-08-09	

३



(1)

NOTES:

1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
6. CHEMICAL CONVERSION COAT PER MIL-C-5541, CLASS 1A EPOXY POLYAMIDE PRIME PER MIL-P-23377 OR TT-P-1757 TYPE 1, 2 COATS

C

B

A

.75



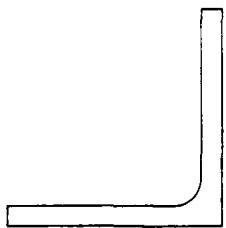
	X	ANGLE
SYM	NOMENCLATURE	
QUANTITY REQUIRED PER DASH NO		
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES-TOLERANCE
		FRACTION DECIMAL
	\pm NA	$X \pm .1$
		$XX \pm .05$
		$XXX \pm .015$
		FINISH:
		6
	LEX-13349	UH-60Q
CURRENT CODE SHEET, NO.	HOST ASSEMBLY	VIEW ON
		APPLICATION

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-08-09	

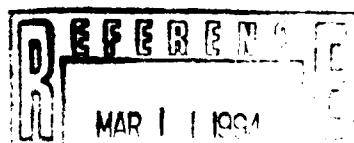
(2)

C



B

REF ID: LEX-13351 1
REV: A
DATE: MAR 11 1994
ONLY

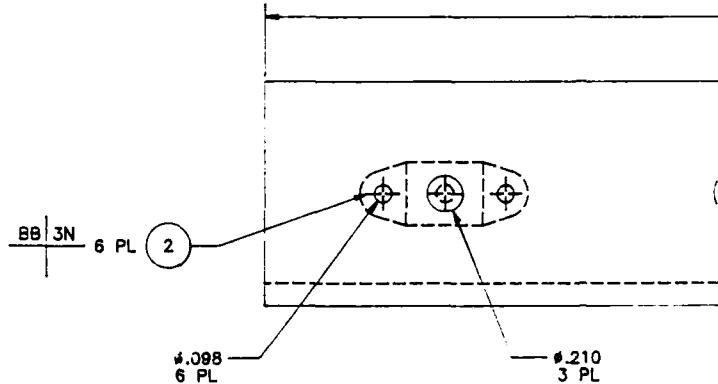


A

<input checked="" type="checkbox"/>	ANGLE	CODE IDENT	IDENTIFYING NO.	.094x.95 AND 10133-1002		
				7075-T6511	QQ-A-200/11	U/M
ED PER DASH NO	SYM	NOMENCLATURE	MATERIAL/SPECIFICATION			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES-TOLERANCES ON DIMENSIONS ARE AS FOLLOWS:		CONTRACT NO.		S.O.F.S.A.		
DIMENSIONS		DAAB07-92-Z-B506		A SUBSIDIARY OF E-SYSTEMS, INC. LBAD LEX, KY.		
± .00		DR. W.B.H. 93-08-09				
.00 ± .005		CNC L.M. 93-08-16				
.00 ± .010		DRW				
FINISH:				ANGLE		
6						
UH-600 WIND ON		SIZE	CODE IDENT NO.	DRAWN BY		
CATION		C 7S976		LEX-13351		
		ONLY 2/1		SHEET 1 of 1		

NOTES:

1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
6. IDENTIFICATION CODE OF FASTENERS PER NAS-523
7. INSTALLATION CODE OF FASTENERS PER MIL-STD-1515
8. CHEMICAL CONVERSION COAT PER MIL-C-5541, CLASS 1A EPOXY POLYAMIDE PRIME PER MIL-P-23377 TYPE 1 OR TT-P-1757, 2 COATS
9. USE HEAT X-CHANGER PN/16630 CAGE 6501-12 TO DETERMINE #.210 HOLE AND ITEM 1 NUTPLATE LOCATION

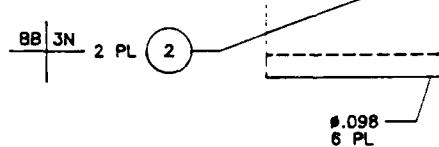


D

C

B

A



BASIC CODE	NAS 51
BB-MS20428AD	INSTAL
C-COUNTED BOTH SS	
CSK 10° GRIND F	

5

4

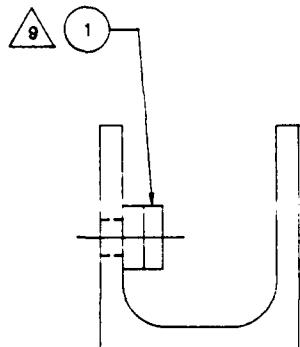
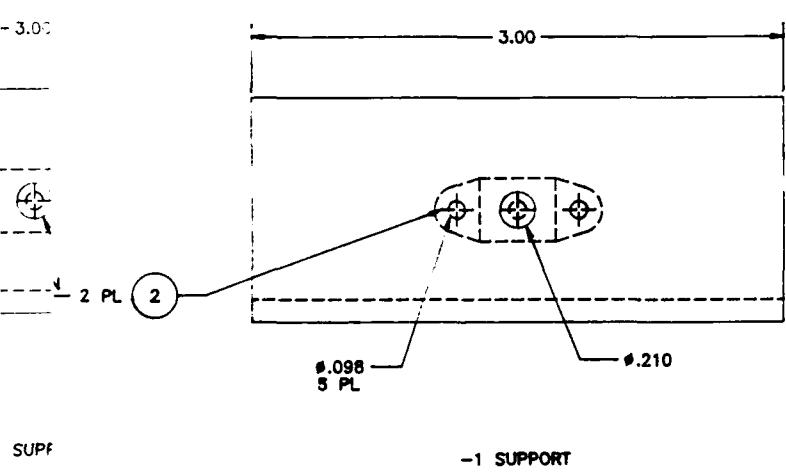
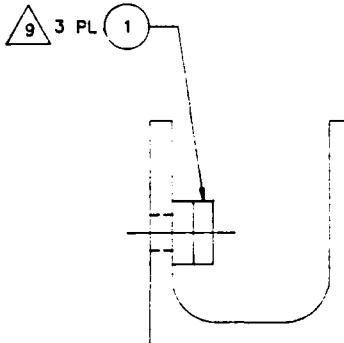
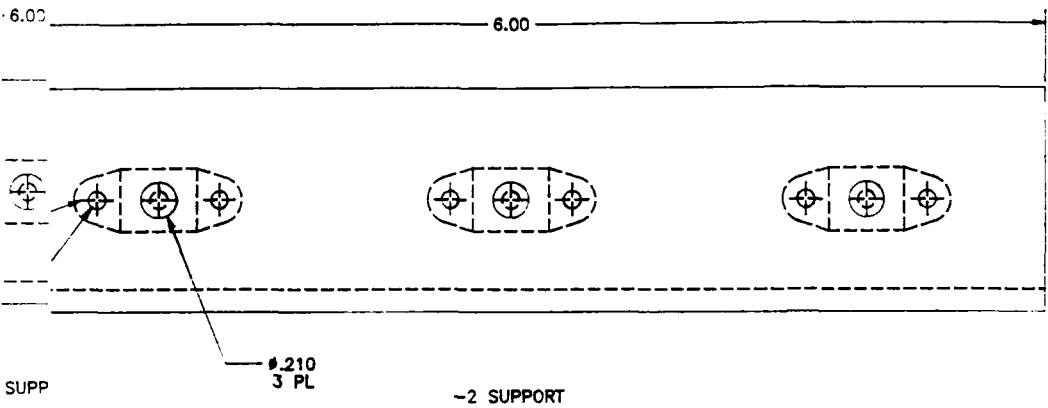
3

2

REVISK

ZONE	REV	DESCRIPTION
		CAD GENERATED

(2)



BASIC CODE		NAS 823 FASTENER CODE		QUANTITY REQUIRED PER DASH NO	UNLESS OTHERWISE SPECIFIED		FINISH:	PARTS LIST
88-MS20426AD0		INSTALL. RIVETS PER MS1515			RECOMMENDED FOR DASH NO			
BASIC CODE	DASH NO FOR DIA	W.H. 100% HEAD H/3	F.H. 100% HEAD F/3		1	2		
					3	4		
					5	6		
					7	8		
					9	10		
C-COUNTERSINK BOTH SIDES CIRK 100° AND ORING FLUSH		DASH NO FOR LENGTH		LHD-13346	UH-802			
				PER DASH NO	PER DASH NO			
				APPLICATION				

RECOMMENDED FOR DASH NO

UNLESS OTHERWISE SPECIFIED

RECOMMENDED FOR DASH NO

FINISH:

PARTS LIST

DAAB07-92-Z-B506

SERV-A SUBSIDY

W.B.H. 83-08-08

L.M. 83-08-18

D 7S976

2/1

3

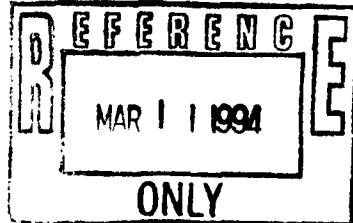
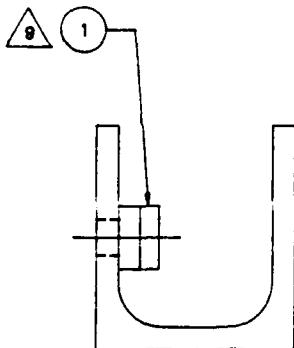
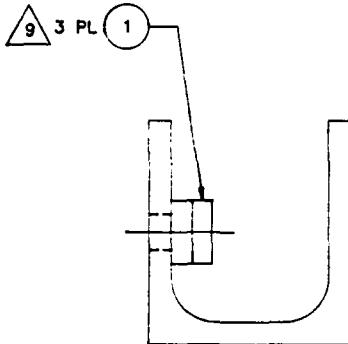
2

1

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
	CAD GENERATED		93-08-09	

3



NOTES:

1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
6. IDENTIFICATION CODE OF FASTENERS PER NAS-523
7. INSTALLATION CODE OF FASTENERS PER MIL-STD-1515
8. CHEMICAL CONVERSION COAT PER MIL-C-5541, CLASS 1A EPOXY POLYAMIDE PRIME PER MIL-P-23377 TYPE 1 OR TT-P-1757, 2 COATS
9. CARC PAINT PER MIL-C-46168, 1 COAT CC #36231 (GREY). APPLY CARC PAINT PER MIL-C-53072
10. USE FAN PN/PASPT 1624 CAGE 2W924 TO DETERMINE .171 HOLES AND ITEM 1 NUTPLATE LOCATION

(1)

D

C

B

A

BASIC CODE	NAS 523
INSTALL.	
BASIC	
O-COUNTED BOTH SIDES	
CSK	
GRIND	

5

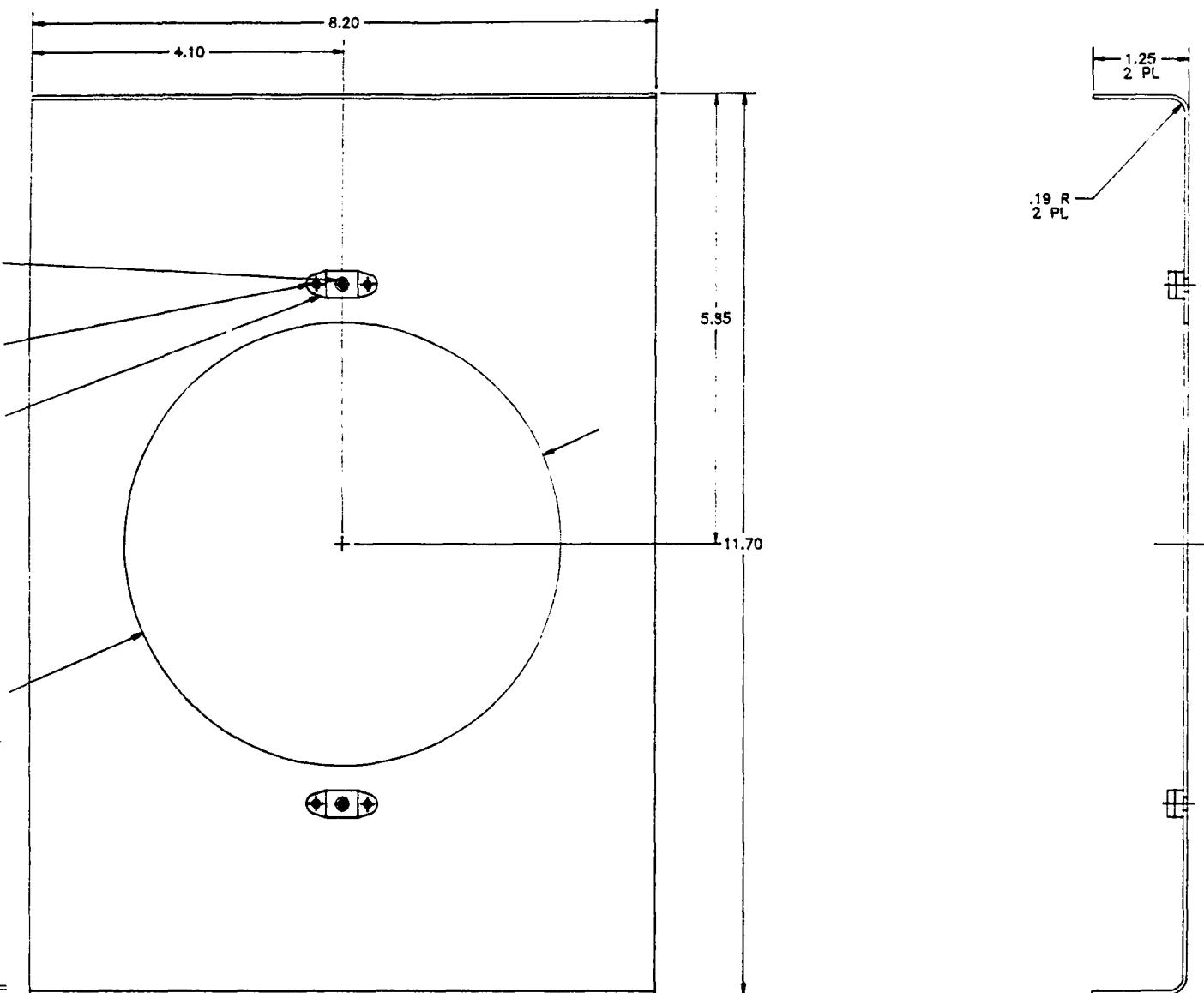
4

3

2

ZONE	REV	REV
	CAD GENERATED	DESCRIPTION

(2)



4	RIVET	MS20426AD3
2	NUTPLATE	MS21076L08
X	FRAME	LEX-13353
SYN	NOMENCLATURE	CODE IDENT
		IDENTIFYING NO.
		MAT
QUANTITY REQUIRED PER DASH NO		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES - PREFERRED UNITS IN MILLIMETERS		
DASH NO FOR DIA HEAD N/S FLANGE HEAD F/S		
DASH NO FOR LENGTH		
FINISH:		
8 9		
SERV A SUBSIC		
DAAB07-92-Z-B506		
W.B.H. 93-06-09		
C.R. L.M. 93-06-16		
D 7S97E		
1/1		

