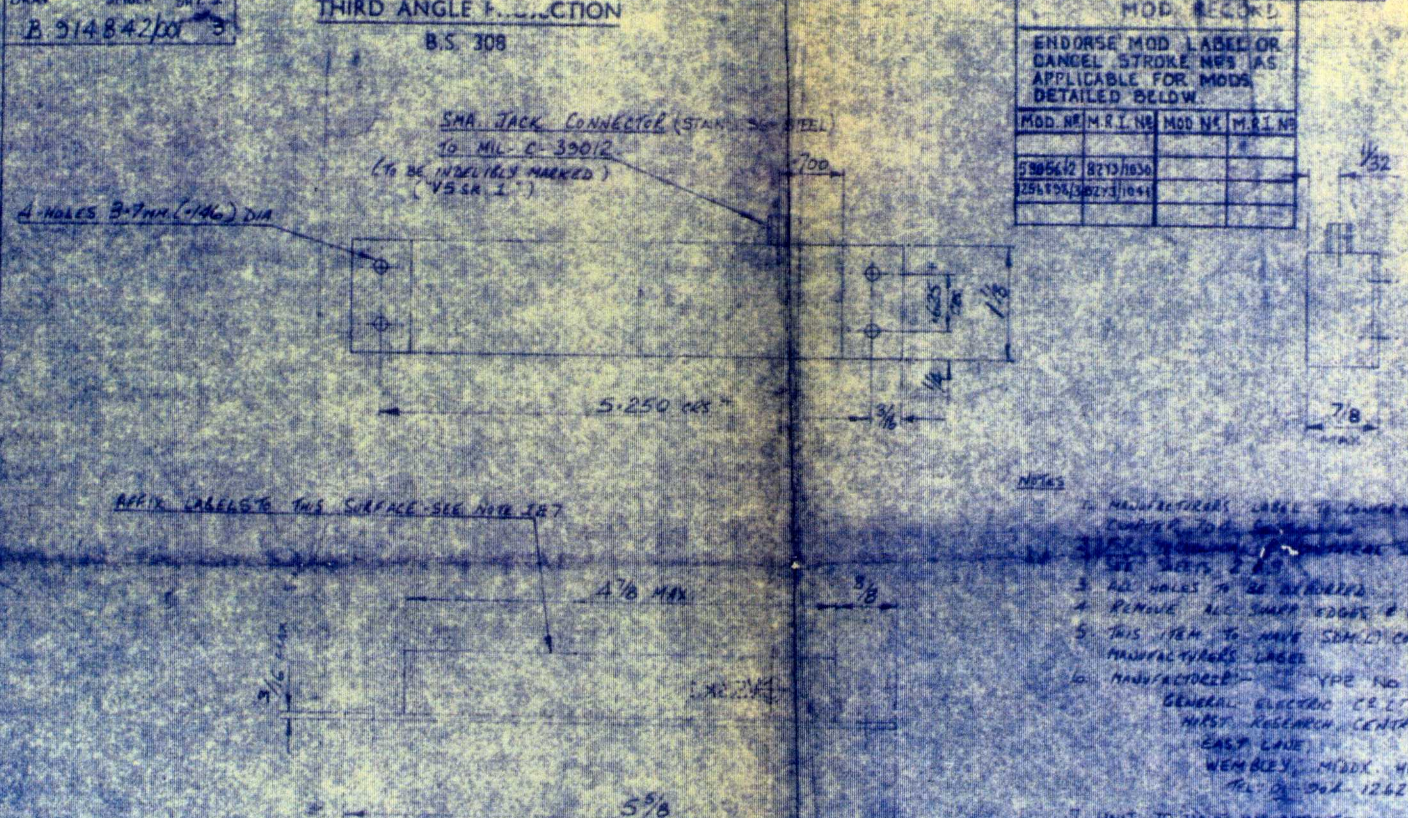
DRAWING NUMBER	SHT.
B 914842/001	3

USED ON
DB04410

~~112-1-76~~ ~~75 1485~~
~~B30 72~~ ~~351/1045~~
~~C1/4-4-77~~ ~~351/111~~

THIRD ANGLE PROJECTION
B.S. 308

MOD RECORD			
ENDORSE MOD LABEL OR CANCEL STROKE Nos AS APPLICABLE FOR MODS DETAILED BELOW.			
MOD. No	M.R.I. No	MOD No	M.R.I. No
5905642	82Y3/1030		
25699/3	82Y3/1041		



NOTES
1. MANUFACTURERS LABEL TO CONFORM TO [illegible] CURRENT [illegible]
2. FOR [illegible] GENERAL SPECIFICATION SEE SHEETS 2 & 3
3. ALL HOLES TO BE DEBURRED
4. REMOVE ALL SHARP EDGES & CORNERS
5. THIS ITEM TO HAVE SDM(C) CODE "VS" ON MANUFACTURERS LABEL
6. MANUFACTURER - TYPE No 529/1
GENERAL ELECTRIC CO LTD
HIRST RESEARCH CENTRE
EAST LANE,
WEMBLEY, MIDDX. HA9 7PP
TEL: 01-904-1262
7. UNIT TO HAVE AN APPROVED MINISTRY "MOD REL" LABEL FITTED

DIMENSIONS MARKED THUS * ARE IMPORTANT FEATURES OF INTERCHANGEABILITY. OTHER DIMENSIONS EITHER HAVE GREATER CLEARANCE [illegible] AND DO NOT REQUIRE GAUGING OR ARE FOR REFERENCE ONLY.

NOTES CONTINUED
8. DELAY LINES MANUFACTURED USING AN 6mm SPINEL ROD WILL HAVE MODIFICATION LABEL WITH NUMBER '2' STRUCK. DELAY LINES MANUFACTURED USING 8 mm SPINEL ROD WILL HAVE MODIFICATION LABEL WITH NUMBERS '2' & '3' STRUCK.

