NOTES:

1. GENERAL

1.1 INTERPRET DRAWING IN ACCORDANCE WITH DOD-STD-100.

1.2 ONLY THE ITEMS DESCRIBED ON THIS DRAWING, WHEN PROCURED FROM THE VENDOR(S) LISTED HEREON, IS APPROVED BY UNISYS CORPORATION GREAT NECK, N.Y. 11020, FOR USE IN THE APPLICATION(S) SPECIFIED HEREON.A SUBSTITUTE ITEM SHALL NOT BE USED WITHOUT PRIOR APPROVAL BY UNISYS CORPORATION OR BY OPERATIONAL SUPPORT FACILITY, NATIONAL WEATHER SERVICE,1200 WESTHEIMER DRIVE, NORMAN, OKLAHOMA 73069.

1.3 IDENTIFICATION OF THE APPROVED SOURCE(S) OF SUPPLY LISTED HEREON IS NOT TO BE CONSTRUED AS A GUARANTEE OF PRESENT OR CONTINUED AVAILABILITY AS A SOURCE OF SUPPLY FOR THE ITEM DESCRIBED ON THE DRAWING.

2. DESCRIPTION:

2.1 GENERAL: THE TUBE FOCUS COIL IS A ONE PIECE ELECTROMAGNET ASSEMBLY WITH A SINGLE CURRENT HIGH IMPEDANCE ALUMINUM STRIP WINDING TO BE USED AS A KLYSTRON FOCUSING COIL. A TUNING MECHANISM ASSEMBLY IS ALSO INCLUDED IN THIS DRAWING.

2.1.1 THE TUBE FOCUS COIL IS INTENDED FOR USE WITH A PULSED KLYSTRON AMPLIFIER AS SPECIFIED BY UNISYS SOURCE CONTROL DRAWING 1213614-201.

2.1.2 THE SUPPLIERS AND PART NUMBERS OF THE PULSED KLYSTRON AMPLIFIER TUBES ARE: (FOR REFERENCE ONLY)

VARIAN - VKS-8287
LITTON - L-5782-20
THOMSON - TH2101

2.4 PHYSICAL CHARACTERISTICS: (TUBE FOCUS COIL -201) SHALL BE AS SPECIFIED HEREIN.

2.4.1 MOUNTING POSITION: ANY

2.4.2 COOLING: FORCED AIR

2.4.3 POLARITY: NORTH POLE ON CATHODE SIDE (ELECTROMAGNET BASE).

2.1.3 THE LATEST ISSUE OF UNISYS DRAWING 1213614-201 SHALL GOVERN SUPPLIERS AND PART NUMBERS OF THE KLYSTRON AMPLIFIER TUBES.

2.2 DETAIL SPECIFICATIONS: THE INDIVIDUAL COMPONENT REQUIREMENTS SHALL BE IN ACCORDANCE WITH EQUIPMENT SPECIFICATION MIL-E-4158 AND AS SPECIFIED HEREIN.

2.2.1 DESIGN, CONSTRUCTION AND PHYSICAL DIMENSIONS: THE DESIGN, CONSTRUCTION AND PHYSICAL DIMENSIONS SHALL BE AS SPECIFIED HEREIN AND PER FIGURE 1 AND FIGURE 3.

2.2.2 WORKMANSHIP: THE FOCUS COIL AND TUNING MECHANISM ASSEMBLY WORKMANSHIP SHALL BE PER MIL-STD-454 REQUIREMENT 9.

2.2.3 COIL OUTLINE: THE OUTLINE SHALL BE AS SPECIFIED PER FIGURE 1.

2.2.4 TUNING MECHANISM ASSEMBLY OUTLINE: THE OUTLINE AND MOUNTING REQUIREMENTS SHALL BE AS SPECIFIED PER FIGURE 1. THE DESIGN CONSTRUCTION AND PHYSICAL DIMENSIONS SHALL BE AS SPECIFIED HEREIN AND PER FIGURE 3.

2.3 IDENTIFICATION:

2.3.1 ITEM IDENTIFICATION: VENDOR IDENTIFICATION, VENDOR PART NUMBER, AND 56232 SOC 1217084-201 AND -202 TO BE APPLIED BY VENDOR PER MIL-STD-130.

2.4.4 X-RAY SHIELDING SHALL BE INCORPORATED WITHIN THE FOCUS COIL TO REDUCE KLYSTRON X-RADIATION (SEE NOTE 3). THE FOCUS COIL AND KLYSTRON TUBE SHALL BE COMPATIBLE WITH THE WESTINGHOUSE XRAY SHIELD DRAWING P/N 157C347.

2.4.5 WEIGHT: SHALL NOT EXCEED 360 POUNDS (164 KG).

2.4.6 POWER INPUT: THE POWER INPUT SHALL BE THROUGH AN MS3452W22-2P OR MS3102R22-2P CONNECTOR MOUNTED ON THE COIL ASSEMBLY. PIN A SHALL BE PLUS VOLTAGE (RED LEAD), PIN B SHALL BE NEGATIVE VOLTAGE (BLACK LEAD) AND PIN C SHALL BE SPARE (PLUGGED).