ENTER CO
S. PER. NC
DASH NO
N=HFG
F=HFG
I=

DASH NO
LENGTH

BASIC CODE	NAS 623 FASTENER CODE
MS-MS20426AD3	INSTALL DASH NO FOR MS1812
	BASIC CODE DASH NO FOR DIA HEAD N/S FLANGE HEAD F/S
	C=COUNTERBORE BOTH SIDES CBM 100° AND GRIND FLUSH DASH NO FOR LENGTH

UN-600
UN-600
UN-600
APPLICATION

3

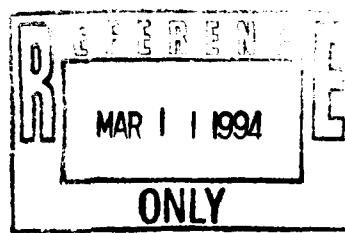
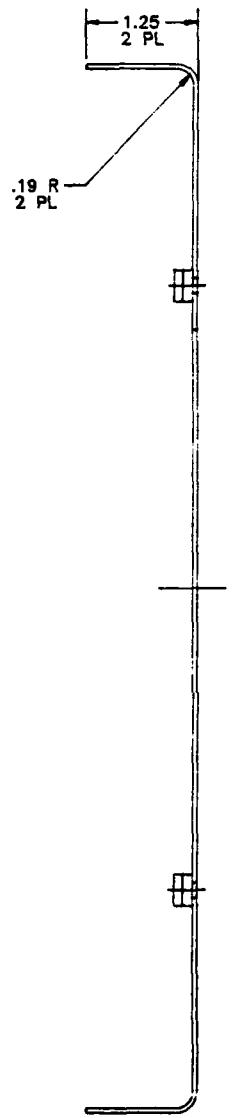
2

1

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-08-09	

3



四

1

7

1

1

1

1

1

1

1

4

1

1

1

1

1

-

1

(1)

NOTES:

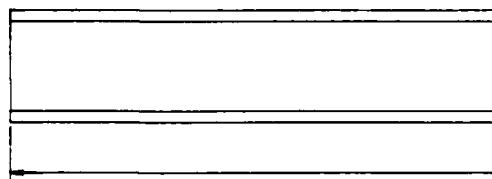
1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982
6. CHEMICAL CONVERSION COAT PER MIL-C-5541,
CLASS 1A EPOXY POLYAMIDE PRIME PER
MIL-P-23377 TYPE 1 OR TT-P-1757, 2 COATS
7. CARC PAINT PER MIL-C-46168, 1 COAT
CC #36231 (GREY). APPLY CARC PAINT PER
MIL-C-53072

D

C

B

A



5

4

3

2

REVISI

ZONE	REV	DESCRIPTION
		CAD GENERATED

(2)

- 1155



ONLY

MAR 11 1994
ONLY

LEX

DAAB07-92-Z-B506	D	7S976	LEX-13349
W.B.L.	93-08-11		
G.C.L.M.	93-08-16	NONE	3 - 3

3

2

1

3

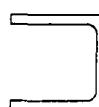
2

1

REVISIONS

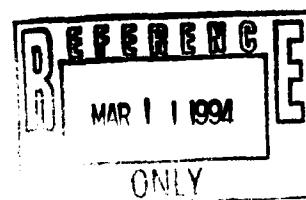
ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-08-09	

(3)



EN

1994

0137-12
A-200/

SPECIFICATION



CHANNEL

LEX-13354

.125x11.6 AND 10137-1207
7075-T6511 QQ-A-200/11

ID PER DASH NO

MATERIAL/SPECIFICATION

U/M

ZONE

P

INC.

E-SYSTEMS

ANNE

LEX

ATION

PARTS LIST

SERV-AIR, INC. S.O.F.S.A.

A SUBSIDIARY OF E-SYSTEMS, INC. LBAF LEX, KY.



UNSPECIFIED SPECIFICATIONS	DAAB07-92-Z-B506
W.B.L.	93-08-09
G.C.L.M.	93-08-16
OSR	
FINISH:	

CHANNEL

D 7S976 LEX-13354

1/1 1 - 1

A

(1)

NOTES:

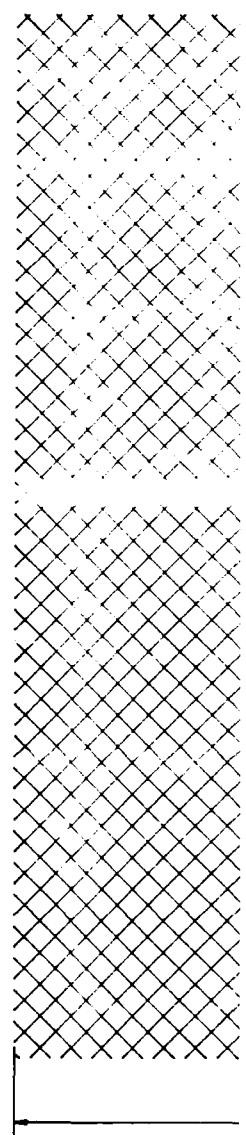
1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. MARK PARTS PER MIL-STD-130
4. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982

D

C

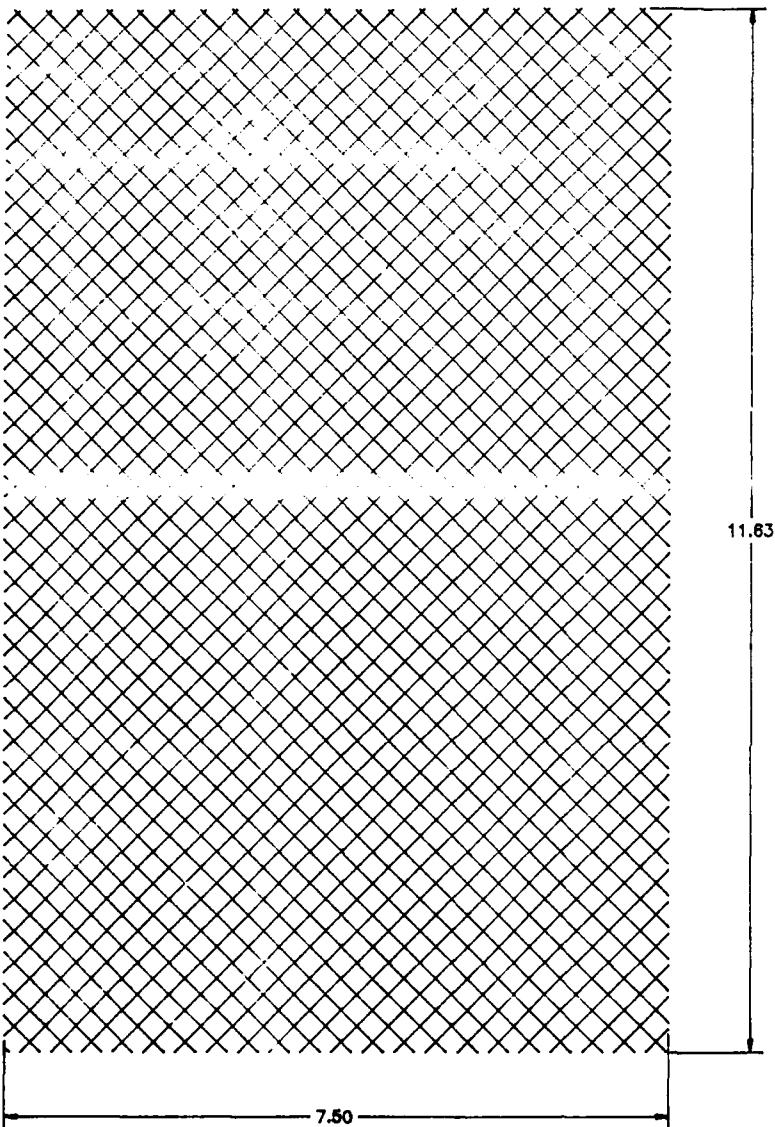
B

A



2

ZONE	REV	DESCRIPTION
		CAD GENERATED



11.63

- 7.50

D E F E R E
MAR 1 1 K
ONLY

3

2

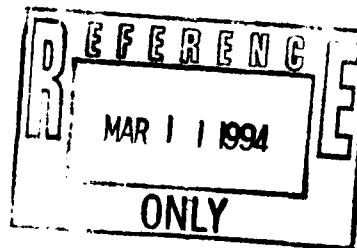
1

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-08-09	

3

11.63



x11.9		SCREEN		LEX-13355-1	.032x.25 MESH 7.7x11.9 304 CRES		
ITEM	S/N	NOMENCLATURE	CODE IDENT	IDENTIFYING NO.	MATERIAL/SPECIFICATION	U/M	ZONE
INC. SYSTEMS, INC.	R DASH NO	PARTS LIST					
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES-EXCEPT WHERE NOTED	ITEM NO. DAAB07-92-Z-B506	SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. LBAD LEX. KY.			S.O.F.S.A.	
EEN		W.B.H. 93-06-09	L.M. 93-06-16			SCREEN	
EX-1	JH-809	D 7S976	LEX-13355			1/1	1 - 1

(1)

8

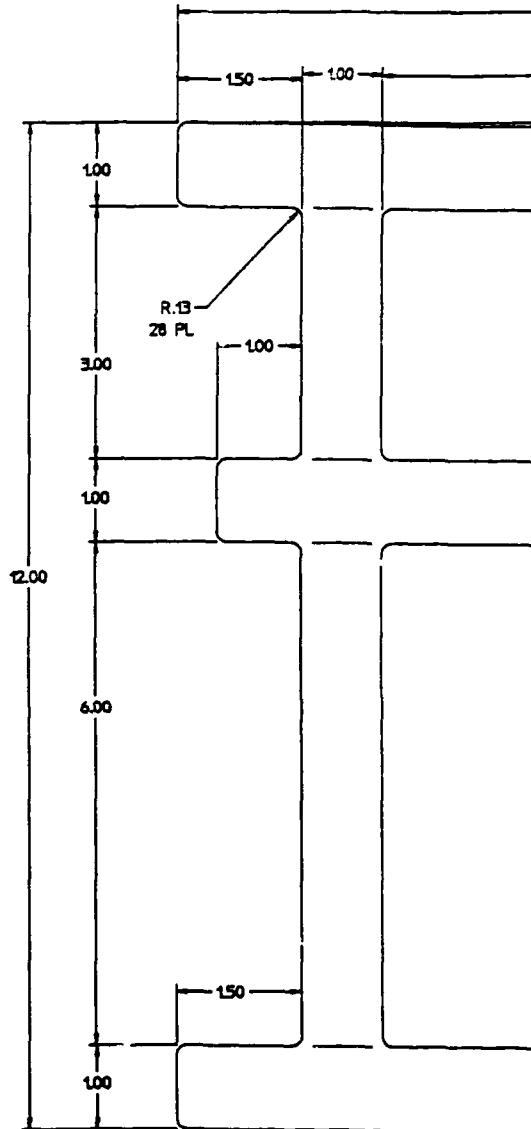
7

6

5

NOTES:

1. INTERPRET DRAWING PER MIL-T-31000 AND MIL-STD-100
 2. INTERPRET ABBREVIATIONS PER MIL-STD-12
 3. REMOVE BURRS AND BREAK ALL SHARP EDGES
 4. MARK PARTS PER MIL-STD-130
 5. DIMENSIONING AND TOLERANCING PER ANSI Y14.5, 1982
- ⚠ 6. CHEMICAL CONVERSION COAT PER MIL-C-5541, CLASS 1A
EPOXY POLYAMIDE PRIME PER MIL-P-3377 TYPE L, 1 COAT



8

7

6

5

5

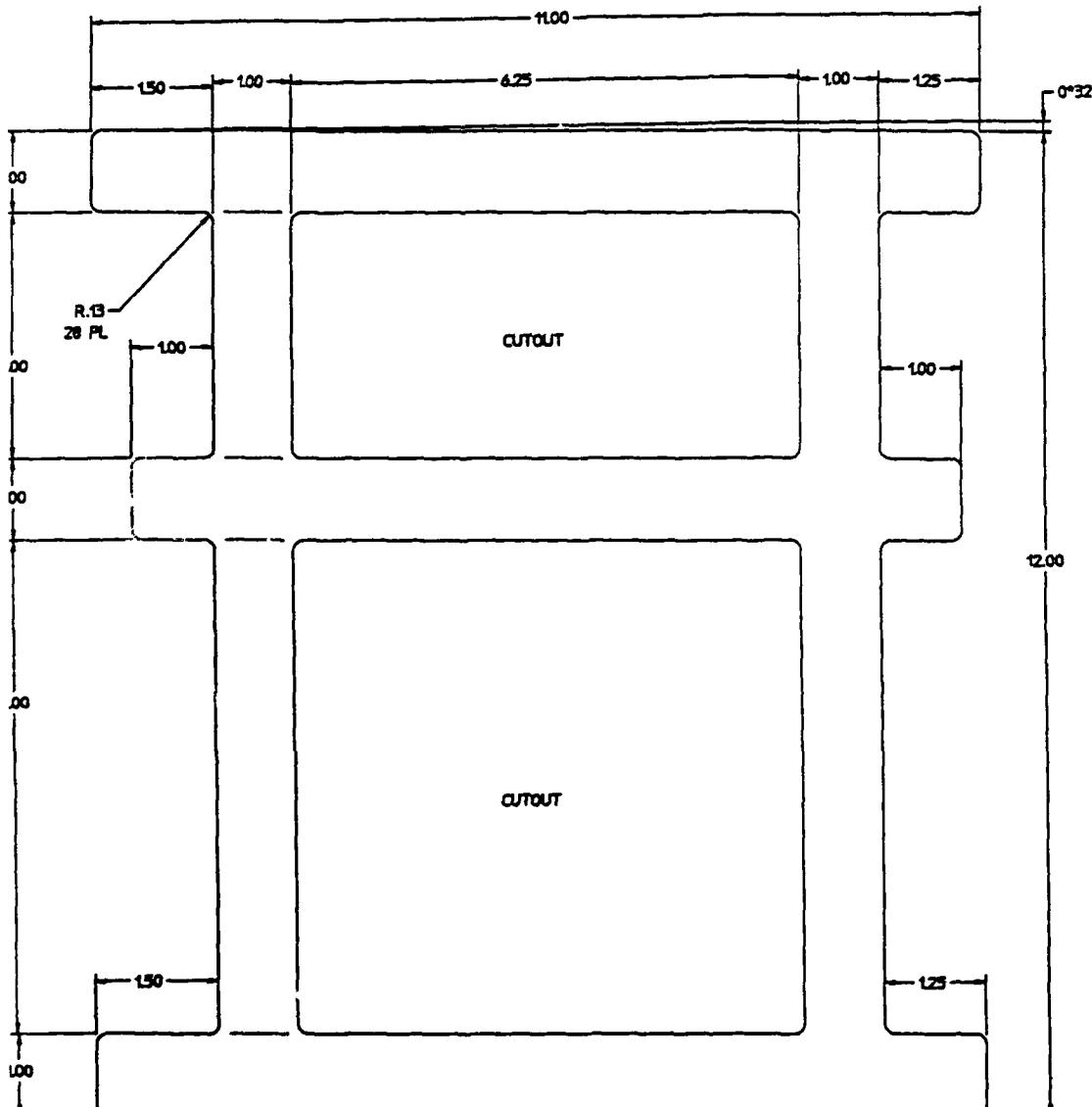
4

3

2

(2)