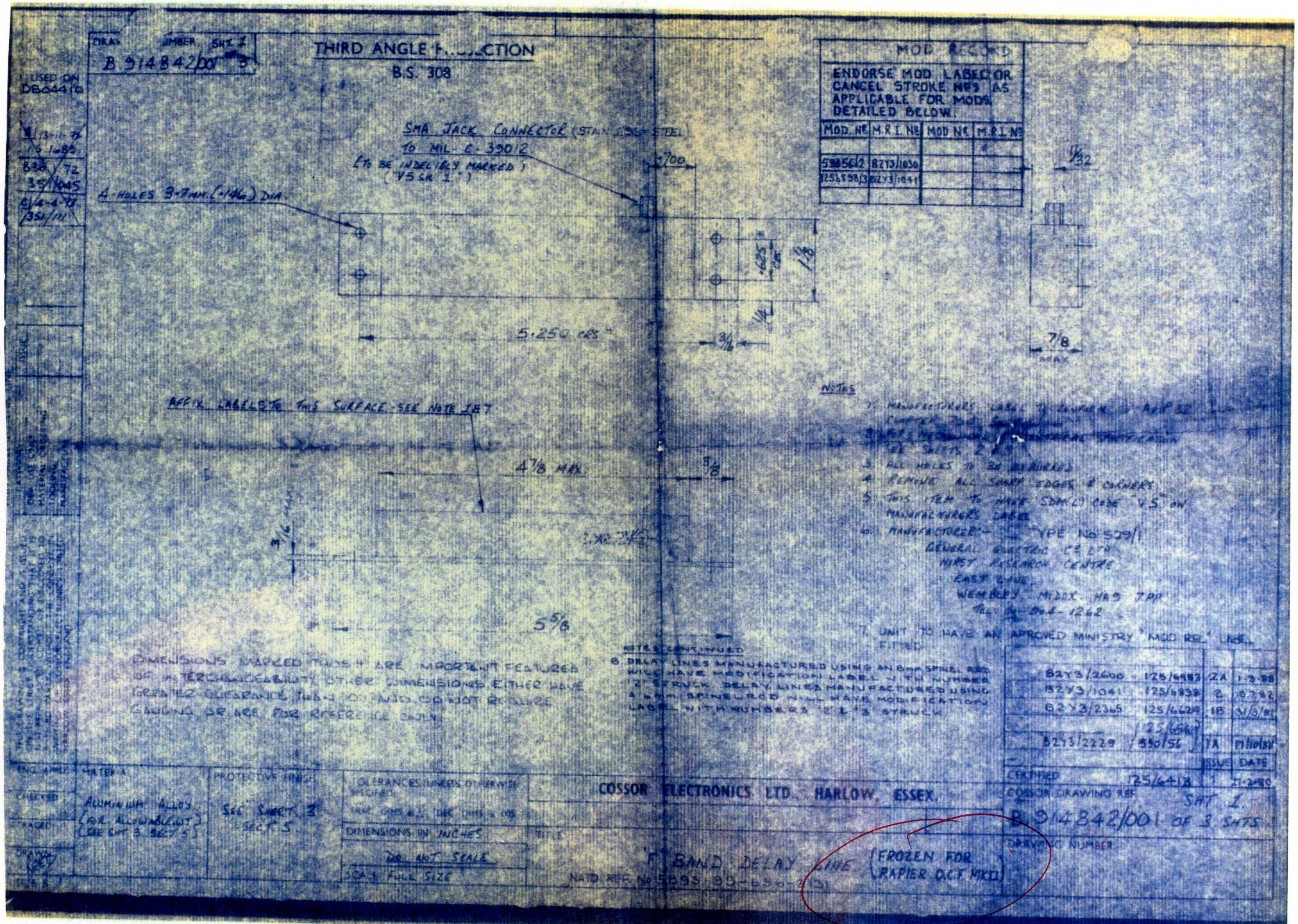
			ISSUE	DATE
	82Y3/2600	125/6983	2A	1.3.83
	82Y3/1041	125/5839	2	10.7.82
	82Y3/2365	125/6624	1B	31/3/81
	82Y3/2229	(125/6540) 550/56	1A	17/10/80
CERTIFIED		125/6413	1	21.2.80

ENG. APPD	MATERIAL	PROTECTIVE FINISH	TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS ± 1/64 DEC. DIMS ± .005	COSSOR ELECTRONICS LTD., HARLOW, ESSEX.
CHECKED	ALUMINIUM ALLOY (FOR ALLOWABLE ALT) (SEE SHT. 3. SECT 5)	SEE SHEET 3 SECT 5	DIMENSIONS IN INCHES	TITLE F BAND DELAY LINE (FROZEN FOR RAPIER O.C.F. MKII)
TRACED			DO NOT SCALE	NATO REF. No 5895-99-656-2131
DRAWN			SCALE FULL SIZE	
SIZE B				

COSSOR DRAWING REF SHT 1
B. 914842/001 OF 3. SHTS
DRAWING NUMBER

1A

269a
~~276~~



DRAWING NUMBER SHT 1 B 914842/001 ~~3~~

USED ON DB04410

~~B 13-11-79 5.1.85~~

~~838/72 35/1045~~

~~C 4-4-77 351/111~~

MOD RECORD			
ENDORSE MOD LABEL OR CANCEL STROKE NOS AS APPLICABLE FOR MODS DETAILED BELOW.			
MOD. No	M.R.I. No	MOD No	M.R.I. No
598562	B2Y3/1030		
125698/3	B2Y3/1041		

NOTES

1. MANUFACTURERS LABEL TO CONFORM TO AvP 32 CHAPTER 7… [illegible]
2. [illegible] MECHANICAL [illegible] SPECIFICATION SEE SHEETS 2 & 3
3. ALL HOLES TO BE DEBURRED
4. REMOVE ALL SHARP EDGES & CORNERS
5. THIS ITEM TO HAVE SDM(L) CODE "V5" ON MANUFACTURERS LABEL
6. MANUFACTURER:- TYPE No 529/1
GENERAL ELECTRIC Co LTD
HIRST RESEARCH CENTRE
EAST LANE
WEMBLEY, MIDDX. HA9 7PP
TEL: 01-904-1262
7. UNIT TO HAVE AN APPROVED MINISTRY 'MOD REC' LABEL FITTED

NOTES CONTINUED

8. DELAY LINES MANUFACTURED USING AN 6mm SPINEL ROD WILL HAVE MODIFICATION LABEL WITH NUMBER '2' STRUCK. DELAY LINES MANUFACTURED USING A 4mm SPINEL ROD WILL HAVE MODIFICATION LABEL WITH NUMBERS '2 & 3' STRUCK.