2.4.6.1 A KLYSTRON INTERLOCK WILL BE PROVIDED TO PREVENT APPLICATION OF BEAM VOLTAGE UNLESS FOCUS COIL CURRENT IS WITHIN ± 10% OF OPERATING VALUE.

2.5 TUNING MECHANISM ASSEMBLY (-202): PROVISIONS FOR MOUNTING A TUNING MECHANISM SHALL BE PROVIDED ON THE TUBE FOCUS COIL. THE TUNING MECHANISM ASSEMBLY IS A TURNS COUNTER ASSEMBLY USED FOR ADJUSTMENT AND COUNTING TURNS DURING TUNING OF THE KLYSTRON. SEE FIGURES 1 AND 3.

2.5.1 THE TUNING MECHANISM ASSEMBLY SHALL CONSIST OF 6-5 DIGIT MECHANICAL COUNTERS CAPABLE OF BEING INCREMENTED 10 DIGITS PER CLOCKWISE REVOLUTION AND DECREMENTED 10 DIGITS PER COUNTERCLOCKWISE REVOLUTION. THE DRIVE MECHANISM SHALL BE ACTUATED BY A 24 TOOTH BRASS MITER GEAR.

2.5.2 THE TIMING MECHANISM ASSEMBLY SHALL INCLUDE ONE LOOSE TUNING TOOL ASSEMBLY. THE TUNING TOOL ASSEMBLY (SHOWN IN FIGURE 3) SHALL CONTAIN A 24 TOOTH BRASS MITER GEAR CAPABLE OF ENGAGING AND ROTATING ANY OF THE SIX MECHANICAL COUNTERS.

2.5.3 PHYSICAL DIMENSIONS OF THE TUNING TOOL ASSEMBLY SHALL BE IN ACCORDANCE WITH FIGURE 3.

2.5.4 WEIGHT: SHALL NOT EXCEED 10 POUNDS (4.54 Kg).

2.6 OPERATIONAL CHARACTERISTICS (-201): ALL OPERATIONAL CHARACTERISTIC(S) SHALL BE AS SPECIFIED HEREIN.

2.6.1 ABSOLUTE RATINGS: NOTES 1 AND 2

MAXIMUMS

CURRENT: 26 AMPERES
VOLTAGE: 110 VOLTS D.C.
POWER: 2.8 KILOWATTS
COIL DIELECTRIC STRENGTH: 1040 VOLTS TO CASE

DWG NO. 1217084 SH 1

REVISIONS

REV	ZONE	DESCRIPTION	DATE	APPROVED
A		UPDATED SHEET INDEX C.O.B02750 (B) S/N 1 & UP	3/20/90	M. STALL
B		UPDATED SHEET INDEX C.O.D17882 (M) S/N 1 & UP	6/4/90	M. STALL
C		UPDATED SHEET INDEX C.O.D16065 (NA)	7/30/90	M. STALL
D		UPDATED SHEET INDEX C.O.D17046 (NA)	2-5-91	M. STALL
E		REVISED AND REDRAWN UPDATED SHEET INDEX C.O. B02753 (NA)	9-13-91	M Stall
F		UPDATED SHEET INDEX C.O. D16374 (NA)	10/21/91	M Stall
G		UPDATED SHEET INDEX C.O. B07535 (NA)	4/17/93	M Stall
H		C.O.F07138 (NA)	12/11/95	[illegible]

SOURCE CONTROL DRAWING

| | | |

REVISIONS

REV	ZONE	DESCRIPTION	DATE	APPROVED
A		EXTENSIVE REVISIONS C.O. B02750 (B) S/N1	3/20/90	M. STALL
D		REVISED PARA. 2.7 C.O. D17046 (NA)	2-5-91	M. STALL
E		EXTENSIVE REVISIONS C.O. B02753 (NA)	9-13-91	M. STALL
F		EXTENSIVE REVISIONS C.O. D16374 (NA)	10/8/91	M. Stall

2.6.1.1 NORMAL OPERATING RATINGS:

CURRENT: ≤25 AMPERES
VOLTAGE: 100 VOLTS D.C. MAX

RESISTANCE AT 20°C: 2.5 OHMS MAXIMUM

COOLING REQUIREMENTS: FORCED AIR 50°C MAXIMUM INLET TEMPERATURE

FLOW RATE: 4.2 KG/MIN (125 CFM) AT SEA LEVEL

COOLING PRESSURE DROP: DESIGN CRITERIA (TESTING NOT REQUIRED)
3.8 MBAR (1.5 INCHES OF WATER) NOMINAL
6.2 MBAR (2.5 INCHES OF WATER) MAXIMUM
AT NORMAL FLOW RATE

MAXIMUM TRANSVERSE FIELD: 0.3% OF PEAK AXIAL FIELD

2.7 FINISH (-201): ALL STEEL PARTS SHALL BE CADMIUM PLATED PER QQ-P-416 TYPE 1 CLASS 2. ALL SURFACES EXCEPT INSIDE DIAMETER, COUNTER BORED PORTION OF RIGHT END PLATE, ELECTRICAL CONNECTOR, BOTTOM OF LEFT END PLATE AND EXTENSION SHALL BE PAINTED GLOSS GRAY OR SEMI GLOSS GRAY PER FED-STD-595 COLOR 16187 OR COLOR 26187 RESPECTIVELY. FOR MISCELLANEOUS STEEL PARTS CADMIUM PLATING MAY BE OPTIONALLY SUBSTITUTED BY ELECTROLESS NICKEL PLATING PER MIL-C-26074-C. THE EXTERIOR SHELL MAY BE ZINC PLATED PER QQ-Z-325 WITH SUPPLEMENTARY YELLOW CHROMATE TREATMENT.