CAD GENERATED



REFERENCE
MAR 11 1994
ONLY

SYN	FRAME	LEX-13346	.032x12.25x11.25 2024-T3 AL ALY 00-A-250/ MATERIAL/SPECIFICATION
PARTS LIST			
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES-TOLERANCES ARE INCHES	CONTRACT NO. DAAB07-92-Z-8506	SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS
	PINSH.	• SLH 93-07-20 • LM 93-12-07 • OCM 93-12-07	
			FRAM
		D 7S976 LEX-	
	LEX-13346 UH-400 APPLICATION		1/1

5

4

3

2

1

2

1

(3)

REVISIONS				
DATE	REV.	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-07-20	

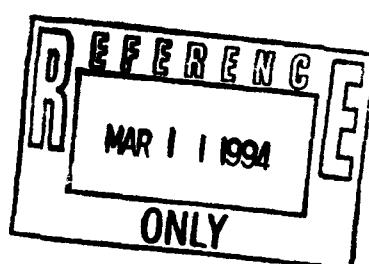
125

0°32'

100

12.00

125



FRAME	LEX-13356	032x12.25x11.25 2024-T3 AL ALY 00-A-250/8			
SYM	NOENCLOSURE	REF NO.	IDENTIFYING NO.	MATERIAL/SPECIFICATION	L/M ZONE PG NO
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS DRAWING IS UNCONTROLLED BY CHANGES		CONTRACT NO. DAA807-92-Z-8506			
		SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS INC. LEBANON, KY.			
PRINT%		FRAME			
		D	7S976	LEX-13356	
		14		1	1

3

2

1

(1)

NOTES:

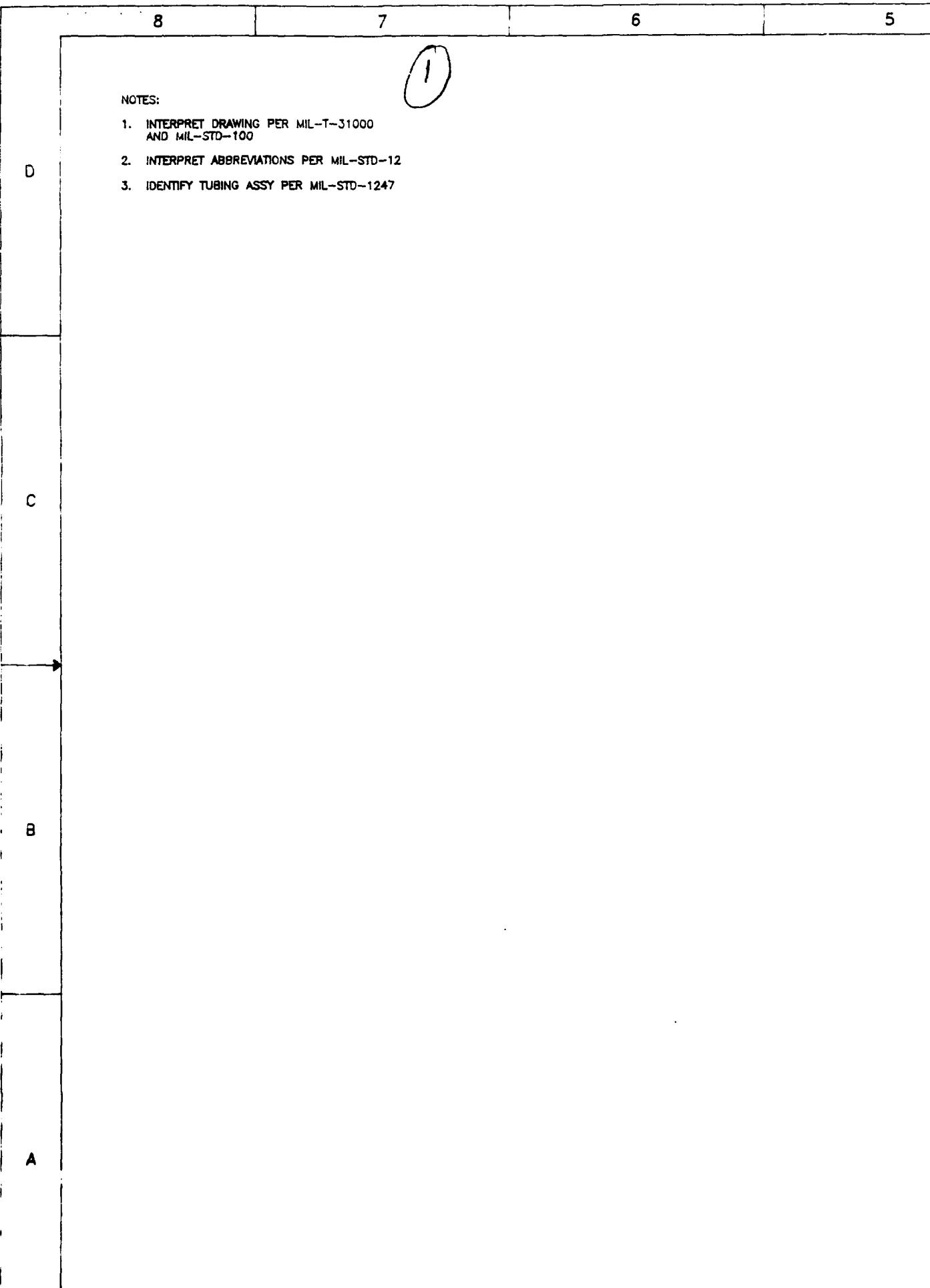
1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. IDENTIFY TUBING ASSY PER MIL-STD-1247

D

C

B

A



2

CAD GENERATED

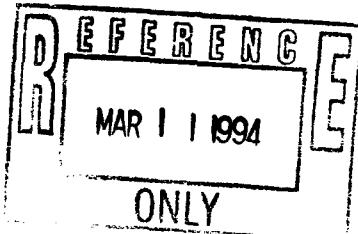
MAR

2	PLUG		AN806-10D
1	UNION		AN815-10D
2	REDUCER		AN919-20D
1	CROSS		AN918-6D
2	ADAPTER		AN816-10-12D
1	REDUCER		AN893-31
1	REDUCER		AN919-6
1	ADAPTER		MS20392-8D
4	TEE		AN824-8D
3	PLUG		AN806-8D
1	MSOGS TUBING ASSY		LEX-13371
1	MSOGS TUBING ASSY		LEX-13370
1	MSOGS TUBING ASSY		LEX-13369
1	MSOGS TUBING ASSY		LEX-13368
1	MSOGS TUBING ASSY		LEX-13367
1	MSOGS TUBING ASSY		LEX-13366
1	MSOGS TUBING ASSY		LEX-13365
1	MSOGS TUBING ASSY		LEX-13364
1	MSOGS TUBING ASSY		LEX-13363
1	MSOGS TUBING ASSY		LEX-13362
1	MSOGS TUBING ASSY		LEX-13361
1	MSOGS TUBING ASSY		LEX-13360
X	MSOGS TUBING SCHEM		LEX-13359

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-08-02	

(3)



2	PLUG	AN806-10D		EA	22
1	UNION	AN815-10D		EA	21
2	REDUCER	AN919-20D		EA	20
1	CROSS	AN918-6D		EA	19
2	ADAPTER	AN816-10-12D		EA	18
1	REDUCER	AN893-31		EA	17
1	REDUCER	AN919-6		EA	16
1	ADAPTER	MS20392-8D		EA	15
4	TEE	AN824-8D		EA	14
3	PLUG	AN806-8D		EA	13
1	MSOGS TUBING ASSY	LEX-13371		EA	12
1	MSOGS TUBING ASSY	LEX-13370		EA	11
1	MSOGS TUBING ASSY	LEX-13369		EA	10
1	MSOGS TUBING ASSY	LEX-13368		EA	9
1	MSOGS TUBING ASSY	LEX-13367		EA	8
1	MSOGS TUBING ASSY	LEX-13366		EA	7
1	MSOGS TUBING ASSY	LEX-13365		EA	6
1	MSOGS TUBING ASSY	LEX-13364		EA	5
1	MSOGS TUBING ASSY	LEX-13363		EA	4
1	MSOGS TUBING ASSY	LEX-13362		EA	3
1	MSOGS TUBING ASSY	LEX-13361		EA	2
1	MSOGS TUBING ASSY	LEX-13360		EA	1
<input checked="" type="checkbox"/>	MSOGS TUBING SCHEM	LEX-13359			

MATERIAL	QTY REQUIRED PER DASH NO	ITEM NO.	DESCRIPTION	CODE IDENT	IDENTIFY NO.	MATERIAL/SPECIFICATION	U/M	ZONE	REV
----------	--------------------------	----------	-------------	------------	--------------	------------------------	-----	------	-----

PARTS LIST

RV-	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	DAAB07-92-Z-B506	SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. LBAD LEX, KY.
SSIDIAN	W.B.H. 93-08-02	W.L.M. 93-08-08	MSOGS TUBING SCHEMATIC
APPLICATION	D 7S976	LEX-13359	NONE
			1 - 2

8

7

6

5

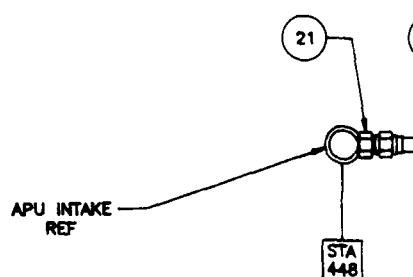
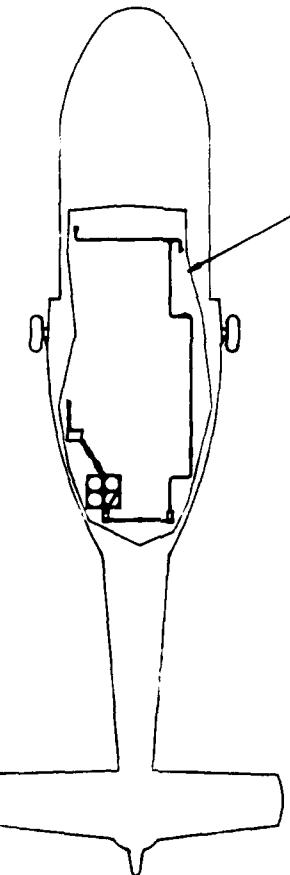
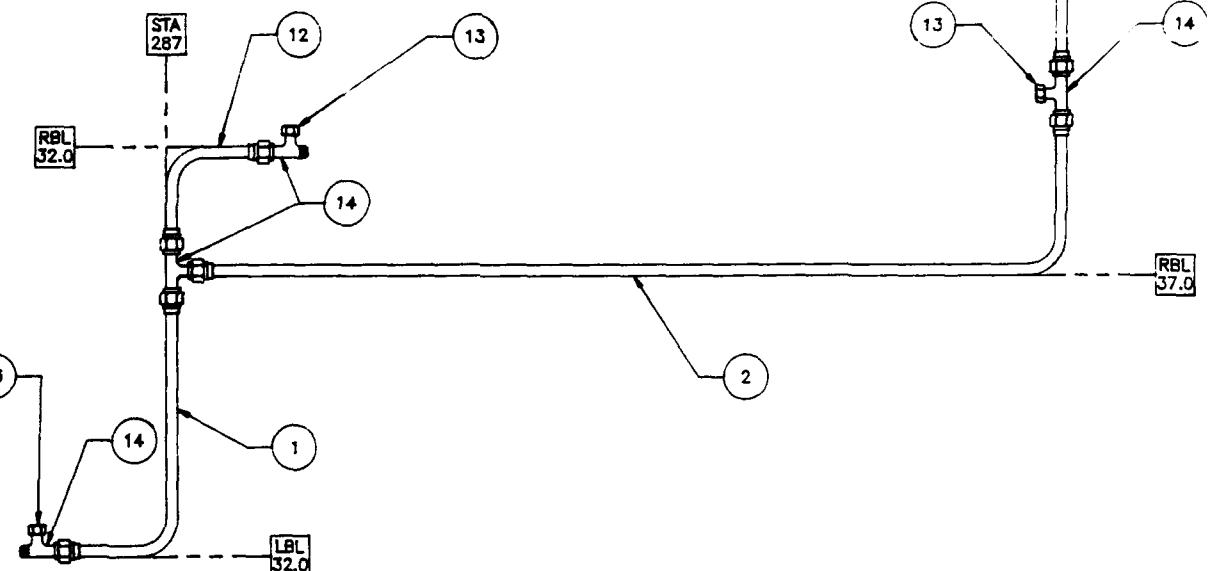
D