DIMENSIONS MARKED THUS ✱ ARE IMPORTANT FEATURES OF INTERCHANGEABILITY. OTHER DIMENSIONS EITHER HAVE GREATER CLEARANCE THAN ·01 AND DO NOT REQUIRE GAUGING OR ARE FOR REFERENCE ONLY.

B2Y3/2600	125/6983	2A	1-3-83
B2Y3/1041	125/6838	2	10.7.82
B2Y3/2365	125/6629	1B	31/3/81
B2Y3/2229	125/6540 550/56	1A	17/10/80
		ISSUE	DATE
CERTIFIED	125/6418	1	21-2-80

ENG. APPD.

CHECKED

TRACED

DRAWN

MATERIAL: ALUMINIUM ALLOY (FOR ALLOWABLE LIST SEE SHT 3. SECT 5)

PROTECTIVE FINISH: SEE SHEET 3 SECT. 5

TOLERANCES UNLESS OTHERWISE SPECIFIED: FRAC. DIMS ± ·1/64 DEC. DIMS ± ·005

DIMENSIONS IN INCHES

DO NOT SCALE

SCALE FULL SIZE

COSSOR ELECTRONICS LTD., HARLOW, ESSEX.

TITLE: 'F' BAND DELAY LINE (FROZEN FOR RAPIER O.C.T. MKII)

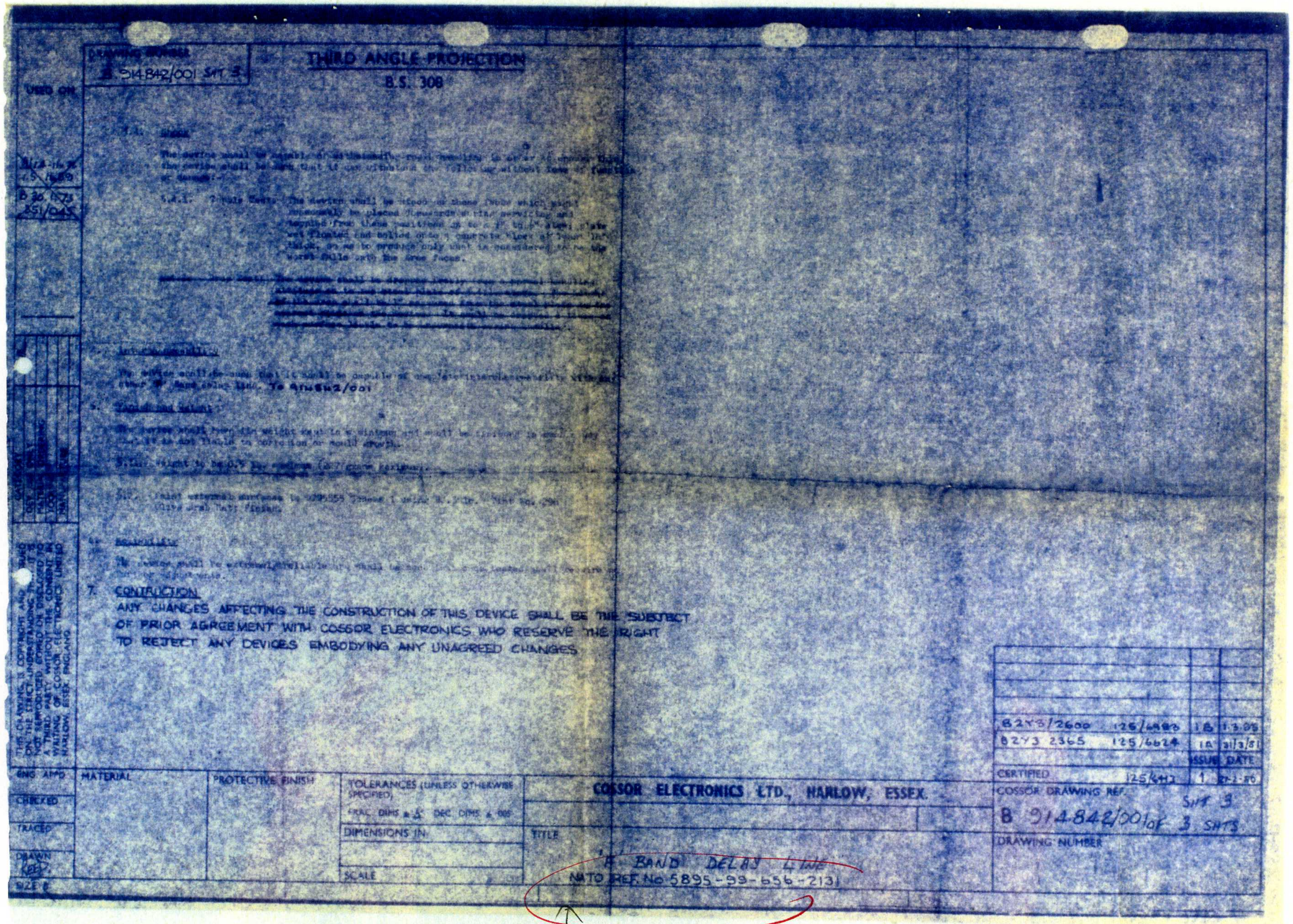
NATO REF. No 5895-99-656-2131

COSSOR DRAWING REF. SHT 1 B 914842/001 OF 3 SHTS

DRAWING NUMBER

SIZE B

269b
~~277~~



DRAWING NUMBER B 914842/001 SHT 3

USED ON

~~B/ZA-16.76 1.5. 1989~~

~~D 30 1.73 251/045~~

THIRD ANGLE PROJECTION

B.S. 308

[illegible] Shock

[illegible]

[illegible] [illegible]

[illegible]

4. Interchangeability

The device shall be such that it shall be capable of complete interchangeability with any other 'F' Band Delay Line. To 914842/001

5. [illegible]

[illegible]

5.1. Weight to be 0.5 lbs maximum [illegible]

5.2. [illegible]

6. [illegible]

[illegible]

7. CONTRUCTION

ANY CHANGES AFFECTING THE CONSTRUCTION OF THIS DEVICE SHALL BE THE SUBJECT OF PRIOR AGREEMENT WITH COSSOR ELECTRONICS WHO RESERVE THE RIGHT TO REJECT ANY DEVICES EMBODYING ANY UNAGREED CHANGES

CATEGORY

DEV. USE ONLY

MATERIAL ORDERING

TOOLING

MANUFACTURE

B2Y3/2600	125/6883	1B	1.3.83
B2Y3 2365	125/6624	1A	31/3/81
		ISSUE	DATE
CERTIFIED	125/6412	1	27-2-80

ENG APPD	MATERIAL	PROTECTIVE FINISH	TOLERANCES (UNLESS OTHERWISE SPECIFIED) FRAC. DIMS ± 1/64 DEC. DIMS ± .005	COSSOR ELECTRONICS LTD., HARLOW, ESSEX.
CHECKED			DIMENSIONS IN	TITLE 'F' BAND DELAY LINE NATO REF. No 5895-99-656-2131
TRACED			SCALE	
DRAWN [illegible]				
SIZE B				

COSSOR DRAWING REF.