2.7.1 FINISH (-202): THE FINISH FOR THE -202 ASSEMBLY SHALL BE SUITABLE FOR THE INTENDED USE AND CAPABLE OF WITHSTANDING THE ENVIRONMENT SPECIFIED FOR THE -201 ASSEMBLY.

2.8 AUXILIARY HARDWARE (-201): TUBE CLAMPS AND TUBE CLAMP MOUNTING HARDWARE SHALL BE PACKAGED AND SHIPPED WITH EACH UNIT.

2.8.1 AUXILIARY HARDWARE (-202): A TUNING TOOL ASSEMBLY SHALL BE PACKAGED AND SHIPPED WITH EACH UNIT.

2.9 TEST PARAMETERS: (NOTES 7 & 8)

COOLING PRESSURE DROP: 6 MBAR (MAX) AT AN AIRFLOW MASS OF 4.2KG/MN, DESIGN CRITERIA.

DIELECTRIC TEST: NO BREAKDOWN AT 1040 VOLTS (NOTE 4)

COIL INSULATION TEST: 100 MEGOHMS (NOTE 5)

COIL RESISTANCE AT 20°C: 2.0 - 2.5 OHMS; COIL CURRENT = 0; AIR FLOW MASS = 4.2 KG/MN

COIL RESISTANCE AFTER OPERATING TO THERMAL STABILIZATION: 4.0 OHMS MAX; COIL CURRENT = 25 AMPS; AIR FLOW MASS = 4.2 KG/MN

AXIAL FIELD AFTER THERMAL STABILIZATION (NOTE 6) THE AXIAL INDUCTION SHALL BE IN ACCORDANCE WITH FIGURE 2.

2.10 ENVIRONMENTAL REQUIREMENTS

2.10.1 GENERAL: THE TUBE FOCUS COIL AND TUNING MECHANISM MUST BE ABLE TO OPERATE AND/OR SURVIVE NON-OPERATING IN THE FOLLOWING ENVIRONMENTS:

2.10.2 TEMPERATURE

OPERATIONAL:	0°C TO 50°C
NON-OPERATION:	-40°C TO 71°C
STORAGE:	-57°C TO 71°C

2.10.3 HUMIDITY: PER MIL-STD-202, METHOD 103B TEST CONDITION B (96 HRS; RH 90 TO 95% NON CONDENSING; TEMP 40°C ± 2°C).

2.10.4 ALTITUDE

OPERATING 3,300 METERS PER MIL-STD-202, METHOD 105C, TEST CONDITION F.

NON-OPERATIONAL 12,160 METERS

2.10.5 SALT FOG: PER MIL-STD-810, METHOD 509.3 NON CONDENSING (EXPOSURE DURATION 48 HOURS).

2.10.6 FUNGUS: PER MIL-STD-454, REQUIREMENT 4.

2.10.7 STORAGE LIFE: THE FOCUS COIL AND TUNING MECHANISM MUST BE ABLE TO BE STORED FOR PERIODS OF UP TO 24 MONTHS WITHOUT DAMAGE OR DETERIORATION IN PERFORMANCE.

2.11 TRANSPORTABILITY: THE TUBE FOCUS COIL AND TUNING MECHANISM MUST BE DESIGNED TO WITHSTAND THE VIBRATION AND SHOCK ENCOUNTERED DURING TRANSPORTATION BY MILITARY AIRCRAFT, SHIPS, RAIL AND TRUCKS OVER WORLDWIDE CONDITIONS.

2.11.1 ACCELERATION: PERMISSIBLE ACCELERATION (NON-OPERATIONAL)

HORIZONTAL: 5G MAXIMUM

VERTICAL: 5G MAXIMUM

2.11.2 GROUND BASED EQUIPMENT

2.11.2.1 SHOCK: PER MIL-STD-202, METHOD 213, TEST CONDITION J MODIFIED TO 5G MAXIMUM.

2.11.2.2 VIBRATION: PER MIL-STD-202, METHOD 201A MODIFIED TO BE 0.04 INCHES PEAK TO PEAK, 25 Hz VERTICAL.

2.12 RELIABILITY: THE MTBF OF THE UNITS SHALL BE AT LEAST 100,000 HOURS. THE CALCULATIONS SHALL BE IN ACCORDANCE WITH MIL-HDBK-217 AT A TEMPERATURE OF 30 DEGREES C IN A FIXED GROUP ENVIRONMENT.

2.13 MAINTAINABILITY THE UNITS SHALL BE FIELD REPLACEABLE AND FACTORY REPAIRABLE.

2.14 DESIGN AND CONSTRUCTION: UNLESS OTHERWISE SPECIFIED, SYSTEM DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH MIL-E-4158E.