C

B

A

1

STA
398

8

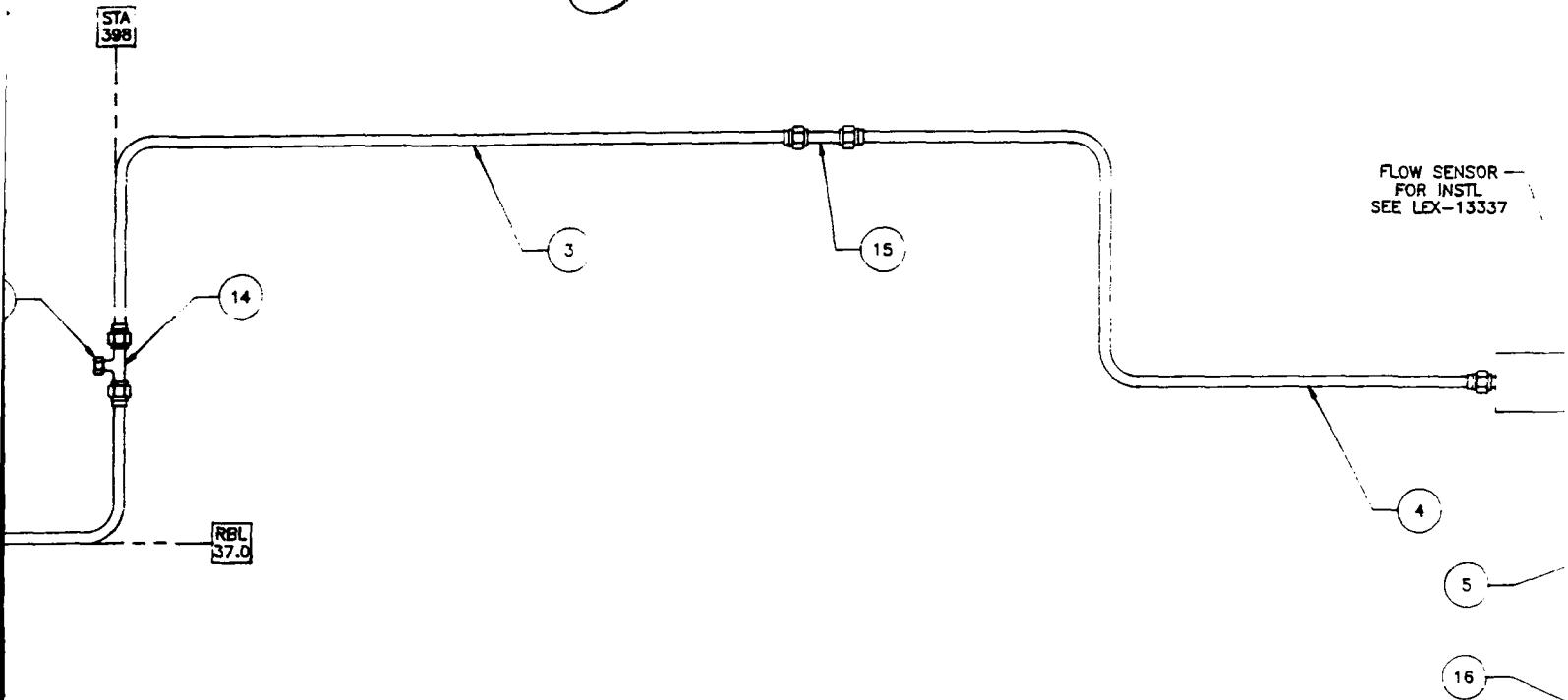
7

6

5

ZONE	REV	DESCRIPTION
		CAD GENERATED

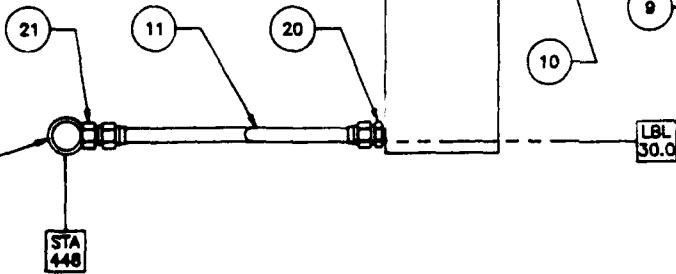
2



VALVE SOLENOID
FOR INSTL
SEE LEX-13345

HEAT X-CHANGER
FOR INSTL
SEE LEX-13349

MSOGS UNIT
FOR INSTL
SEE LEX-13338



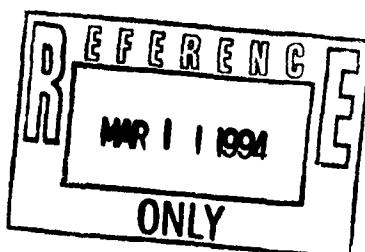
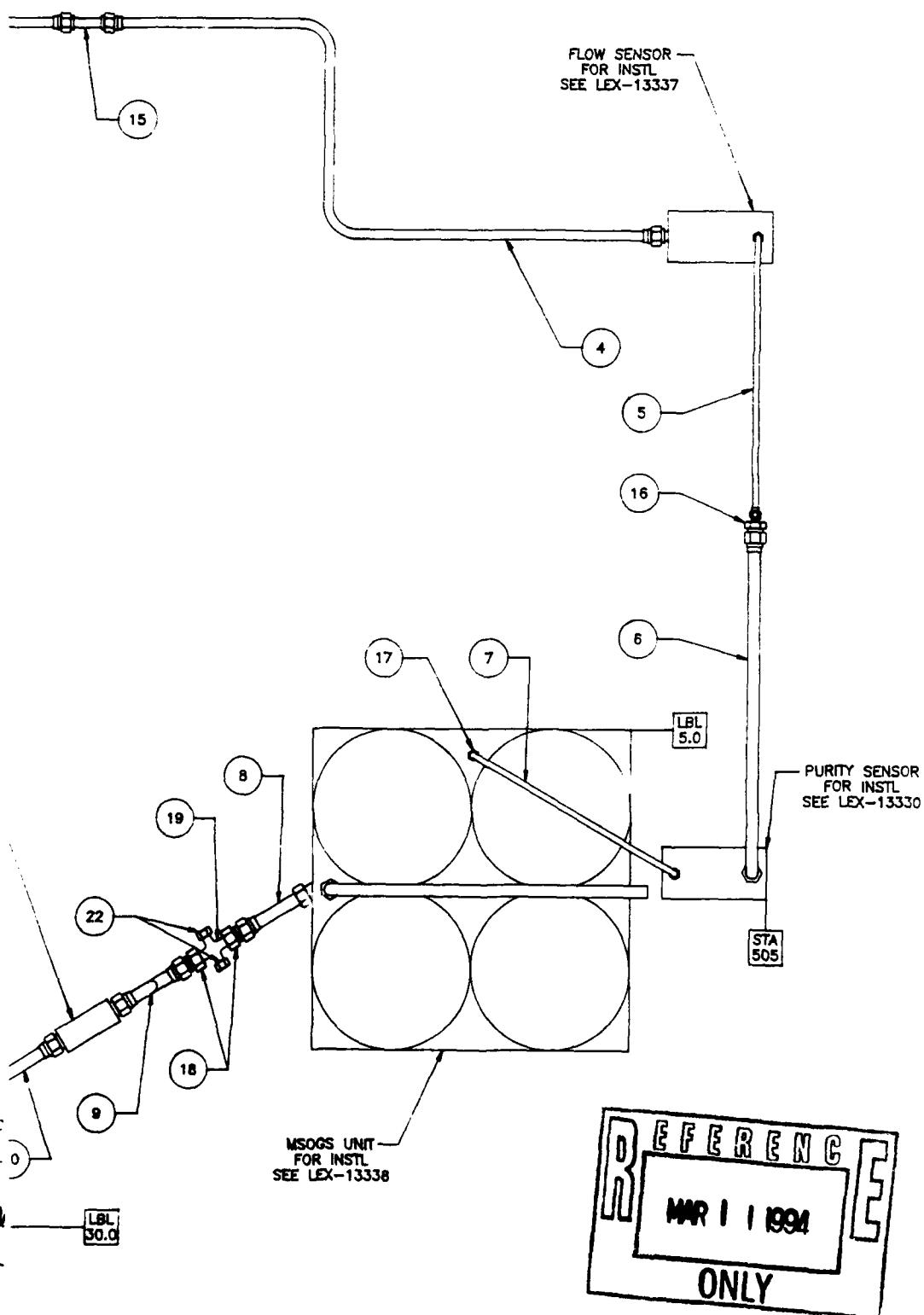
DETAIL A

DAAB07-92-Z-8506
W.B.H. 93-08-02
W.L.M. 93-08-08
NONE

D 7S976

REVISIONS					
ZONE	REV	DESCRIPTION	DATE	APPROVED	
	CAD GENERATED		93-08-02		

3



SEARCHED <input checked="" type="checkbox"/>	DAA807-92-Z-B506	INDEXED <input checked="" type="checkbox"/>	FILED <input checked="" type="checkbox"/>
SERIALIZED <input checked="" type="checkbox"/>	W.B.H.	83-08-02	D 7S976 LEX-13359
INDEXED <input checked="" type="checkbox"/>	L.M.	83-08-09	NONE
			2 of 2

(1)

NOTES:

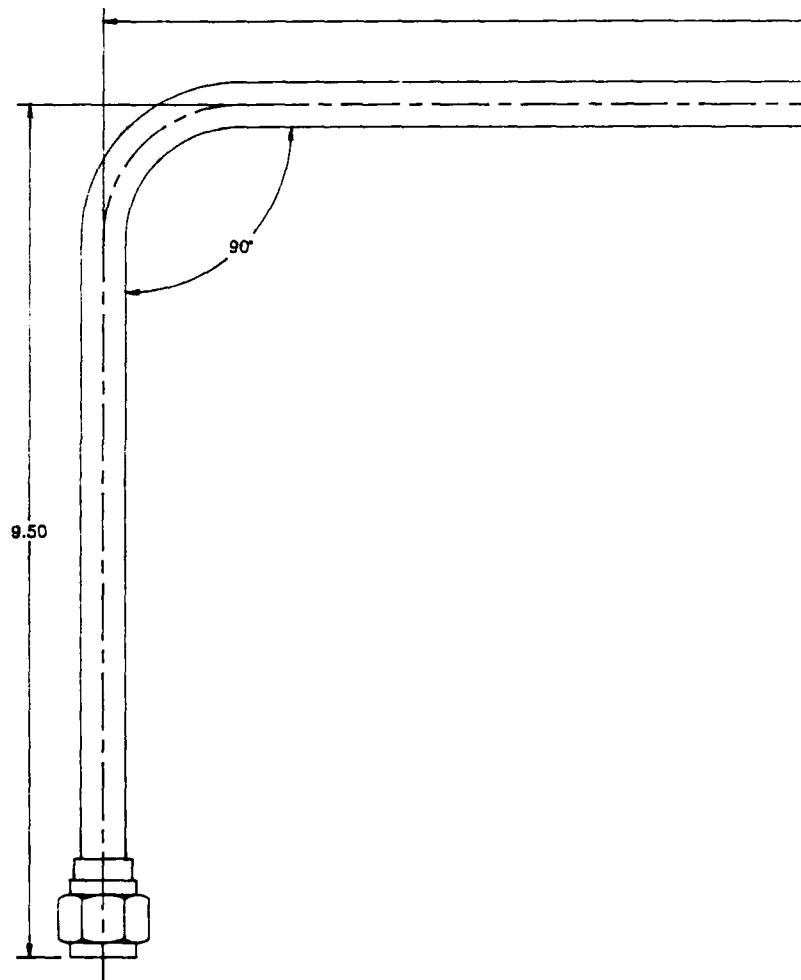
1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982
6. ALL BEND RADIUS PER MS33611

D

C

B

A



5

4

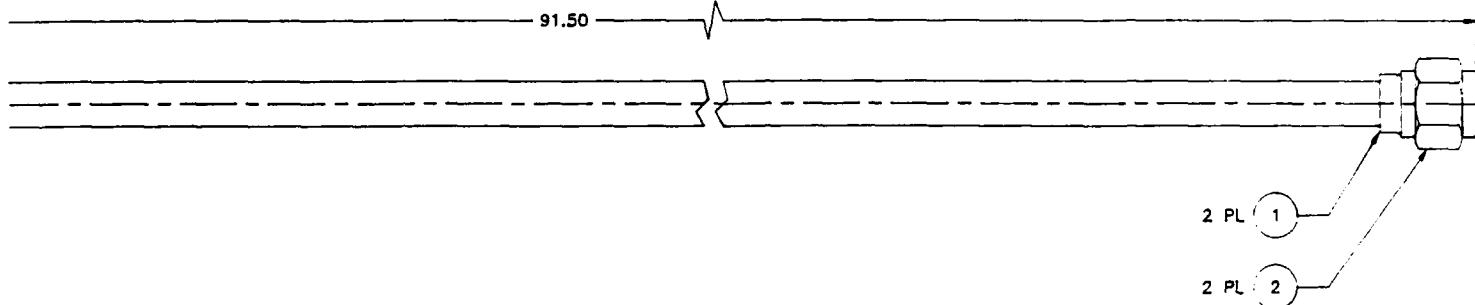
3

2

CAD GENERATED

2

- 91.50



2

2

RE

2	NUT		AN818-8DN	
2	SLEEVE		MS20819-8DS	
1	MS905 TUBING ASSY		LX-13360	.375 "

UNLESS OTHERWISE SPECIFIED
SHIPPING AND RECEIVING ARE TO BE MADE AT THE PORT OF
LADING OR DESTINATION.

DAA807-92-Z-8506

 SER
A SUB

PART II LIST

QUANTITY REQUIRED PER DASH NO	
LDX-13369	UH-80Q
ITEM NO.	APPLICATION

041807 22 Z B506

PARTS LIST

D 7S97

114

5

4

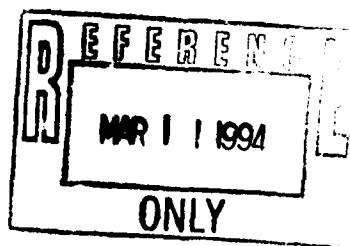
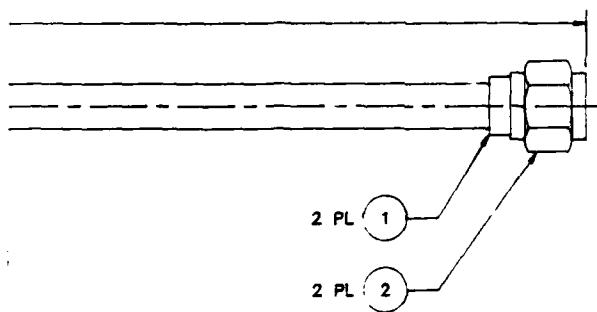
3

2

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-07-29	

(3)



2	NUT	AN818-8DN			2
2	SLEEVE	MS20819-8DS			1
3 WALL UMINUM SPECIFIC	MSOGS TUBING ASSY	LEX-13360	.375 ID x .063 WALL x 102.0 3003-H14 ALUMINUM TUBING		
ASH NO	ITEM NUMBER/DESCRIPTION	CODE IDENT	IDENTIFY NO.	MATERIAL/SPECIFICATION	U/M ZONE
PARTS LIST					
IR, OF E-	VALUES OTHERWISE SPECIFIED ARE AS FOLLOWS: S. B. S. P. S. M. S. P. S. N. S. P. S. D. S. P.	DAAB07-92-Z-B506	SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. LBAD LEX, KY.	S.O.F.S.A	
MSG TUR SSE		W.B.H. 93-07-30 L.M. 93-08-09	MSOGS TUBING ASSEMBLY	D 7S976 LEX-13360	
602			1/1		1 - 1

(1)

NOTES:

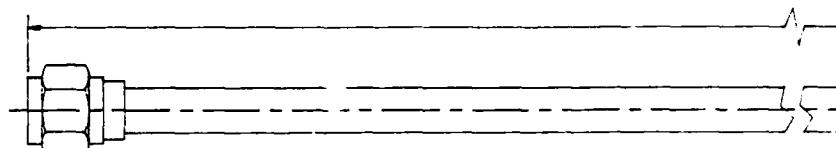
1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982
6. ALL BEND RADIUS PER MS33611