B 914842/001 SHT 3 of 3 SHTS

DRAWING NUMBER

269c

~~22~~8

DRAWING NUMBER
B.914842 SHT. 2

USED ON

B 14-1-78
125/6983
B 30 – 73
125/0-45

THIRD ANGLE PROJECTION

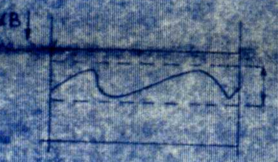
B.S. 308

[illegible]

≯ 1 Watt (Mean or Peak)

≯ 18 : 1

[illegible]



-65dB@+25°C, 61dB@-35°C

-70dB@+25°C 73dB@+70°C

[illegible]

Environmental Specification

THE DEVICE SHALL BE DESIGNED SUCH THAT IT WILL MEET THE ABOVE ELECTRICAL SPECIFICATION UNDER THE FOLLOWING CONDITIONS:

1. Temperature: Operating – -35°C to +70°C
Storage – -40°C to [illegible]°C

2. Pressure: equivalent to an altitude of [illegible] ft. above sea level

3. Vibration: The equipment shall be capable of surviving transportation without subsequent loss of function. This transportation shall be as follows:

[illegible]

In order to ensure the device is capable of meeting these requirements it should be able to undergo the following tests without subsequent loss of function, in each of 3 mutually perpendicular directions.

Low Frequency Endurance

Random vibrations shall be applied with a flat spectral density of [illegible] for 20 hours.

[illegible]

Bump Test

[illegible]

125/6983	10	[illegible] 82
B2Y3/2173 125/5967	1C	3-1-78
B2Y3/2172 125/5940	1B	2-11-77
B2Y3/2027, 352/1B	1A	8/11/73
	ISSUE	DATE
CERTIFIED 125/5266	1	26-7-73

ENG. APPD. | CHECKED | TRACED | DRAWN
MATERIAL
PROTECTIVE FINISH
TOLERANCES (UNLESS OTHERWISE SPECIFIED)
FRAC. DIMS ± 1/64" DEC. DIMS ± .005
DIMENSIONS IN
SCALE

COSSOR ELECTRONICS LTD., HARLOW, ESSEX.

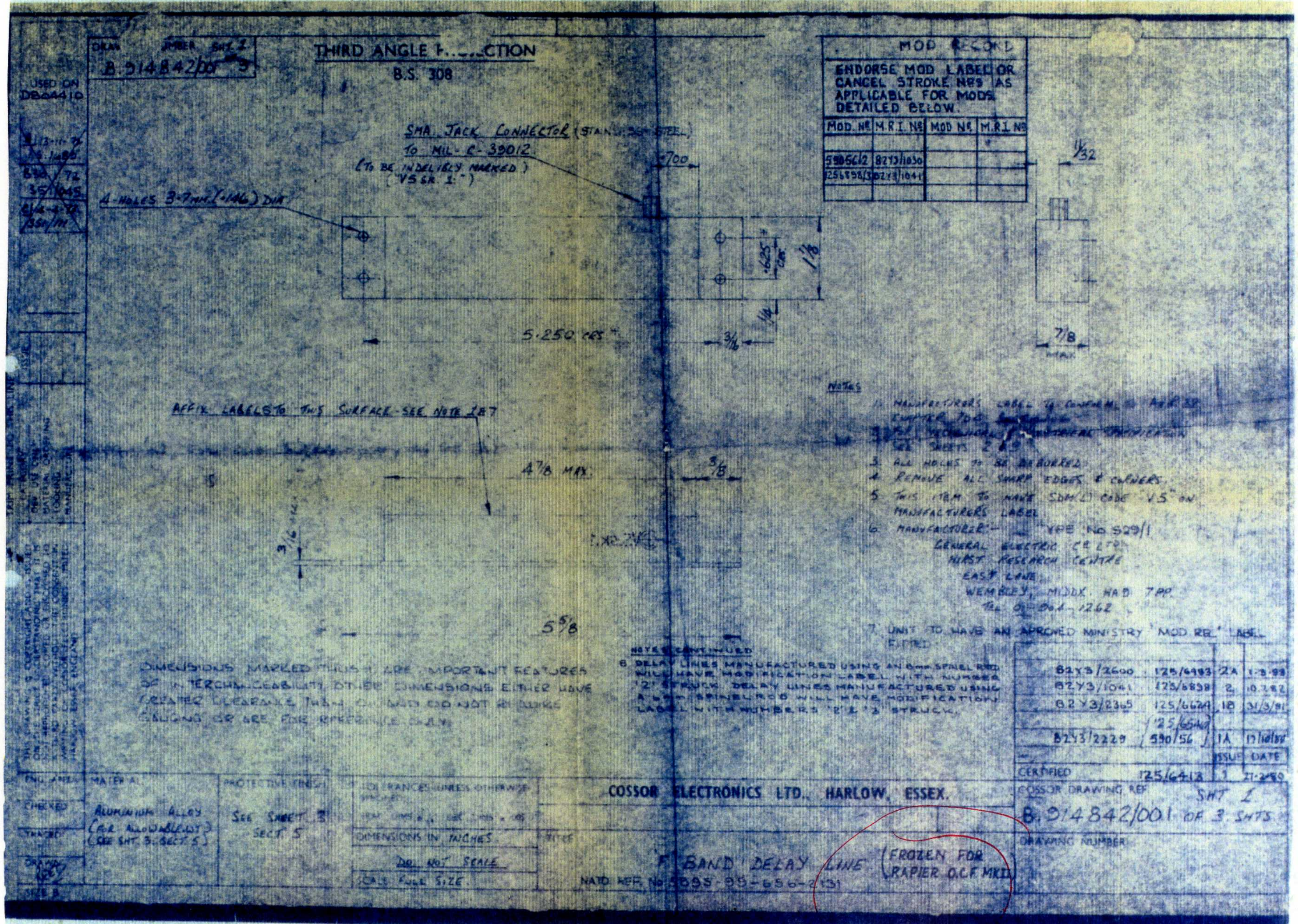
TITLE
'F' BAND DELAY LINE
NATO REF. No 5895-99-626-3071