2.14.1 MATERIAL PROCESSES AND PARTS: MIL-STD-454J, STANDARD GENERAL REQUIREMENTS FOR ELECTRONIC EQUIPMENT, WILL BE USED AS A GUIDE FOR PARTS AND MATERIALS. SPECIAL EFFORT SHALL BE MADE TO AVOID USE OF STRATEGIC OR CRITICAL MATERIALS.

2.14.2 INTERCHANGEABILITY: ALL UNIQUE ASSEMBLIES AND PARTS SHALL BE INTERCHANGEABLE WITH ALL LIKE ITEMS AND SHALL CONFORM TO REQUIREMENT 7 OF MIL-STD-454J.

NOTES:

NOTE 1: REFERRING TO PARAGRAPH 6.5 OF MIL-E-1, THESE VALUES ARE BASED ON THE "ABSOLUTE SYSTEM" AND SHOULD NOT BE EXCEEDED UNDER CONTINUOUS OR TRANSIENT CONDITIONS. A SINGLE RATING MAY BE THE LIMITATION AND SIMULTANEOUS OPERATION AT ANOTHER RATING MAY NOT BE POSSIBLE. DESIGN VALUES FOR SYSTEMS SHOULD INCLUDE A SAFETY FACTOR TO MAINTAIN OPERATION WITHIN RATING UNDER VOLTAGE AND ENVIRONMENTAL VARIATIONS.

NOTE 2: SUITABLE CIRCUITRY WILL PROTECT THE COIL WINDINGS AGAINST OVERVOLTAGE RESULTING FROM SUDDEN CURRENT INTERRUPTIONS DURING OPERATION. ANY TRANSIENT OVERVOLTAGE WILL NOT EXCEED 80% OF THE DIELECTRIC STRENGTH TEST VOLTAGE.

DWG NO. 1217084 SH 3

REVISIONS

REV	ZONE	DESCRIPTION	DATE	APPROVED
A		EXTENSIVE REVISIONS C.O. B02750(B) S/NI	3/20/90	M. STALL
E		EXTENSIVE REVISIONS C.O. B02753 (NA)	9-13-91	M. STALL
F		EXTENSIVE REVISIONS C.O. D16374 (NA)	11/6/91	[illegible]
G	A3	ADDED GAMMA PT. NO.'S FOR DASH 202 AND DASH 203 C.O. B07535 (NA)		
H		C.O. F07138 (NA)	12/11/95	[illegible]

NOTE 3: IT IS THE RESPONSIBILITY OF THE TUBE AND FOCUS COIL ASSEMBLERS TO PROVIDE SUFFICIENT X-RAY SHIELDING TO REDUCE RADIATION TO 2 MR/HR AT A DISTANCE OF 1 FT FROM ANY INTEGRAL PART OF THE KLYSTRON ABOVE THE PLANE OF THE BOTTOM OF THE BASEPLATE OF THE TUBE FOCUS COIL (EXCEPTING THE CONICAL PROJECTION OF THE OUTPUT WAVEGUIDE) WHEN THE TUBE IS MOUNTED IN THE FOCUS COIL SPECIFIED HEREIN. THE COIL SHALL BE EQUIPPED WITH AN X-RAY SHIELD SIMILAR TO VARIAN DRAWING 139158 OR EQUIVALENT (SEE UNISYS P/N 1213614-201). THE TEST SHALL BE PERFORMED WITH TUBE AND COIL OPERATED AT RATED CONDITIONS FOR THE POWER OUTPUT TEST. IT IS THE RESPONSIBILITY OF THE EQUIPMENT MANUFACTURER TO PROVIDE X-RAY SHIELDING FOR RADIATION BELOW THE PLANE OF THE BOTTOM OF THE BASEPLATE OF THE TUBE FOCUS COIL. IT IS ALSO THE RESPONSIBILITY OF THE EQUIPMENT MANUFACTURERS TO PROVIDE ANY ADDITIONAL X-RAY SHIELDING NECESSARY TO MEET ALL REQUIRED SAFETY STANDARDS WHEN THE TUBE AND COIL ARE OPERATED. THE TUBE AND COIL MANUFACTURERS SHALL HAVE NO RESPONSIBILITY FOR EXCESS RADIATION OR RADIATION LEAKAGE ARISING FROM ALTERATIONS TO THE TUBE AND/OR THE FOCUS COIL, OR FROM OPERATION BEYOND THE SPECIFIED OPERATING PARAMETERS NECESSARY TO ACHIEVE POWER OUTPUT TEST CONDITIONS.

NOTE 4: THE DIELECTRIC STRENGTH TEST SHALL BE PERFORMED AT A MAXIMUM POTENTIAL OF 1040 VOLTS BETWEEN THE COILS AND THE COIL CASE.

NOTE 5: COIL INSULATION TEST SHALL BE PERFORMED WITH THE COILS SHORTED AND THE TEST SHALL BE BETWEEN THE COILS AND THE COIL CASE.