D

C

B

A



5

4

3

2

REVISION

ZONE	REV	DESCRIPTION
		CAD GENERATED

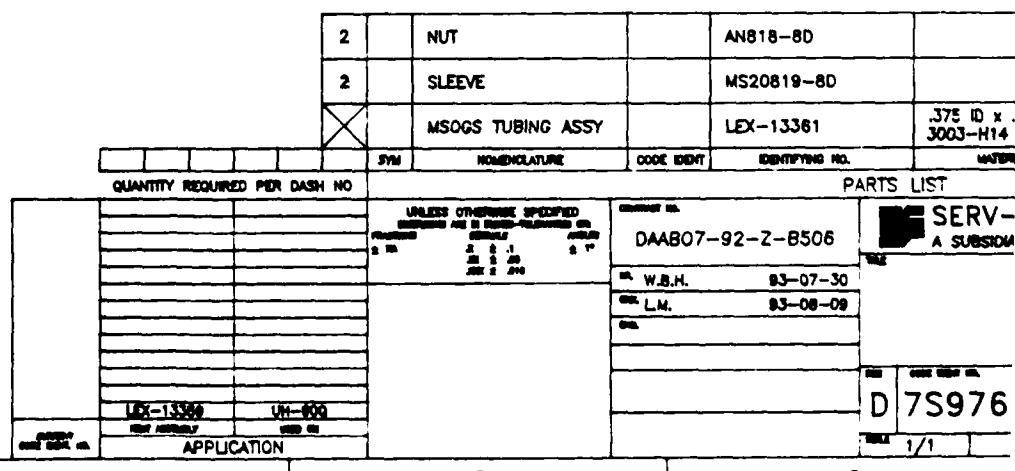
-101.50-

99

19.5G

2 81

2 PL



5

4

3

2

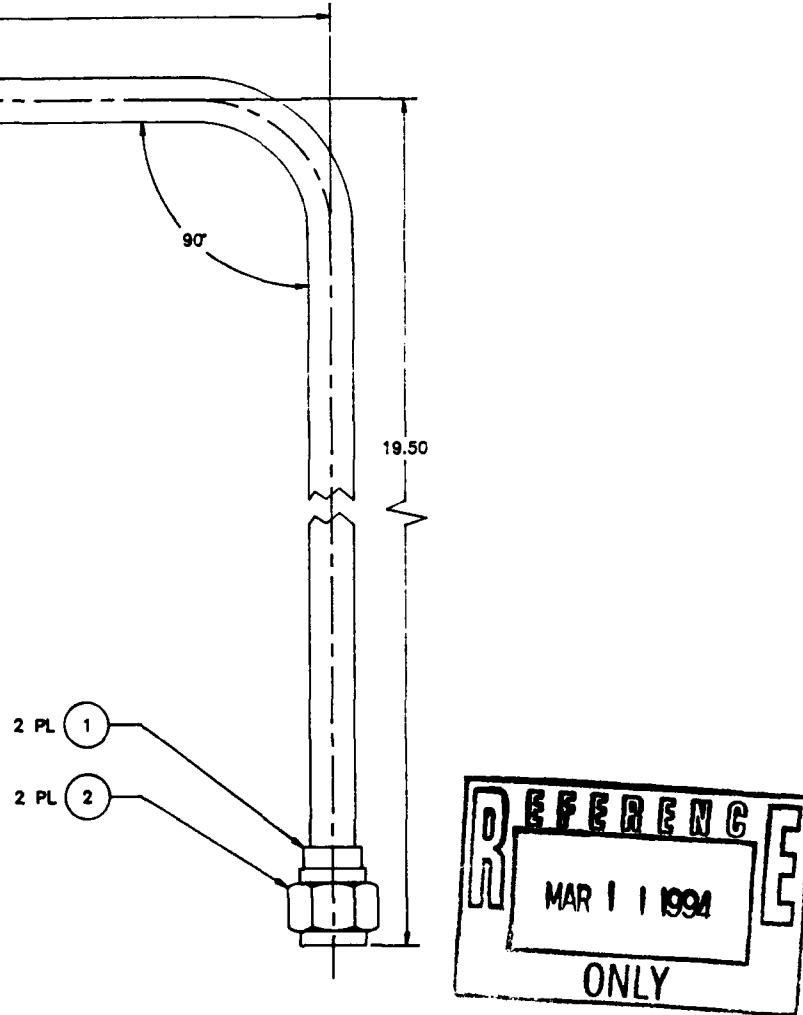
3

2

1

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	83-07-29	

(3)



2	NUT	AN818-8D					2
2	SLEEVE	MS20819-8D					1
ALL x NUM SPECATK	MSOGS TUBING ASSY	LEX-13361	.375 ID x .063 WALL x 122.0 3003-H14 ALUMINUM TUBING				
SWN	MANUFACTURE	CODE IDENT	DESIGNING NO.	ITEM/SPECIFICATION	U/N	ZONE	3
PARTS LIST							
1	1	DAAB07-92-Z-B508	SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. L100 LEX, KY.	S.O.F.S.A.			
E-S	W.B.H.	83-07-30					
SC	LM.	83-08-08					
JBI							
SEN							
LP							
MSOGS TUBING ASSEMBLY							
	D 7S976	LEX-13361					
	1/1				1		

3

2

1

(1)

NOTES:

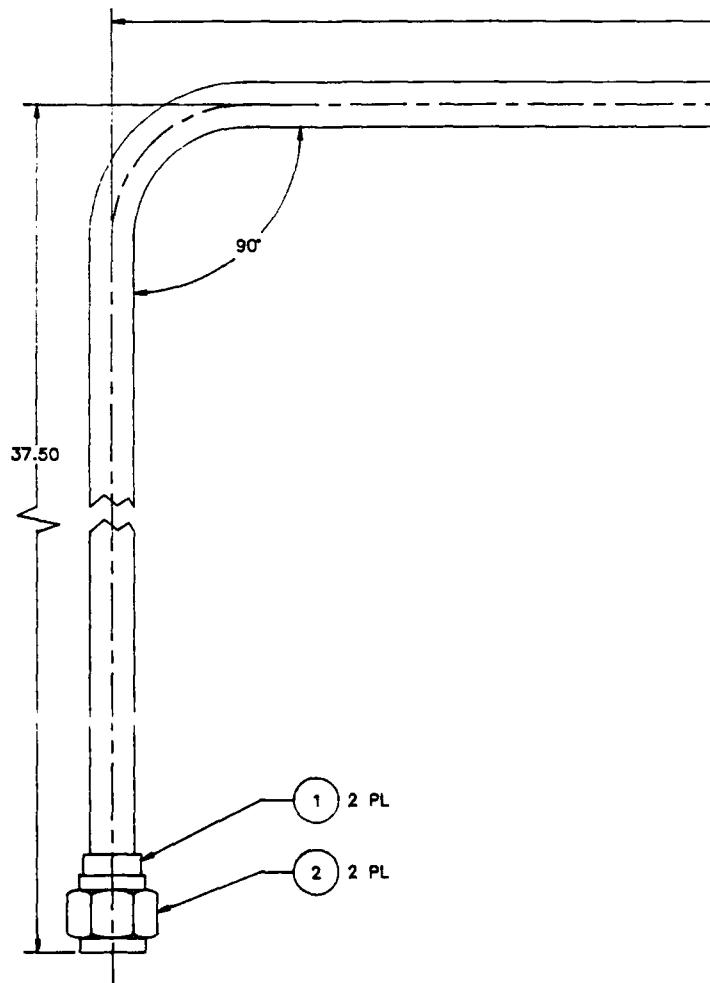
1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982
6. ALL BEND RADIUS PER MS33611

D

C

B

A



5

4

3

2

REVISION

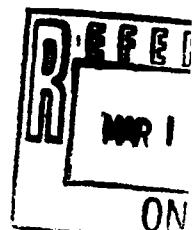
ZONE	REV	DESCRIPTION
		CAD GENERATED

(2)

61.50

) 2 PL

) 2 PL



2	NUT	AN818-8D	
2	SLEEVE	MS20819-8D	
X	MSOGS TUBING ASSY	LEX-13362	.375 ID x . 3003-H14 A
	SYN	HOMEDOLATURE	IDENTIFYING NO.
			MATERIAL
QUANTITY REQUIRED PER DASH NO			
	UNLESS OTHERWISE SPECIFIED ALL PARTS ARE IN GROSS-MADE-IN-CHINA PRODUCTION GENERAL SPECIFICATIONS 2 IN. 1 1/2 1 1/4 1 1/2 1 1/2 1 1/4 1 1/2 1 1/2 1 1/2 1 1/4 1 1/2 1 1/2	REFERENCE NO. C11807 02-2-0500	PARTS LIST SERV-A SUBSIDIARY W.B.H. 83-07-30 L.M. 83-08-09 D 7S976 1/1
	LX-13362 UH-800 APPLICATION		

5

4

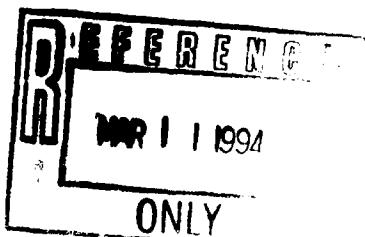
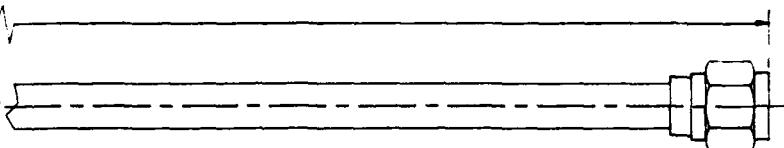
3

2

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-07-29	

(3)



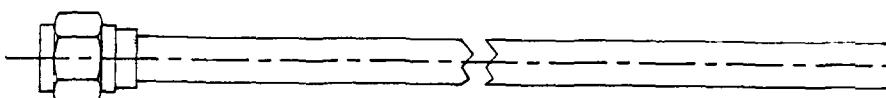
ITEM	STN	NOMENCLATURE	CODE IDENT	IDENTIFYING NO.	MATERIAL/PROPORTION	U/N	ZONE
1		NUT		AN818-8D			2
2		SLEEVE		MS20819-8D			1
3	X	MSOGS TUBING ASSY		LEX-13362	.375 ID x .063 WALL x 100.0 3003-H14 ALUMINUM TUBING		
PARTS LIST							
INC		UNLESS OTHERWISE SPECIFIED 1. 1. 1. 1. 2. 2. 2. 2. 3. 3. 3. 3.	COMMITTEE NO.	SERV-AIR, INC.	S.O.F.S.A.		
OG			CA9007 00-2-0000	A SUBSIDIARY OF E-SYSTEMS, INC., LARGO, FLA.			
BIN			W.B.H. 83-07-30				
IME			G.L.M. 83-08-09				
LEX				MSOGS TUBING ASSEMBLY			
ATION				D 7S976	LEX-13362		
				1/1	1		

D

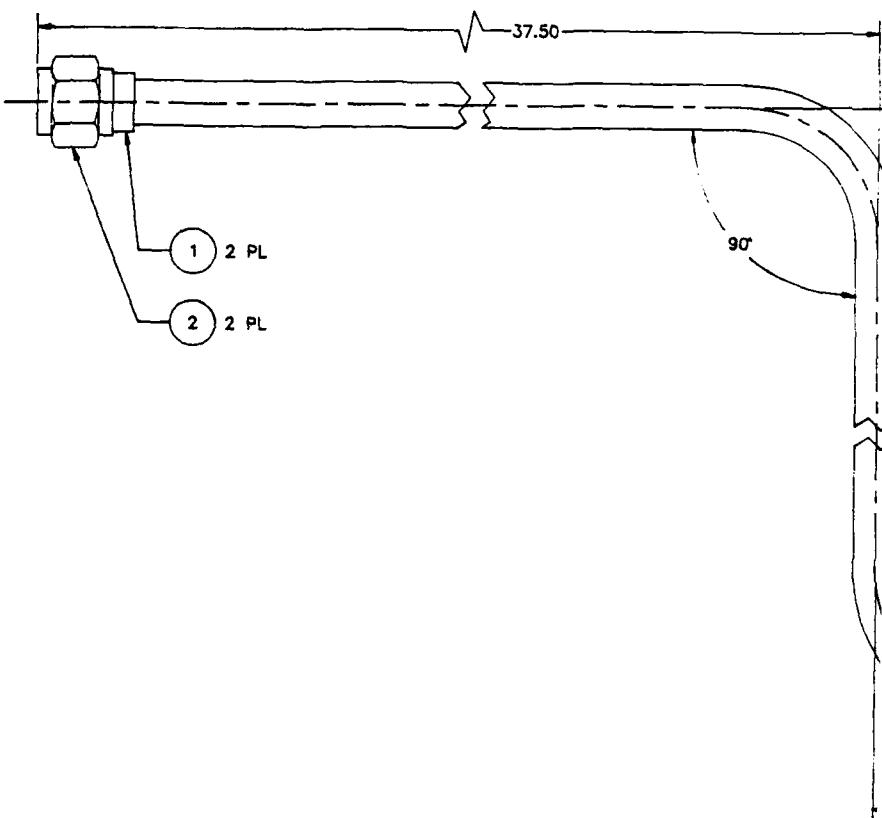
NOTES:

1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982
6. ALL BEND RADIUS PER MS33611

(1)