COSSOR DRAWING REF.
B. 914842 SHT. 2 OF 3 SHTS.
DRAWING NUMBER

DO NOT PRINT TO THIS LINE

APPROVAL
DEV. USE ONLY
PATTERN ORDERING
TOOLING
MANUFACTURE

269d
27



DRAWING NUMBER SHT 2 OF 3
B.914842/001

THIRD ANGLE PROJECTION
B.S. 308

USED ON
DB04410

~~13-11-72~~
~~125/1480~~
~~830/72~~
~~351/1045~~
~~6/12-4-72~~
~~351/111~~

MOD RECORD

ENDORSE MOD LABEL OR CANCEL STROKE Nos AS APPLICABLE FOR MODS DETAILED BELOW.

MOD. No	M.R.I. No	MOD No	M.R.I. No
590562/2	82Y3/1030		
256898/3	82Y3/1041		

NOTES

1. MANUFACTURERS LABEL TO CONFORM TO AvP 32 CHAPTER 700 [illegible]
2. FOR TECHNICAL & ELECTRICAL SPECIFICATION SEE SHEETS 2 & 3
3. ALL HOLES TO BE DEBURRED
4. REMOVE ALL SHARP EDGES & CORNERS.
5. THIS ITEM TO HAVE SDM(C) CODE "VS" ON MANUFACTURERS LABEL
6. MANUFACTURER:- TYPE No S29/1
   GENERAL ELECTRIC Co LTD
   HIRST RESEARCH CENTRE
   EAST LANE
   WEMBLEY, MIDDX. HA9 7PP.
   TEL 01-904-1262
7. UNIT TO HAVE AN APPROVED MINISTRY 'MOD REC' LABEL FITTED

NOTES CONTINUED

8. DELAY LINES MANUFACTURED USING AN 8mm SPINEL ROD WILL HAVE MODIFICATION LABEL WITH NUMBER '2' STRUCK. DELAY LINES MANUFACTURED USING A 6mm SPINEL ROD WILL HAVE MODIFICATION LABEL WITH NUMBERS '2' & '3' STRUCK.

DIMENSIONS MARKED THUS ⊕ ARE IMPORTANT FEATURES OF INTERCHANGEABILITY OTHER DIMENSIONS EITHER HAVE GREATER CLEARANCE THAN ⊕ AND DO NOT REQUIRE GAUGING OR ARE FOR REFERENCE ONLY.

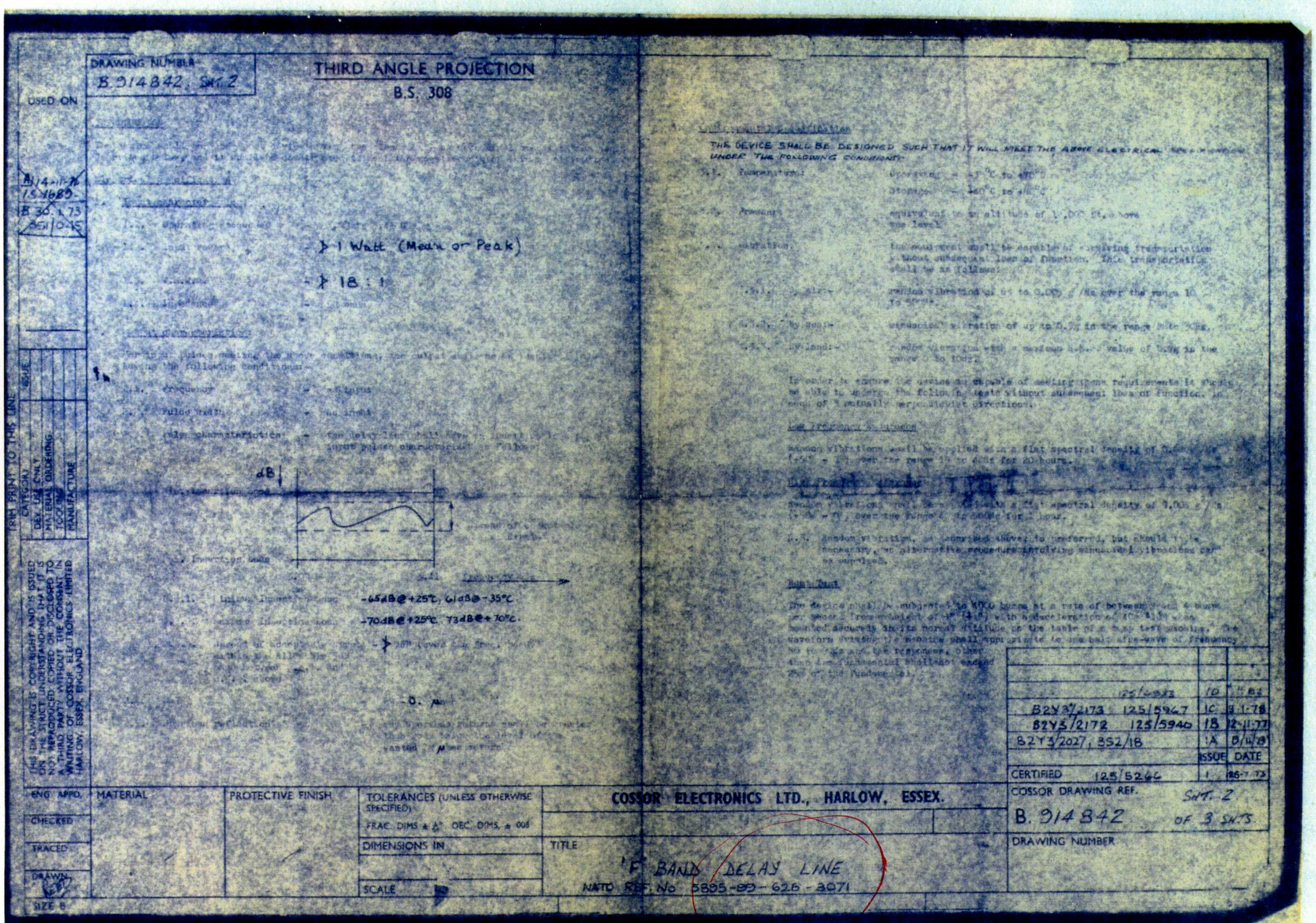
82Y3/2600	125/6993	2A	1-3-93
82Y3/1041	125/6898	2	10.2.92
82Y3/2365	125/6624	1B	31/3/91
82Y3/2229	125/6640 590/56	1A	17/10/88
		ISSUE	DATE
CERTIFIED	125/6413	1	27-2-90