NOTE 6: MAGNETIC INDUCTION MEASUREMENTS SHALL BE MADE WITH DUMMY POLE PIECES, EQUIVALENT TO THE MAGNETIC CIRCUITRY OF THE KLYSTRON, INSERTED IN THE FOCUS COIL. THE TEST SHALL BE PERFORMED AT AN AMBIENT ROOM TEMPERATURE AND AIR FLOW TEMPERATURE OF 50°C AND WITH AN AIR MASS FLOW OF 4.3 KG/MN. THE AXIAL MAGNETIC FIELD SHALL BE AS SPECIFIED IN THE FIELD PLOT TABULATED IN FIGURE 2 WITH THE FOCUS COIL CURRENT SET AT 25 ± 1% AMPERES.

NOTE 7: DO NOT DISCONNECT TUBE FOCUS POWER CABLE UNTIL VOLTAGE HAS BEEN PROGRESSIVELY REDUCED TO ZERO.

NOTE 8: TUBE FOCUS COIL POWER INPUT SHALL BE INTERLOCKED TO THE COILS REQUIRED MINIMUM COOLING AIR FLOW TO PRECLUDE DAMAGE.

NOTE 9: INLET AND OUTLET VENT CONFIGURATION AND SCREENING SHOWN IS TYPICAL. DIMENSIONS SHOWN FOR VENTS AND SCREENING WILL VARY BETWEEN MANUFACTURERS.

2.15 DESIGN AND CONSTRUCTION REQUIREMENTS: THE DESIGN AND CONSTRUCTION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED HEREIN. FOR NEW EQUIPMENT DESIGNS, THE GENERAL EQUIPMENT REQUIREMENTS CONTAINED OR REFERENCED IN MIL-E-4158E FOR THE DESIGN; PARTS; MATERIALS; PROCESSES; NOMENCLATURE; IDENTIFICATION MARKING, AND LABELS; AND WORKMANSHIP SHALL APPLY.

3. QUALITY ASSURANCE PROVISIONS

3.1 RESPONSIBILITY: UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR PURCHASE ORDER, THE SUPPLIER IS RESPONSIBLE FOR THE PERFORMANCE OF ALL INSPECTION REQUIREMENTS. UNISYS RESERVES THE RIGHT TO PERFORM ANY OF THE INSPECTIONS OR WITNESS TESTS AS SET FORTH IN THE PURCHASE ORDER WHERE SUCH INSPECTIONS/TESTS ARE DEEMED NECESSARY TO ASSURE THE UNIT CONFORMS TO PRESCRIBED REQUIREMENTS.

3.2 QUALITY CONTROL SYSTEM: THE SELLER SHALL PROVIDE AND MAINTAIN AN EFFECTIVE INSPECTION AND QUALITY CONTROL SYSTEM (SUCH AS MIL-Q-9858A).

3.3 UNISYS VERIFICATION: ALL QUALITY CONTROL OPERATIONS PERFORMED BY THE SELLER WILL BE SUBJECT TO UNISYS VERIFICATION AT ANY TIME. FAILURE OF THE SELLER TO PROMPTLY CORRECT DEFICIENCIES BY HIM OR OF WHICH HE IS NOTIFIED SHALL BE CAUSE FOR SUSPENSION OF ACCEPTANCE UNTIL CONFORMANCE OF PRODUCT TO PRESCRIBED CRITERIA HAS BEEN DEMONSTRATED.

3.4 TESTS: TESTS SHALL BE PERFORMED TO DETERMINE BOTH WORKMANSHIP ACCEPTANCE AND DESIGN ACCEPTANCE. FACTORY ACCEPTANCE TEST PROCEDURES SHALL BE GENERATED BY THE SELLER, APPROVED BY UNISYS, AND PERFORMED BY THE SELLER.

3.4.1 PERFORMANCE TESTS: THE UNIT SHALL BE SUBJECTED TO TESTS TO DETERMINE DESIGN CONFORMANCE WITH THE REQUIREMENTS OF THIS DOCUMENT. THESE TESTS SHALL BE ARRANGED TO CORRELATE WITH PERFORMANCE REQUIREMENTS SPECIFIED HEREIN.

A. FUNCTIONAL REQUIREMENTS TESTS.

B. TEST OF INTERFACE REQUIREMENTS.

C. VERIFICATION OF MODES OF OPERATION.

D. TEST OF ALL PERFORMANCE PARAMETERS.

E. OTHER PERFORMANCE TESTS AS REQUIRED.

(TESTS ARE THOSE INSPECTIONS WHICH CAN BE MADE BY APPLYING PREDETERMINED STIMULI TO THE ITEM UNDER TEST AND OBSERVING, MEASURING, OR COMPARING EVOKED RESPONSES TO ASCERTAIN THAT A DESIRED PERFORMANCE HAS BEEN OBTAINED).

4. PREPARATION FOR DELIVERY: UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR PURCHASE ORDER, ITEMS SPECIFIED HEREIN SHALL BE PREPARED FOR DOMESTIC SHIPMENT, IMMEDIATE USE IN ACCORDANCE WITH REST INDUSTRIAL PRACTICE.