C

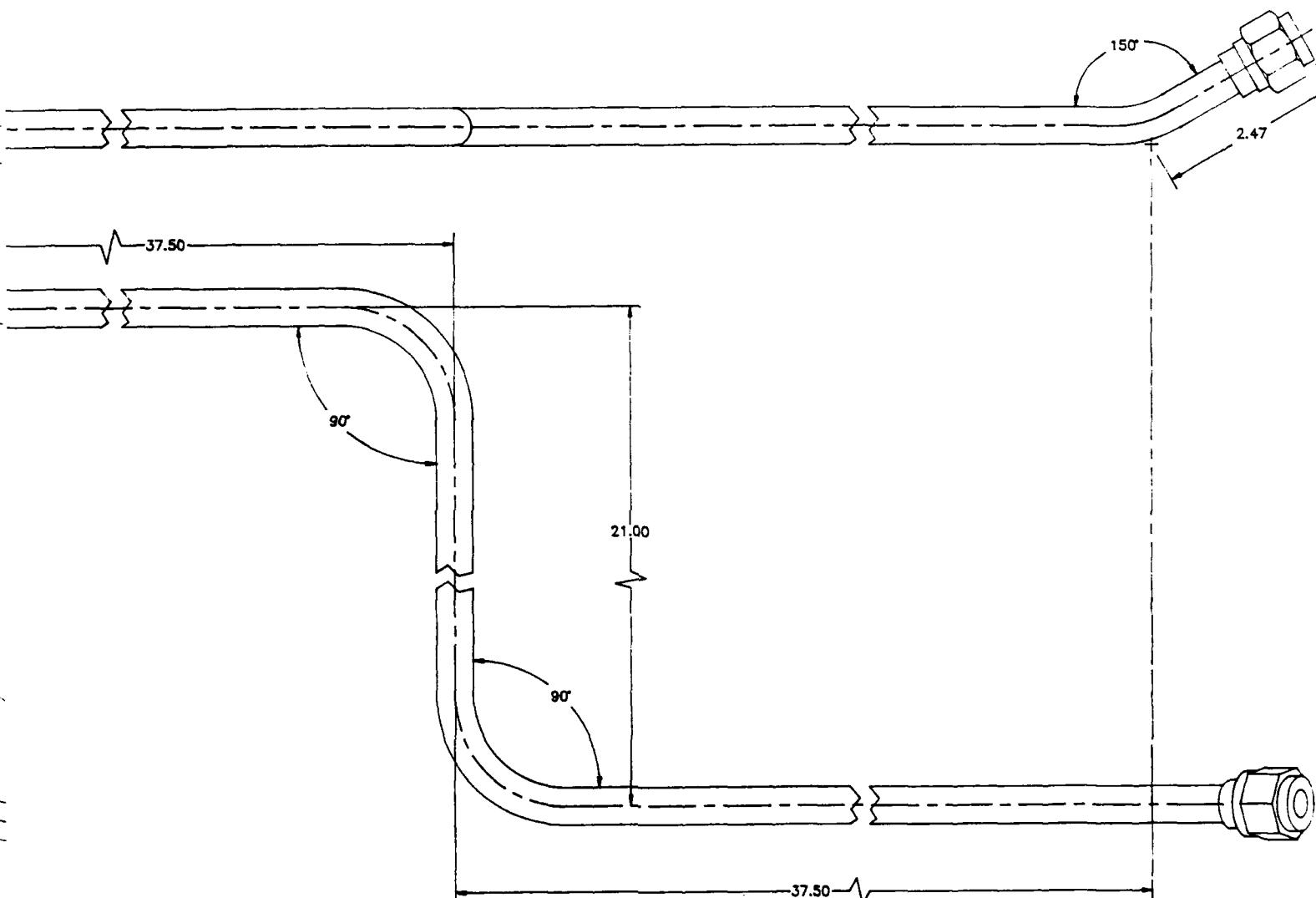


B

A

ZONE	REV
CAD GENERA	

(2)



2	NUT	AN818-8D
2	SLEEVE	MS20819-8D
	MSCGS TUBING ASSY	LEX-13363

SYN	NONENCLATURE	CODE IDENT	IDENTIFYING NO.
-----	--------------	------------	-----------------

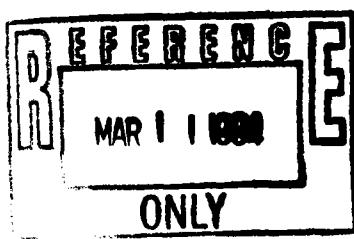
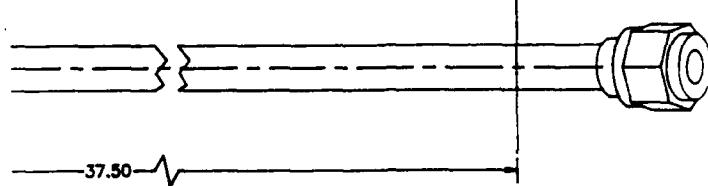
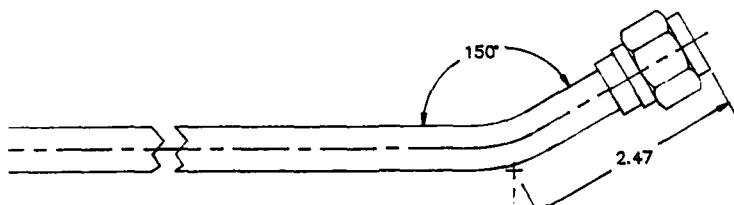
QUANTITY REQUIRED PER DASH NO

		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES-ALTERNATE UNITS IN MILLIMETERS		STANDARD ID
1	2	3	4	DAAB07-92-Z-B506
5	6	7	8	W.B.H. 83-07-30
9	10	11	12	LM 83-08-09
13	14	15	16	PA
17	18	19	20	
21	22	23	24	
25	26	27	28	
29	30	31	32	
33	34	35	36	
37	38	39	40	
41	42	43	44	
45	46	47	48	
49	50	51	52	
53	54	55	56	
57	58	59	60	
61	62	63	64	
65	66	67	68	
69	70	71	72	
73	74	75	76	
77	78	79	80	
81	82	83	84	
85	86	87	88	
89	90	91	92	
93	94	95	96	
97	98	99	100	
101	102	103	104	
105	106	107	108	
109	110	111	112	
113	114	115	116	
117	118	119	120	
121	122	123	124	
125	126	127	128	
129	130	131	132	
133	134	135	136	
137	138	139	140	
141	142	143	144	
145	146	147	148	
149	150	151	152	
153	154	155	156	
157	158	159	160	
161	162	163	164	
165	166	167	168	
169	170	171	172	
173	174	175	176	
177	178	179	180	
181	182	183	184	
185	186	187	188	
189	190	191	192	
193	194	195	196	
197	198	199	200	
201	202	203	204	
205	206	207	208	
209	210	211	212	
213	214	215	216	
217	218	219	220	
221	222	223	224	
225	226	227	228	
229	230	231	232	
233	234	235	236	
237	238	239	240	
241	242	243	244	
245	246	247	248	
249	250	251	252	
253	254	255	256	
257	258	259	260	
261	262	263	264	
265	266	267	268	
269	270	271	272	
273	274	275	276	
277	278	279	280	
281	282	283	284	
285	286	287	288	
289	290	291	292	
293	294	295	296	
297	298	299	300	
301	302	303	304	
305	306	307	308	
309	310	311	312	
313	314	315	316	
317	318	319	320	
321	322	323	324	
325	326	327	328	
329	330	331	332	
333	334	335	336	
337	338	339	340	
341	342	343	344	
345	346	347	348	
349	350	351	352	
353	354	355	356	
357	358	359	360	
361	362	363	364	
365	366	367	368	
369	370	371	372	
373	374	375	376	
377	378	379	380	
381	382	383	384	
385	386	387	388	
389	390	391	392	
393	394	395	396	
397	398	399	400	
401	402	403	404	
405	406	407	408	
409	410	411	412	
413	414	415	416	
417	418	419	420	
421	422	423	424	
425	426	427	428	
429	430	431	432	
433	434	435	436	
437	438	439	440	
441	442	443	444	
445	446	447	448	
449	450	451	452	
453	454	455	456	
457	458	459	460	
461	462	463	464	
465	466	467	468	
469	470	471	472	
473	474	475	476	
477	478	479	480	
481	482	483	484	
485	486	487	488	
489	490	491	492	
493	494	495	496	
497	498	499	500	
501	502	503	504	
505	506	507	508	
509	510	511	512	
513	514	515	516	
517	518	519	520	
521	522	523	524	
525	526	527	528	
529	530	531	532	
533	534	535	536	
537	538	539	540	
541	542	543	544	
545	546	547	548	
549	550	551	552	
553	554	555	556	
557	558	559	560	
561	562	563	564	
565	566	567	568	
569	570	571	572	
573	574	575	576	
577	578	579	580	
581	582	583	584	
585	586	587	588	
589	590	591	592	
593	594	595	596	
597	598	599	600	
601	602	603	604	
605	606	607	608	
609	610	611	612	
613	614	615	616	
617	618	619	620	
621	622	623	624	
625	626	627	628	
629	630	631	632	
633	634	635	636	
637	638	639	640	
641	642	643	644	
645	646	647	648	
649	650	651	652	
653	654	655	656	
657	658	659	660	
661	662	663	664	
665	666	667	668	
669	670	671	672	
673	674	675	676	
677	678	679	680	
681	682	683	684	
685	686	687	688	
689	690	691	692	
693	694	695	696	
697	698	699	700	
701	702	703	704	
705	706	707	708	
709	710	711	712	
713	714	715	716	
717	718	719	720	
721	722	723	724	
725	726	727	728	
729	730	731	732	
733	734	735	736	
737	738	739	740	
741	742	743	744	
745	746	747	748	
749	750	751	752	
753	754	755	756	
757	758	759	760	
761	762	763	764	
765	766	767	768	
769	770	771	772	
773	774	775	776	
777	778	779	780	
781	782	783	784	
785	786	787	788	
789	790	791	792	
793	794	795	796	
797	798	799	800	
801	802	803	804	
805	806	807	808	
809	810	811	812	
813	814	815	816	
817	818	819	820	
821	822	823	824	
825	826	827	828	
829	830	831	832	
833	834	835	836	
837	838	839	840	
841	842	843	844	
845	846	847	848	
849	850	851	852	
853	854	855	856	
857	858	859	860	
861	862	863	864	
865	866	867	868	
869	870	871	872	
873	874	875	876	
877	878	879	880	
881	882	883	884	
885	886	887	888	
889	890	891	892	
893	894	895	896	
897	898	899	900	
901	902	903	904	
905	906	907	908	
909	910	911	912	
913	914	915	916	
917	918	919	920	
921	922	923	924	
925	926	927	928	
929	930	931	932	
933	934	935	936	
937	938	939	940	
941	942	943	944	
945	946	947	948	
949	950	951	952	
953	954	955	956	
957	958	959	960	
961	962	963	964	
965	966	967	968	
969	970	971	972	
973	974	975	976	
977	978	979	980	
981	982	983	984	
985	986	987	988	
989	990	991	992	
993	994	995	996	
997	998	999	1000	

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-07-29	

(3)



2	NUT	AN818-8D			2
2	SLEEVE	MS20819-8D			1
X	MSOGS TUBING ASSY	LEX-13363	.375 ID x .063 WALL x 98.0 3C03-H14 ALUMINUM TUBING		

ITEM NO.	DESCRIPTION	CODE IDENT	IDENTIFYING NO.	PARTS LIST	
				MATERIAL	U/M
1	TY REQUIRED PER DASH NO				
SER	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE IN THOUSANDS OF INCHES			S.O.F.S.A.	
A SUB	2 1/2 2 1/2 2 1/2	DAA807-92-Z-B506		SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. L8AD LEX, KY.	
		W.B.H.	93-07-30	MSOGS	
		G.R. L.M.	93-08-08	TUBING	
				ASSEMBLY	
S97	13363 UN-000	D 7S976	LEX-13363		
	APPLICATION	1/1		1 1	

(1)

NOTES:

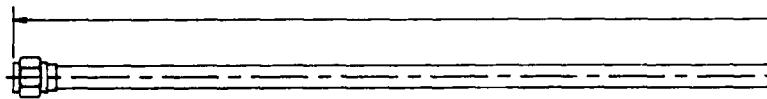
1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982
6. ALL BEND RADIUS PER MS33611

D

C

B

A



700E

1

REV

descriptio

CAD GENERATED

Digitized by srujanika@gmail.com

2

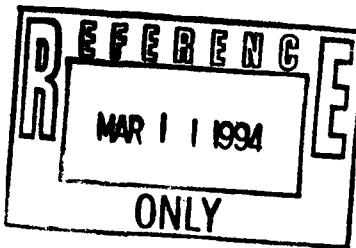
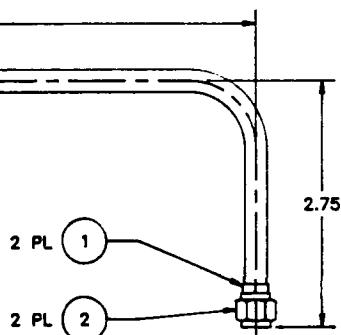
A technical drawing showing a horizontal profile of a component. A dimension line at the top indicates a total width of 18.75. The right side features a vertical support structure with a height of 2.75 indicated by a dimension line. Two callouts point to specific parts: '2 PL 1' points to a circular feature near the top of the vertical support, and '2 PL 2' points to a rectangular base or connector at the bottom.

R

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-07-30	

(3)

SER
IR
ONI

2	NUT		AN815-4D					2
2	SLEEVE		MS20819-4D					1
X	MSOGS TUBING ASSY		LEX-13364	.1875 ID x .025 WALL x 22.5 304 CRES SS TUBING				
SYN	NONCULATURE	CODE IDENT	IDENTIFYING NO.	MATERIAL/DESCRIPTION	U/M	ZONE	PP	
PARTS LIST								
VALVE SPECIFIED AS A SUB-ASSEMBLY ON P/N 20819-4D		REF. NO.	DAA07-92-Z-B506	SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. LBAD LEX, KY.	S.O.F.S.A.			
		W.B.H.	93-07-30	MSOGS TUBING ASSY				
		L.M.	93-08-08					
				D	7S976	LEX-13364		
				1/1			1	1

D

C

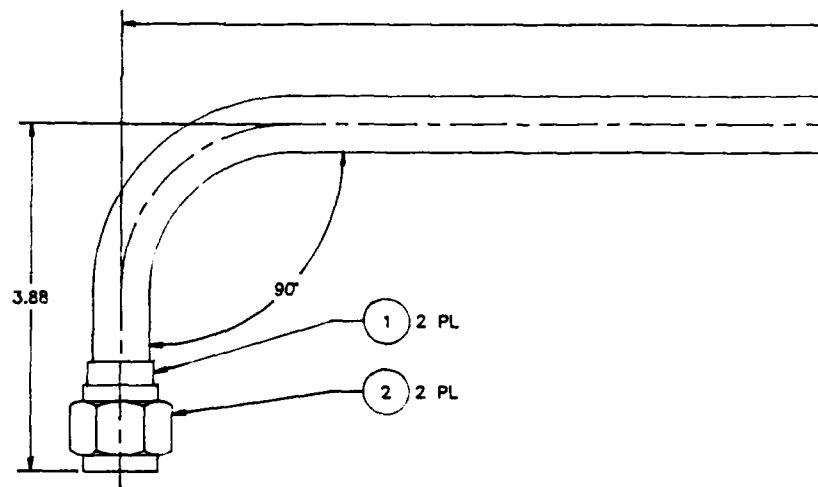
B

A

NOTES:

1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982
6. ALL BEND RADIUS PER MS33611

1



5

4

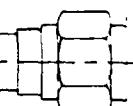
3

2

ZONE	REV	DESCRIPTION
		CAD GENERATED

2

-19-88-



R

2	NUT		AN818-10D	
2	SLEEVE		MS20819-10D	
X	MSOGS TUBING ASSY		LEX-13385	.50 ID 3003+
SYM	HOMONOLATURE	CODE IDENT	IDENTIFYING NO.	W

QUANTITY REQUIRED PER DASH NO		SYN	NONCENATURE	CODE IDENT	IDENTIFYING NO.	PARTS LIST
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS OR INCHES AND FRACTIONAL INCHES ARE IN EIGHTEENTHS 2 MM 5 1/2 1 1/2 25 1/2 400				
		W.B.H. 93-07-30				SER
		L.M. 93-08-08				A SUB
UDI-13500		UH-600				D 7S97
APPLICATON						1/1