ENG. AREA	MATERIAL	PROTECTIVE FINISH	TOLERANCES UNLESS OTHERWISE STATED
CHECKED	ALUMINIUM ALLOY (FOR ALLOWABLE ALT) (SEE SHT. 3. SECT. 5)	SEE SHEET 3 SECT 5	LIN. DIMS ± [illegible] ANG. DIMS ± ·05
TRACED			DIMENSIONS IN INCHES.
DRAWN			DO NOT SCALE
SIZE B			SCALE FULL SIZE.

COSSOR ELECTRONICS LTD., HARLOW, ESSEX.

TITLE
F BAND DELAY LINE (FROZEN FOR RAPIER O.C.F MKII)
NATO REF. No 5895-99-656-2131

COSSOR DRAWING REF SHT 1
B.914842/001 OF 3. SHTS
DRAWING NUMBER



DRAWING NUMBER B.914842. SHT.2

THIRD ANGLE PROJECTION

B.S. 308

[illegible]

- 1 Watt (Mean or Peak)

- 18 : 1

[illegible]

Frequency – [illegible]

Pulse width – [illegible]

[illegible] – [illegible]

-65dB@+25°C, 61dB@-35°C

-70dB@+25°C 73dB@+70°C.

[illegible]

-0. μ [illegible]

[illegible] μsec [illegible]

THE DEVICE SHALL BE DESIGNED SUCH THAT IT WILL MEET THE ABOVE ELECTRICAL SPECIFICATION UNDER THE FOLLOWING CONDITIONS:-

5.1. Temperature: Operating – [illegible]°C to [illegible]°C

Storage – [illegible]°C to [illegible]°C

5.2. Pressure: equivalent to an altitude of [illegible],000 ft. above sea level

5.3. Vibration: The equipment shall be capable of [illegible] transportation without subsequent loss of function. This transportation shall be as follows:

[illegible]

In order to ensure the device is capable of meeting these requirements it should be able to undergo the following tests without subsequent loss of function, in each of 3 mutually perpendicular directions.

[illegible]

Random vibrations shall be applied with a flat spectral density of [illegible] over the range [illegible] for [illegible] hours.

[illegible]

Random vibration, as described above, is preferred, but should it be necessary, an alternative procedure involving sinusoidal vibrations can be supplied.

Bump Test

The device shall be subjected to [illegible] bumps at a rate of between [illegible] bumps per second [illegible] when mounted securely in its normal attitude on the table of a bump test machine. The waveform [illegible] shall approximate to one half sine-wave of frequency [illegible]

125/6883	1D	[illegible] 82
B2Y3/2173 125/5967	1C	3.1.78
B2Y3/2172 125/5940	1B	2.11.77
B2Y3/2027, 352/18	1A	8/4/78
	ISSUE	DATE
CERTIFIED 125/5266	1	25.7.73

COSSOR DRAWING REF. B.914842 SHT. 2 OF 3 SHTS.

DRAWING NUMBER

COSSOR ELECTRONICS LTD., HARLOW, ESSEX.

TITLE 'F' BAND DELAY LINE

NATO REF. No 5895-99-626-3071

MATERIAL

PROTECTIVE FINISH

TOLERANCES (UNLESS OTHERWISE SPECIFIED) FRAC. DIMS ± 1/64" DEC. DIMS ± .005

DIMENSIONS IN

SCALE

ENG. APPD.

CHECKED

TRACED

DRAWN

SIZE B

USED ON

~~B 14-11-76 15/1689~~

~~B 30.1.73 351/0-15~~

TRIM PRINT TO THIS LINE

CATEGORY

DEV. USE ONLY

MATERIAL ORDERING

TOOLING

MANUFACTURE

ISSUE

2269b

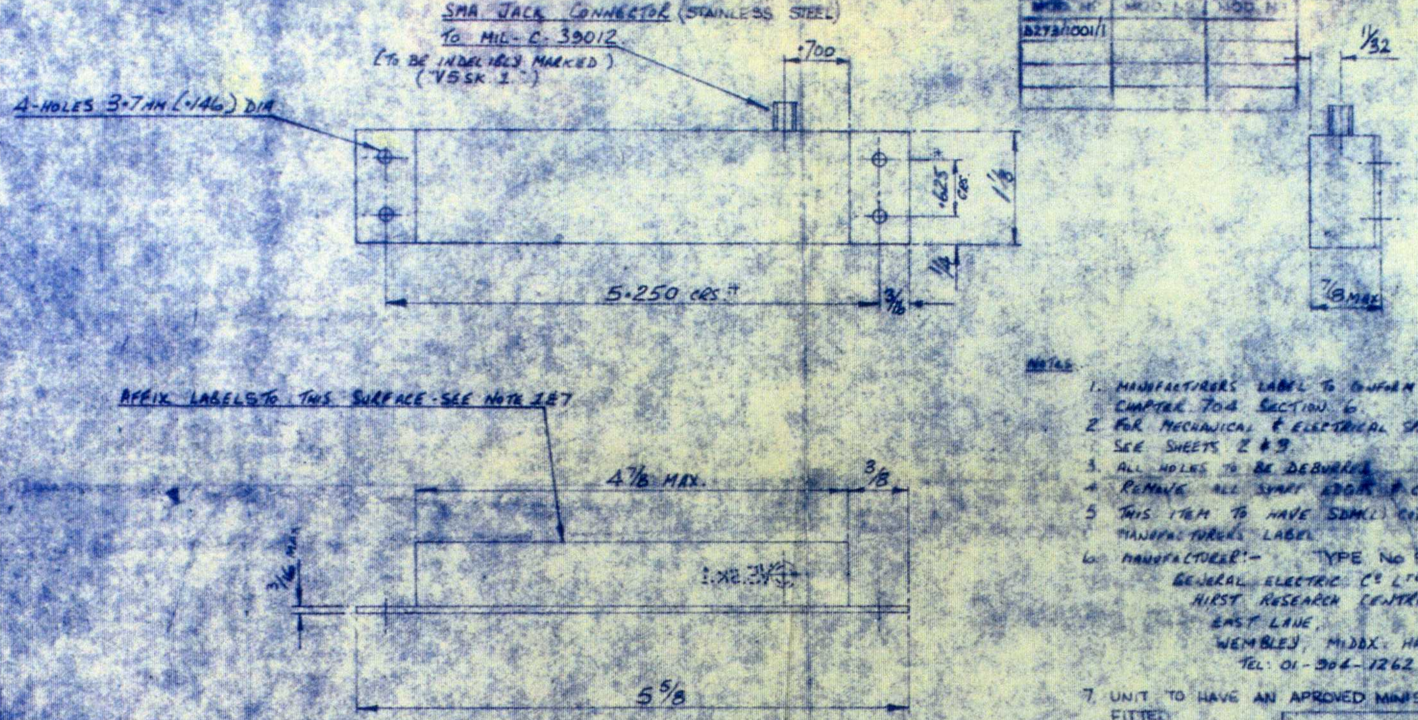
DRAWING NUMBER	SHT. 1 OF 3 SHTS
B 914842	