APPROVED SOURCE(S) OF SUPPLY:

VARIAN ASSOCIATES (CAGE CODE 99313)
PALO ALTO, CA
PART NO.: PER TABLE I

THOMSON ELECTRON TUBES AND DEVICE CORP. (CAGE CODE 48257)
TOTOWA, N.J.
PART NO.: PER TABLE I

OGALLALA ELECTRONICS (CAGE CODE 15766)
OGALLALA, NEB.
PART NO.: PER TABLE I

LITTON SYSTEMS INC (CAGE CODE 80080)
SAN CARLOS, CA
PART NO.: PER TABLE I

PREMIER MICROWAVE CORP. (CAGE CODE 66775)
PORT CHESTER, N.Y.
PART NO.: PER TABLE I

TABLE I

DASH NO.	MANUFACTURER(S) PART NUMBER					
	VARIAN	THOMSON	OGALLALA	LITTON	PREMIER	
201	VA-1587F	TH20199A (MODIFIED)	41C2081	X	GA-1587L	TUBE FOCUS COIL ASSEMBLY
202	64276 (MODIFIED)	TH20211A (MODIFIED)	X	430800 (MODIFIED)	01060912	TUNING MECHANISM ASSEMBLY
203	VA-1587F WITH TUNING MECHANISM	TH20199A MODIFIED WITH TUNING MECHANISM	X	X	GA-1587L WITH 01060912	ASSEMBLY OF TUBE FOCUS COIL AND TUNING MECHANISM

SIZE	FSCM NO.	DWG NO.	REV
D	56232	1217084	H

SCALE NONE SHEET 3

FC-... 632125H

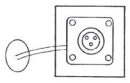
DWG NO. 1217084 SH 4

REVISIONS

REV	ZONE	DESCRIPTION	DATE	APPROVED
A		EXTENSIVE REVISIONS C.O. B02750(B) S/N 1	2/20/90	[illegible]
C		ADDED REFERENCE A(-A-) TO 5.325 ±.010 DIA C.O. D16065 (NA)	7/10/90	[illegible]
E		EXTENSIVE CHANGES C.O. B02753 (NA)	8/13/91	[illegible]
F		EXTENSIVE CHANGES C.O. D16374 (NA)	11/21/91	[illegible]
G	C4	DIM (8.82) WAS (8.62) C.O. B07535 (NA)		

NOTE 1: TABLE A PROVIDES DIMENSIONS FOR THOMSON FOCUS COIL. LETTERS Ⓐ THROUGH Ⓦ IDENTIFY LOCATION OF DIMENSIONS ON FIGURES 1 & 2.

CONNECTOR MS3452W22-2P OR MS3102R22-2P



PIN A - RED (+)
PIN B - BLACK (-)
PIN C - SPARE

VIEW A-A

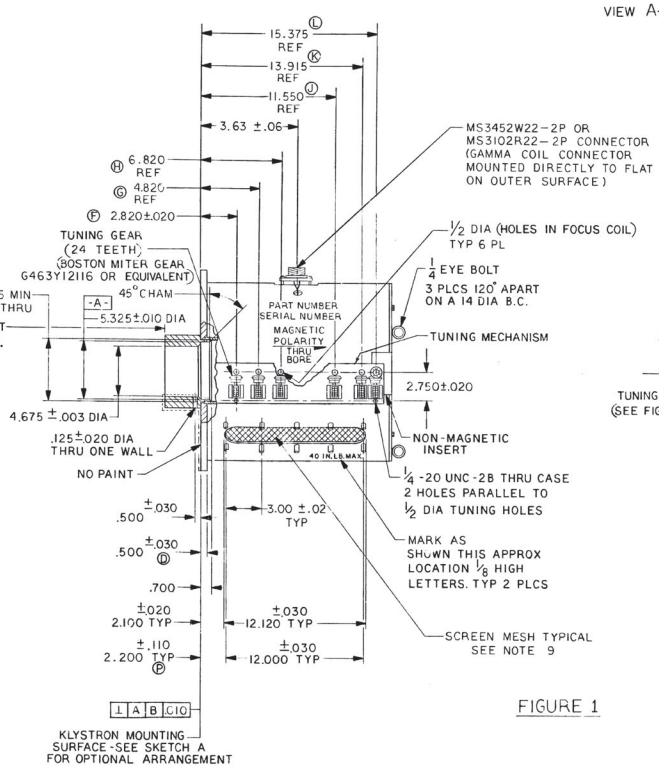
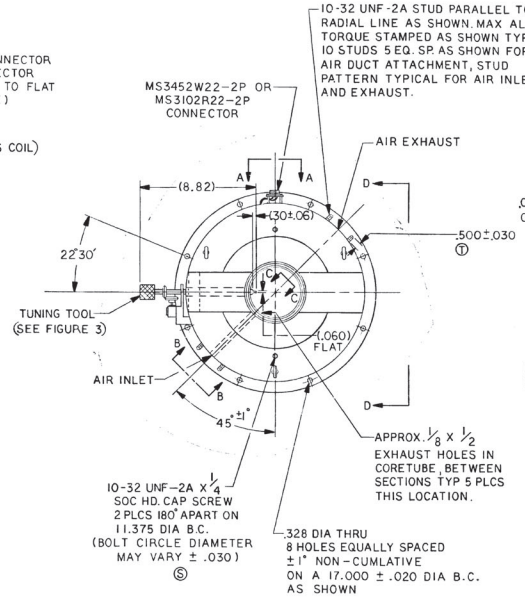
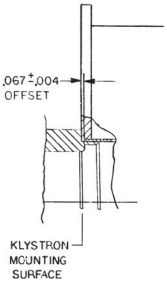