5

4

3

3

(1)

NOTES:

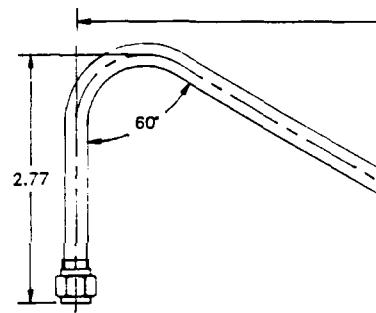
1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982
6. ALL BEND RADIUS PER MS33611

D

C

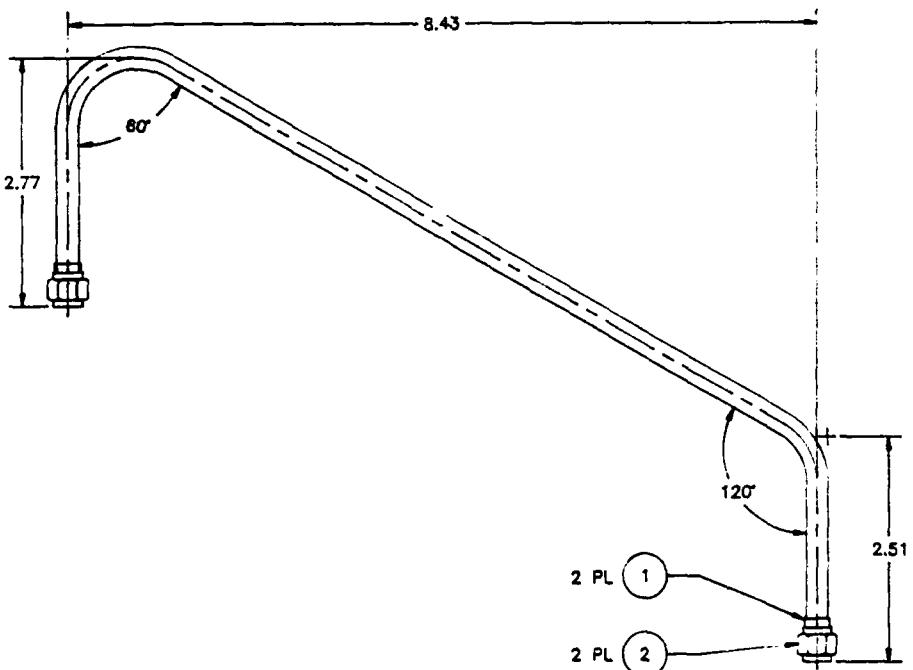
B

A



ZONE REV DESCRIPTION
CAD GENERATED

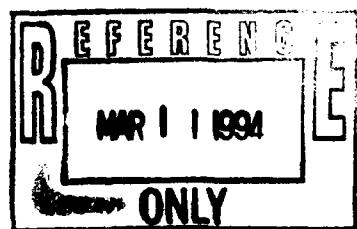
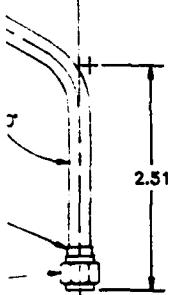
2



2	NUT		AN818-4D	
2	SLEEVE		MS20819-4D	
X	MSOGS TUBING ASSY		LEX-13368	.1875 304 C
SYN	NOMENCLATURE	CODE IDENT	IDENTIFYING NO.	

REVISIONS					
ZONE	REV	DESCRIPTION	DATE	APPROVED	
		CAD GENERATED	93-07-29		

(3)



199

LY

125 WALL

SS TUB

/SPECIFICATIONS

REQUIRED PER DRAWN NO

AIR,

Y OF E

MSG

TUE

SSE

UH-60

APPLICATION

2	NUT	AN818-4D				2
2	SLEEVE	MS20819-4D				1
<input checked="" type="checkbox"/>	MSOGS TUBING ASSY	LEX-13366	.1875 ID x .025 WALL x 15.71 304 CRES SS TUBING			
	SYN	HOMENOLATURE	CODE IDENT	IDENTIFYING NO.	MATERIAL/SPECIFICATION	U/M ZONE
PARTS LIST						
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES		DAAB07-92-Z-B506	SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. LBAO LEX, KY.			
			W.B.H.	03-07-29	S.O.F.S.A.	
			G.R. L.M.	03-08-09	MSOGS TUBING ASSEMBLY	
					D 7S976	LEX-13366
					1/1	1

A

B

(1)

NOTES:

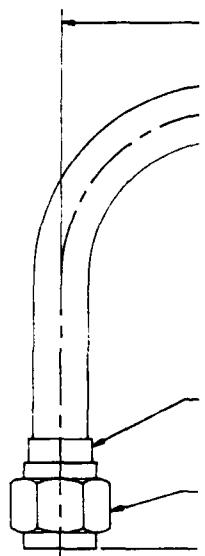
1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982
6. ALL BEND RADIUS PER MS33611

D

C

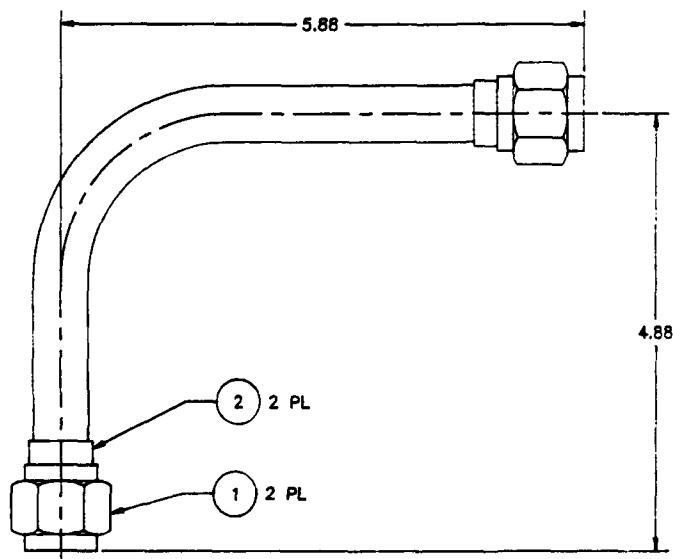
B

A



CAD GENERATED

2



2	NUT		AN818-10D
2	SLEEVE		MS20819-10D
X	MSOGS TUBING ASSY		LEX-13367
SYN	NOMENCLATURE	CODE IDENT	IDENTIFYING NO.
SI NO	PART		
2 10	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES—DIMENSIONS ON PRINTED DRAWINGS ARE IN MILLIMETERS		DRAWING NO.
	2 1/2	2 1/2	DAAB07-92-Z-B506
	2 1/2	2 1/2	W.B.H. 93-07-29
	2 1/2	2 1/2	L.M. 93-08-09
	2 1/2	2 1/2	DR.
DQ			
			D

3

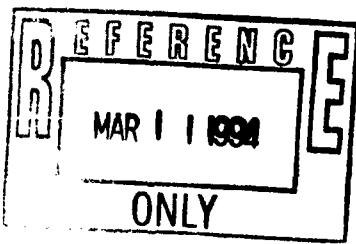
2

1

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-07-29	

(3)



MAR

2

1

2

1

1

1

1

1

1

1

1

PARTS LIST		SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. LBAD LEX, KY.	
SERV-AIR, INC.	DAAB07-92-Z-B506	W.B.H.	93-07-29
SUBSIDIARY		W.M.	93-08-08
		MSOGS TUBING ASSEMBLY	
		D 7S976	LEX-13367
		1/1	1

3

2

1

NOTES:

1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982
6. ALL BEND RADIUS PER MS33611

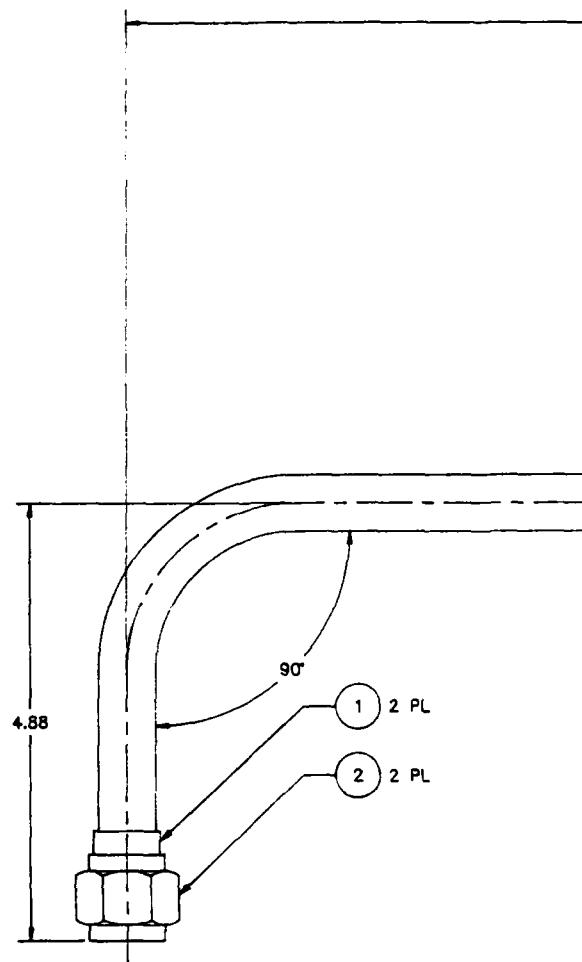
(1)

D

C

B

A

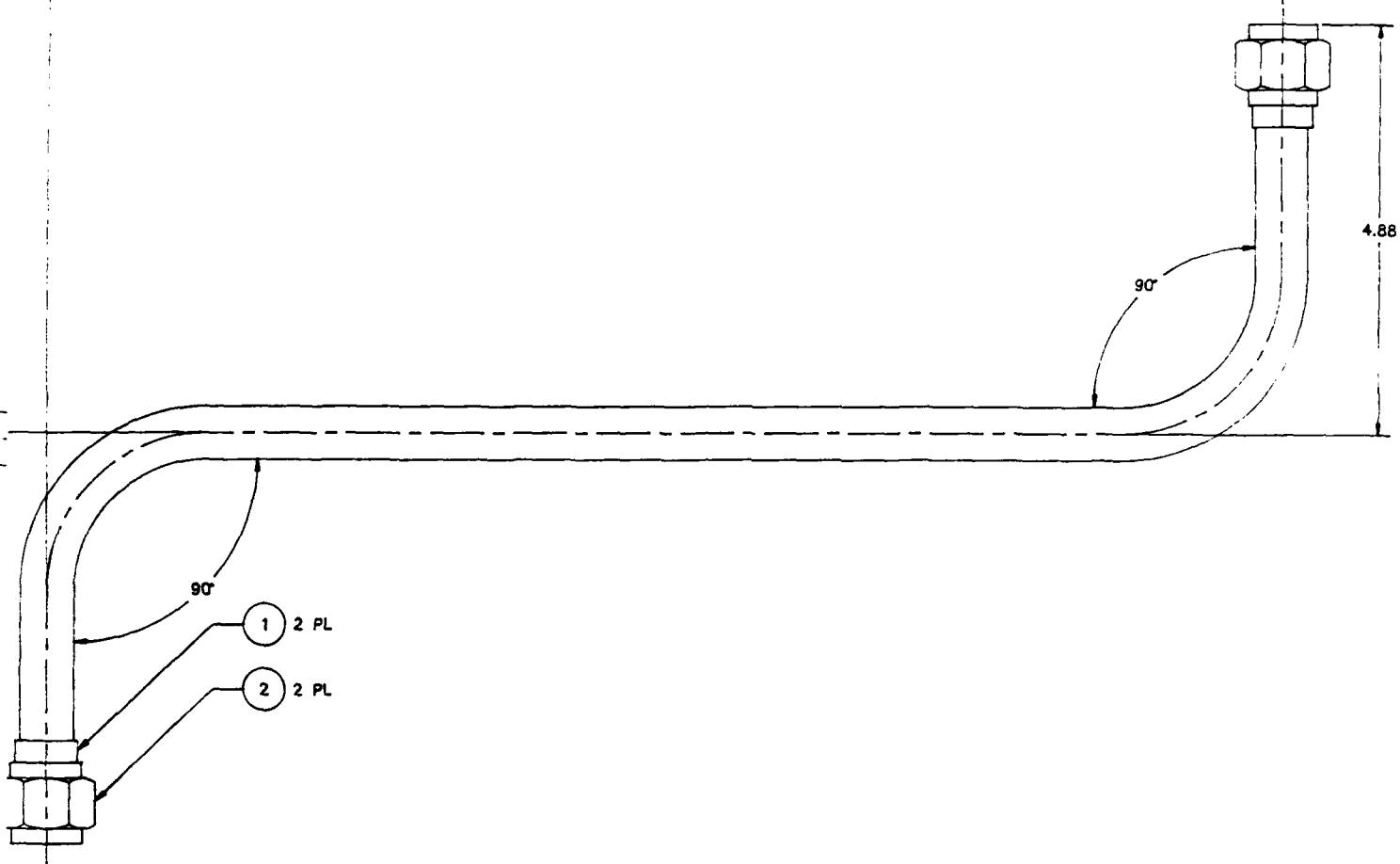


6 5 4 3 2

CAD GENERATION

2

-14.75



6

5

1

2

7

3

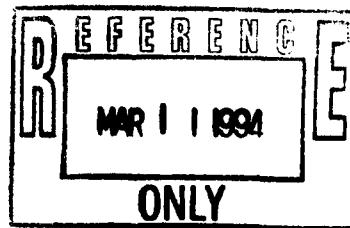
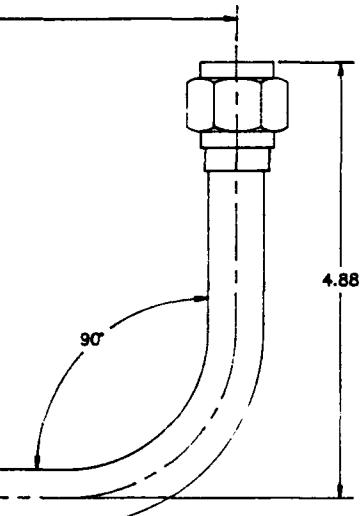
2

1

REVISION
SCHRI

REVISIONS		DESCRIPTION	DATE	APPROVED
ZONE	REV			
		CAD GENERATED	93-07-29	

(3)



2	NUT	AN818-100					2
2	SLEEVE	MS20819-100					1
	MSOGS TUBING ASSY	LEX-13368	.50 ID x .063 WALL x 27.5 3003-H14 ALUMINUM TUBING				
	SWR	MANUFACTURE	CODE DATE	MANUFACTURE NO.	MATERIAL/SPECIFICATION	U/N	ZONE
PARTS LIST							
<small>UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES TOLERANCES ARE AS SHOWN .005</small>		<small>DAAB07-92-Z-B506</small>		<small>SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. L8AD LEX, KY.</small>			
<small>W.B.H. 93-07-29</small>		<small>W.B.H. 93-07-29</small>		<small>MSOGS TUBING ASSEMBLY</small>			
<small>L.M. 93-08-09</small>		<small>L.M. 93-08-09</small>		<small>D 7S976 LEX-13368</small>			
				<small>1/1</small>			