USED ON
D. 803072

~~A 13-11-74~~	~~1.S. 1689~~
~~B 30-1-72~~	~~351/045~~
~~C 4-4-77~~	~~351/111~~

THIRD ANGLE PROJECTION
B.S. 308

MOD RECORD		
[illegible] DETAILED BELOW		
[illegible] No	MOD. [illegible]	MOD No
B2Y3/1001/1		



NOTES.

1. MANUFACTURERS LABEL TO CONFORM TO AV. P.32 CHAPTER 704 SECTION 6.
2. FOR MECHANICAL & ELECTRICAL SPECIFICATION SEE SHEETS 2 & 3.
3. ALL HOLES TO BE DEBURRED
4. REMOVE ALL SHARP EDGES & CORNERS.
5. THIS ITEM TO HAVE SDM(L) CODE "V5" ON MANUFACTURERS LABEL
6. MANUFACTURER:- TYPE No 5291 OR 529/6
GENERAL ELECTRIC Co LTD
HIRST RESEARCH CENTRE
EAST LANE,
WEMBLEY, MIDDX. HA9 7PP.
TEL: 01-904-1262
7. UNIT TO HAVE AN APROVED MINISTRY 'MOD REL' LABEL FITTED

DIMENSIONS MARKED THUS † ARE IMPORTANT FEATURES OF INTERCHANGEABILITY OTHER DIMENSIONS EITHER HAVE GREATER CLEARANCE THAN 0.1 AND DO NOT REQUIRE GAUGING OR ARE FOR REFERENCE ONLY

	ISSUE	DATE
125/6933	2A	4-11-82
352/54 B2Y3/1001	2	14-3-74
352/18 B2Y3/2027	1B	10-11-73
3F-2/14 B2Y3/2015	1A	3-9-73
CERTIFIED 125/5266	1	25-7-73

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THIN PRINT TO THIS LINE

CATEGORY	ISSUE
DEV. USE ONLY	
MATERIAL ORDERING	
TOOLING	
MANUFACTURE	

ENG. APPD.	MATERIAL	PROTECTIVE FINISH	TOLERANCES (UNLESS OTHERWISE SPECIFIED) FRAC. DIMS ± 1/64 DEC. DIMS ± ·005	COSSOR ELECTRONICS LTD., HARLOW, ESSEX.
CHECKED	ALUMINIUM ALLOY (FOR ALLOWABLE ALT.) (SEE SHT 3. SECT. 5)	SEE SHEET 3. SECT. 5.	DIMENSIONS IN INCHES	TITLE 'F' BAND DELAY LINE
TRACED			DO NOT SCALE	NATO REF No 5895-99-626-3071
DRAWN			SCALE FULL SIZE	
SIZE B				

COSSOR DRAWING REF
B.914842
SHT. 1 OF 3. SHTS.
DRAWING NUMBER

269g
282

DRAWING NUMBER
B.914842/001 SHT 3.

THIRD ANGLE PROJECTION
B.S. 308

USED ON
~~B.18.11.68 6.5/6.69~~
~~B 30.11.73 351/C45~~

3.2. [illegible]

The device shall be capable of withstanding rough handling. In order to ensure this, the device shall be such that it can withstand the following without loss of function or damage:-

3.2.1. Topple Test: The device shall be placed on those faces which might reasonably be placed downwards [illegible] and toppled from these positions onto a [illegible] steel plate [illegible] bolted onto a concrete block at least [illegible] thick, so as to provide only that is considered to be the worst falls onto the free faces.

~~[illegible]~~

4. Interchangeability.

The device shall be such that it shall be capable of complete interchangeability with any other 'F' Band Delay Line. To 914842/001

5. Physical data.

The device shall have the weight kept to a minimum and shall be designed in such a way that it is not liable to [illegible] or mould growth.

5.1. Weight to be 0.5 kg maximum [illegible]

5.2. [illegible] external surfaces [illegible]

6. Reliability.

The device shall be extremely reliable [illegible]

7. CONTRUCTION.
ANY CHANGES AFFECTING THE CONSTRUCTION OF THIS DEVICE SHALL BE THE SUBJECT OF PRIOR AGREEMENT WITH COSSOR ELECTRONICS WHO RESERVE THE RIGHT TO REJECT ANY DEVICES EMBODYING ANY UNAGREED CHANGES.

		ISSUE	DATE
82Y3/2600	125/6983	1B	1.3.85
82Y3 2365	125/6624	1A	31/3/81
CERTIFIED	125/6412	1	27.2.80

COSSOR DRAWING REF.
B 914842/001 SHT 3 OF 3 SHTS.
DRAWING NUMBER

CATEGORY: DEV. USE ONLY / MATERIAL DRAWING / TOOLING / MANUFACTURE
ISSUE

ENG. APPD
CHECKED
TRACED
DRAWN KED
SIZE B

MATERIAL
PROTECTIVE FINISH
TOLERANCES (UNLESS OTHERWISE SPECIFIED)
FRAC. DIMS ± 1/64 DEC. DIMS ± .005
DIMENSIONS IN
SCALE

COSSOR ELECTRONICS LTD., HARLOW, ESSEX.