FIGURE 1





SKETCH A
THOMSON VARIATION: .067 OFFSET
LITTON, VARIAN VARIATION: .000 OFFSET

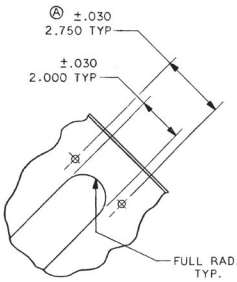
SIZE	FSCM NO.	DWG NO.	REV
D	56232	1217084	G
SCALE NONE		SHEET 4	

FORM 632935H

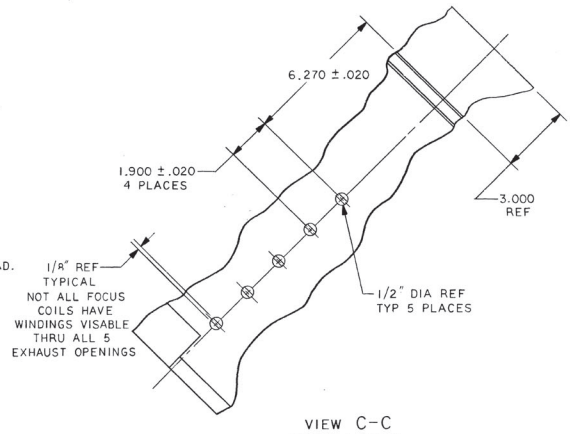
DWG NO. 1217084 SH 5

REVISIONS

REV	ZONE	DESCRIPTION	DATE	APPROVED
A	A-2	ADDED (SEE NOTE 6) TO FIGURE 2 C.O. B02750(B) S/N 1	[illegible]	[illegible]
B	A3 B3	REVISED FIELD PLOT GAUSS FIGURE 2 C.O. D17882 (M) S N/1 & UP	1/4/90	[illegible]
C		ADDED REFERENCE B(-B-) TO 10.015 +.010 -.000 DIA; 0.400 DIM WAS 0.650 C.O. D16065 (NA)	[illegible]	[illegible]
E		EXTENSIVE CHANGES C.O. B02753 (NA)	9/12/91	[illegible]
F		EXTENSIVE CHANGES C.O. D16374 (NA)	[illegible]	[illegible]



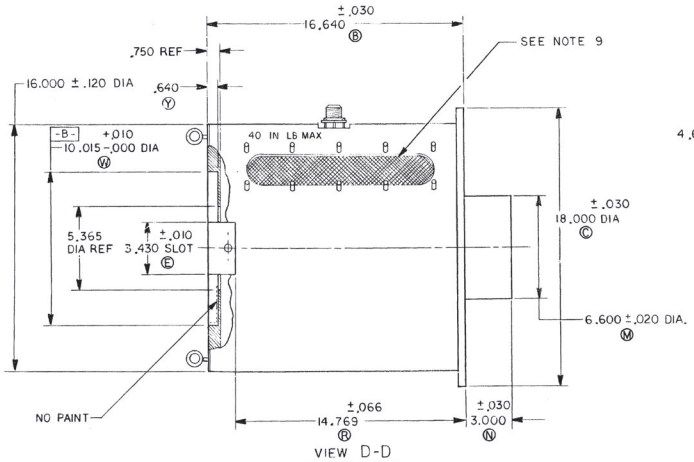
VIEW B-B
FIGURE 1 CONTD



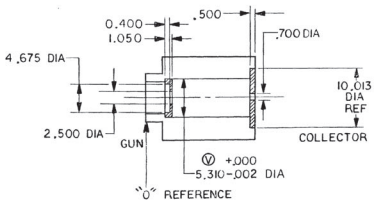
VIEW C-C
FIGURE 1 CONTD

TABLE A
DIMENSIONS FOR THOMSON FOCUS COIL
SEE NOTE 1

Ⓐ	2.7165-2.779	
Ⓑ	16.606-16.669	
Ⓒ	17.968-18.031	
Ⓓ	.469-.531	
Ⓔ	3.405-3.445	
Ⓕ	2.795-2.843	
Ⓖ	4.795-4.843	
Ⓗ	6.795-6.843	
Ⓙ	11.528-11.575	
Ⓚ	13.890-13.937	
Ⓛ	15.350-15.398	
Ⓜ	6.579-6.618	
Ⓝ	2.953-3.071	
Ⓟ	2.087-2.150	
Ⓡ	14.783-14.839	
Ⓢ	11.358-11.398	TAPPED FOR M5 SCREWS
Ⓣ	.551-.610	
Ⓥ	5.315-5.339	
Ⓦ	10.011-10.023	
Ⓨ	.563-.579	