3

2

1

S976

CN

A

1 1

NOTES:

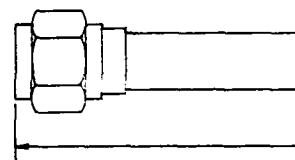
1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982
6. ALL BEND RADIUS PER MS33611

D

C

B

A



5

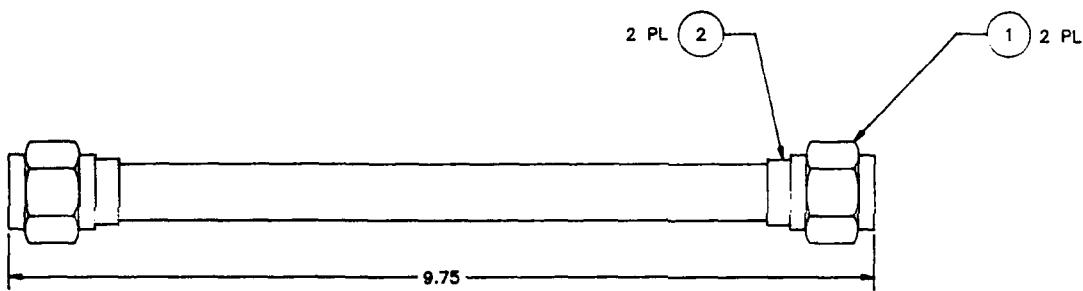
4

3

2

ZONE REV
CAD GENERATED

2



2	NUT		AN818-10D
2	SLEEVE		MS20819-10D
X	MSOGS TUBING ASSY		LEX-13370

5

1

3

2

3

2

1

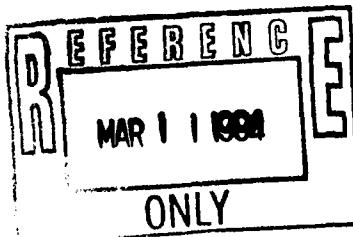
IONS

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-07-29	

(3)

1 2 PL



B

MAR 1

NUT	AN818-100				2
SLEEVE	MS20819-100				1
x .063 WA 14 ALUMINU	MSOOGS TUBING ASSY	LEX-13370	.50 ID x .063 WALL x 9.75 3003-H14 ALUMINUM TUBING		

ITEM/SPECIFIC SYM NOMENCLATURE CODE IDENT IDENTIFYING NO. MATERIAL/SPECIFICATION U/M ZONE

PARTS LIST

V-AIR, DIARY OF E	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES - TOLERANCES IN THOUSANDS OF AN INCHES	DAAB07-92-Z-B506	SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. LBAE LE, NY	S.O.F.S.A.
MS		W.B.H. 93-07-29		
TUB		L.M. 93-08-09		
ASSE				
'6				
			MSOOGS TUBING ASSEMBLY	
		D 7S976	LEX-13369	
		1/1	1	1

3

2

1

NOTES:

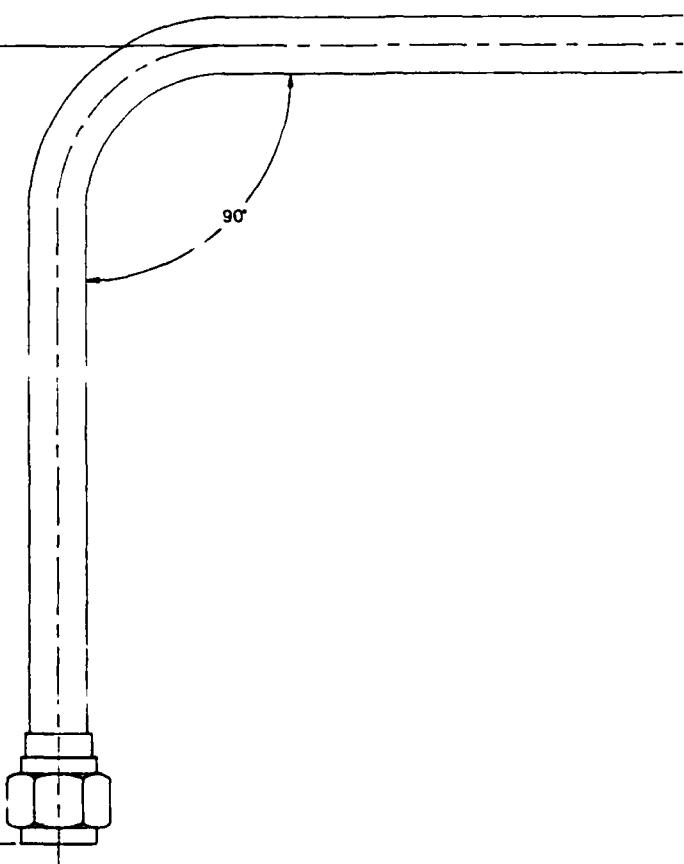
1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982
6. ALL BEND RADIUS PER MS33611

D

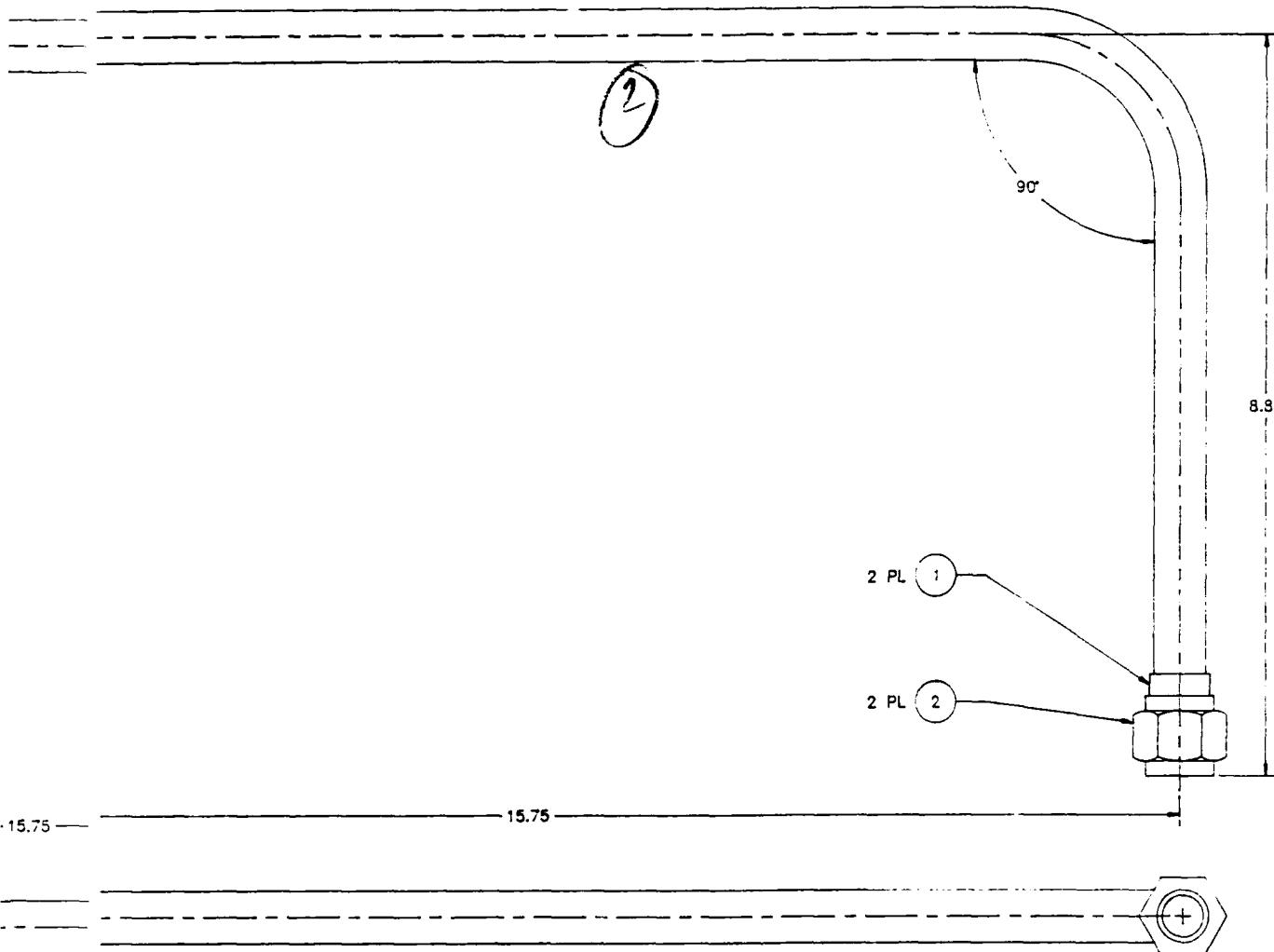
C

B

A



ZONE	REV	
		CAD GENERATED

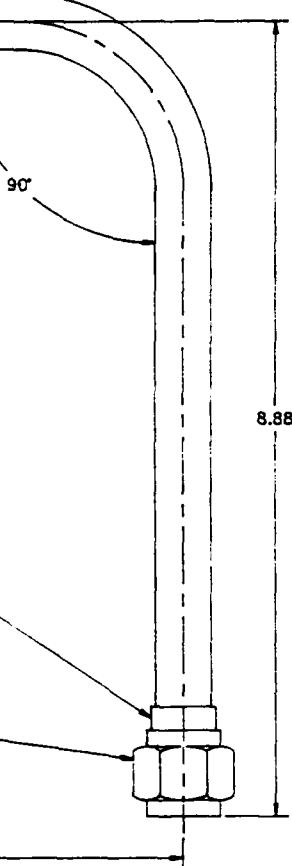


2	NUT		AN818-10D
2	SLEEVE		MS20819-10D
X	MSOGS TUBING ASSY		LEX-13370

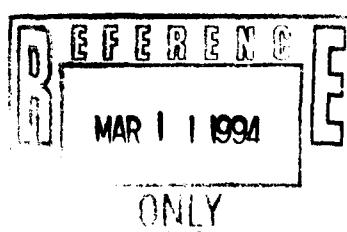
	SYN	NOMENCLATURE	CODE IDENT	IDENTIFYING NO.
QUANTITY REQUIRED PER DASH NO		PART		
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES-THOUSANDS OR FRACTIONAL INCHES	COMPLIMENT	
		INCHES	DAAB07-92-Z-B506	
		± .01		
		± .005		
		± .002		
		JEWEL		
			W.B.H.	93-07-29
			L.M.	93-08-09
			Q.C.	
LINEAR	UH-500			
ANGLE				
ROTARY				
APPLICATION				

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	93-07-29	



(3)



2	NUT	AN818-100			2
2	SLEEVE	MS20819-100			1
X	MSOGS TUBING ASSY	LEX-13370	.50 ID x .063 WALL x 35.5 3003-H14 ALUMINUM TUBING		

SYN	NONDENOMINATE	CODE EIGHT	IDENTIFYING NO.	MATERIAL/SPECIFICATION	U/M	ZONE
-----	---------------	------------	-----------------	------------------------	-----	------

QUANTITY REQUIRED PER DASH NO

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES - PREFERRED OVER MILLIMETERS		DRAWING NO. DAAB07-92-Z-B506	PARTS LIST		
			ITEM	DESCRIPTION	QTY
W.B.H.	93-07-29	SERV-AIR, INC.	S.O.F.S.A.		
G.R.L.M.	93-08-09	A SUBSIDIARY OF E-SYSTEMS, INC. LBAD LEX, KY.			
		MSOGS TUBING ASSEMBLY			
D-13370	LEX-13370	D 7S976	LEX-13370		
APPLICATION		1/1	1		

(1)

NOTES:

1. INTERPRET DRAWING PER MIL-T-31000
AND MIL-STD-100
2. INTERPRET ABBREVIATIONS PER MIL-STD-12
3. REMOVE BURRS AND BREAK ALL SHARP EDGES
4. MARK PARTS PER MIL-STD-130
5. DIMENSIONING AND TOLERANCING PER
ANSI Y14.5, 1982
6. ALL BEADS RADIUS PER MS33611

D

C

B

A



5

4

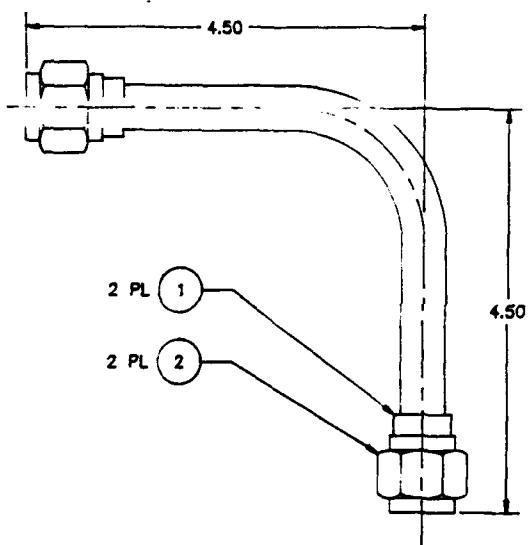
3

2

ZONE REV CAD GENERATED

2

— 4.51



3

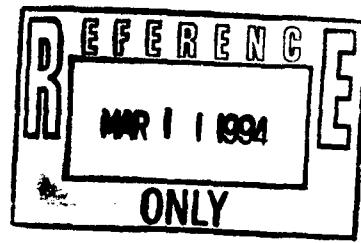
2

1

VISION
REV
REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		CAD GENERATED	83-07-29	

(3)



2	NUT	AN815-80					2
2	SLEEVE	MS20819-80					1
X	MSOGS TUBING ASSY	LEX-13371	J75 ID x .063 WALL x 10.0 3003-H14 ALUMINUM TUBING				
	SWL	TEMPERATURE	CODE NUMBER	IDENTIFICATION NO.	MATERIAL/SPECIFICATION	U/M	ZONE
10 x .06 -H14 ALU MATERIAL/							
PER DASH NO	PARTS LIST						
RV-A SUBSIDIARY	UNLEAD SPLICER ROUTINE AND STANDAR D. 2000-0000-0000-0000 2000-0000-0000-0000 2000-0000-0000-0000 2000-0000-0000-0000	DAAB07-92-Z-B506	W.B.H.	83-07-30	SERV-AIR, INC. A SUBSIDIARY OF E-SYSTEMS, INC. LEAD LEX, KY.	S.O.F.S.A	A
			L.M.	83-08-09	MSOGS TUBING ASSEMBLY		
76 ION		D 7S976	LEX-13371	1/1	1		

3

2

1