TITLE
'F' BAND DELAY LINE
NATO REF. No 5895-99-656-2131

DRAWING NUMBER
B.914842/001 SHT 3.

THIRD ANGLE PROJECTION

B.S. 308

USED ON

~~B14-11-78 / 125/6659~~

~~B 30.11.78 / 251/045~~

CATEGORY	ISSUE
OEM USE ONLY	
MATERIAL ORDERING	
TOOLING	
MANUFACTURE	

4.4. [illegible]

The device shall be [illegible] the device shall be [illegible] or damage:-

4.4.1. Topple Test: The device shall be [illegible]

~~[illegible]~~

5. [illegible]

The device shall be such that it shall be capable of complete interchangeability with any other 'F' Band delay line. To 914842/001

5. [illegible]

[illegible]

5.1. [illegible]

5.2. [illegible]

6. [illegible]

[illegible]

7. CONTRUCTION

ANY CHANGES AFFECTING THE CONSTRUCTION OF THIS DEVICE SHALL BE THE SUBJECT OF PRIOR AGRGEMENT WITH COSSOR ELECTRONICS WHO RESERVE THE RIGHT TO REJECT ANY DEVICES EMBODYING ANY UNAGREED CHANGES.

		ISSUE	DATE
82X3/2600	125/6893	1B	1.3.83
82Y3 2365	125/6624	1A	31/3/81
CERTIFIED	125/6413	1	27-2-80

ENG. APPD.	
CHECKED	
TRACED	
DRAWN	KED.
SIZE B	

MATERIAL

PROTECTIVE FINISH

TOLERANCES (UNLESS OTHERWISE SPECIFIED)
FRAC. DIMS ± 1/64" DEC. DIMS ± ·005

DIMENSIONS IN

SCALE

COSSOR ELECTRONICS LTD., HARLOW, ESSEX.

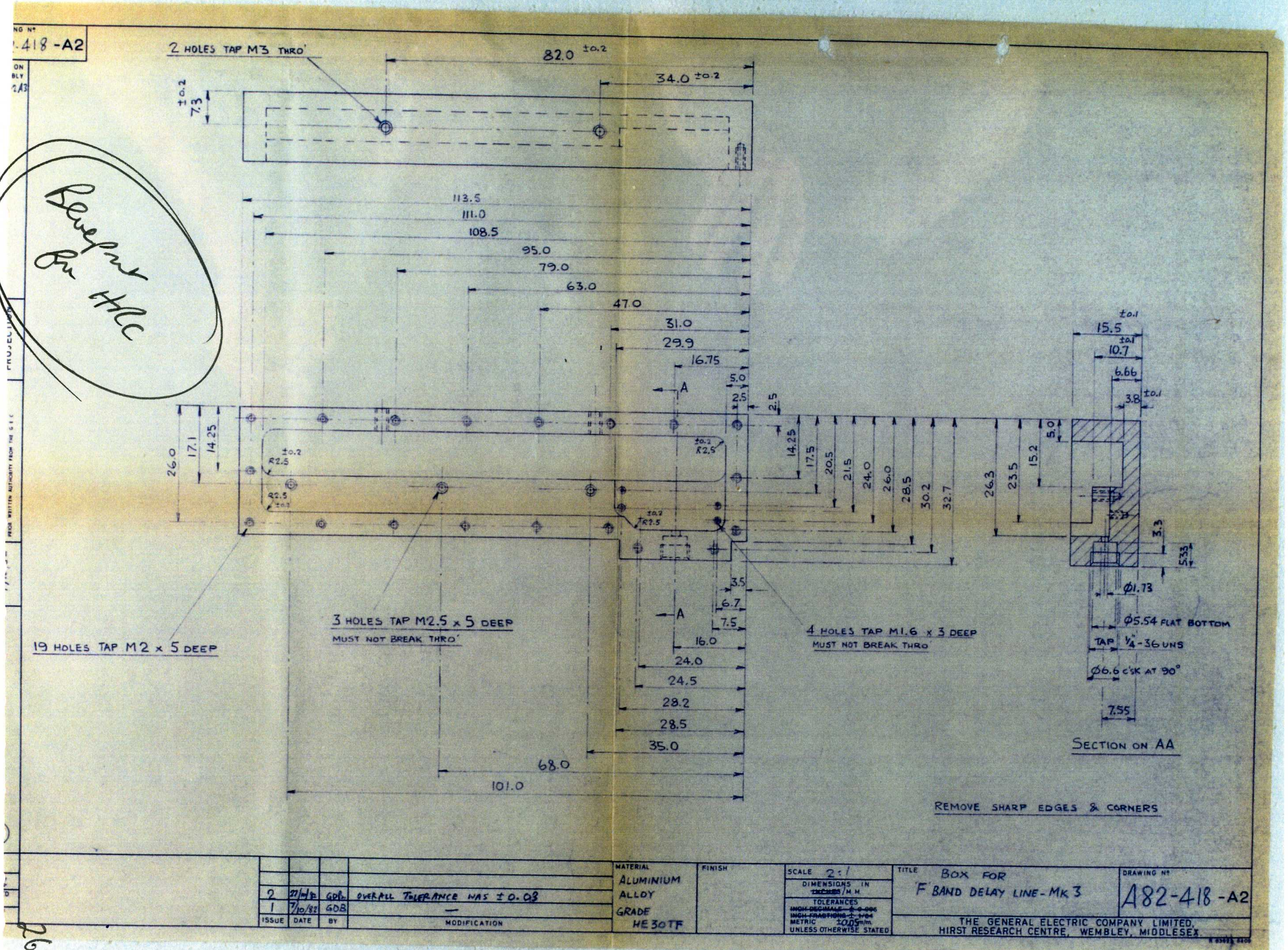
TITLE
'F' BAND DELAY LINE
NATO REF No 5895-99-656-2131

COSSOR DRAWING REF.
B 914842/001 SHT 3 of 3 SHTS

DRAWING NUMBER

269 i

284



Blueprint for HRC