VIEW D-D
FIGURE 1-CONTD



APERTURES

DISTANCE FROM "0" INCHES	MIN GAUSS	MAX GAUSS
0.0	1	20
1.0	10	22
2.0	25	42
3.0	100	150
3.5	225	350
4.0	460	645
4.5	740	930
5.0	940	1050
5.0	1070	1180
8.0	1210	1305
10.0	1360	1450
12.0	1480	1570
14.0	1570	1660
16.0	1630	1710
16.5	1630	1715
17.0	1640	1710
17.5	1630	1705
18.0	1590	1680
18.5	1515	1630
19.0	700	1035
19.5	65	90

FIELD PLOT (SEE NOTE 6)
FIGURE 2

SIZE	FSCM NO.	DWG NO.	REV
D	56232	1217084	F

SCALE NONE SHEET 5

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DWG NO. 1217084 SH 6

REVISIONS

REV	ZONE	DESCRIPTION	DATE	APPROVED
A		EXTENSIVE REVISIONS C.O. B02750 (B) S/N 1	3/20/90	
E		EXTENSIVE CHANGES C.O. B02753 (NA)	9/13/91	

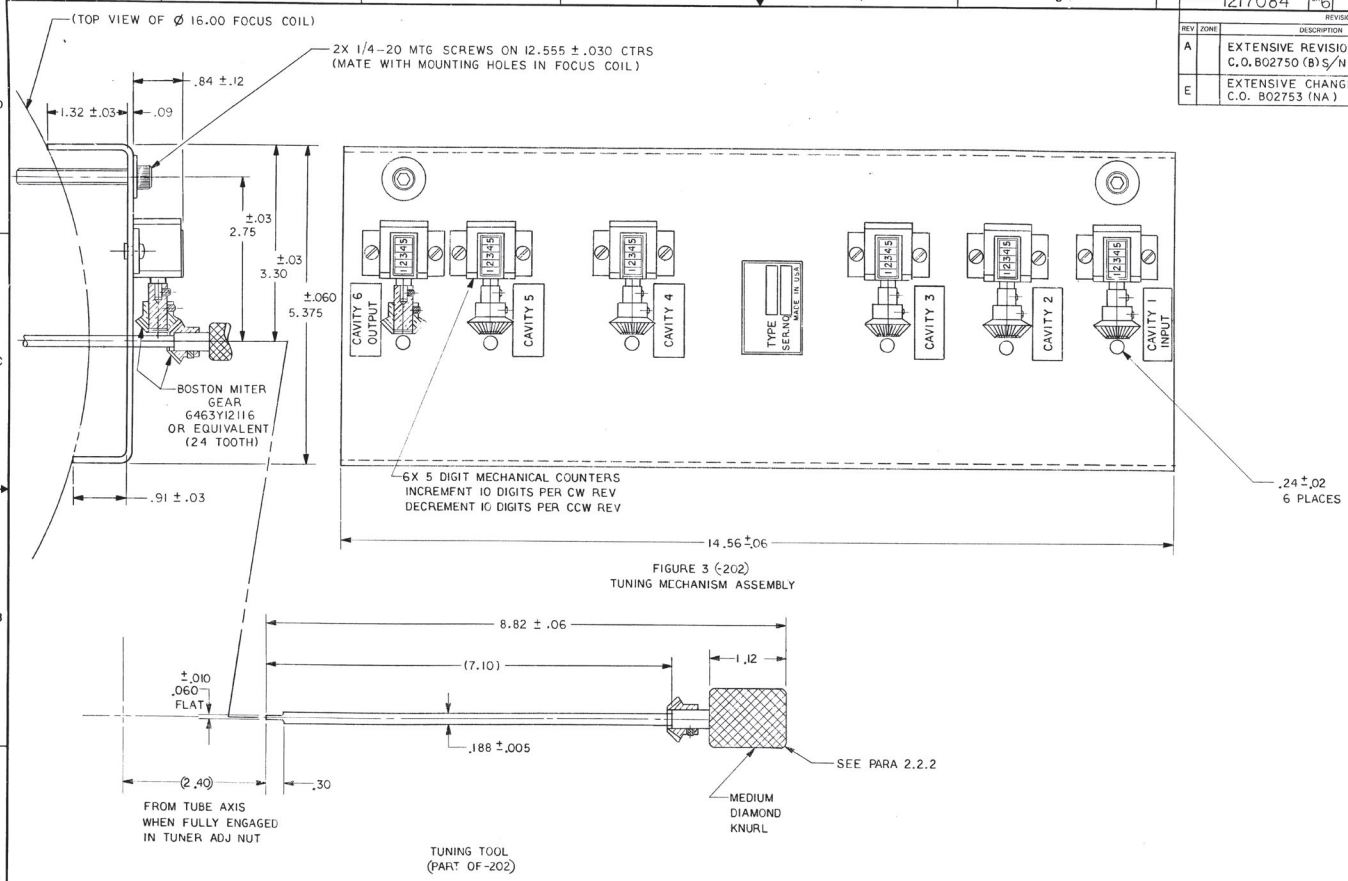

FIGURE 3 (-202)
TUNING MECHANISM ASSEMBLY

TUNING TOOL
(PART OF -202)

SIZE	FSCM NO.	DWG NO.	REV
D	56232	1217084	E
SCALE NONE		SHEET 6	

FORM 632935H