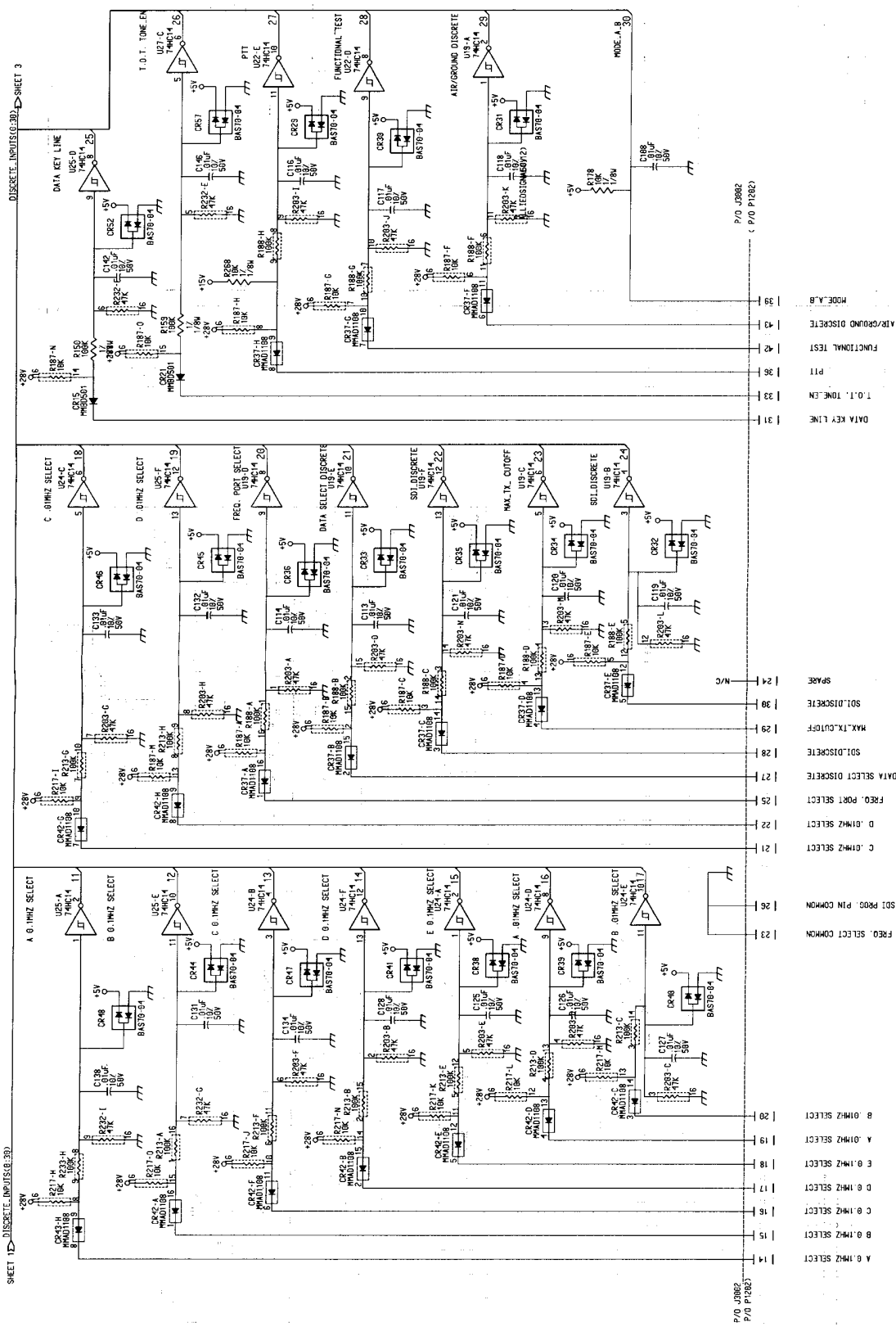




IDENTIFY CONNECTING
SHEET NUMBERS

SHEET_9

DO NOT USE FOUR POINT CONNECTIONS

POINT CONNECTIONS
 11 C12

0.01

OFFSET CONNECTIONS

12

C13

10

TRANSMISSION LINE

SYMBOLS

CABLING EXAMPLES:
COPY ARROWS, P/T'S

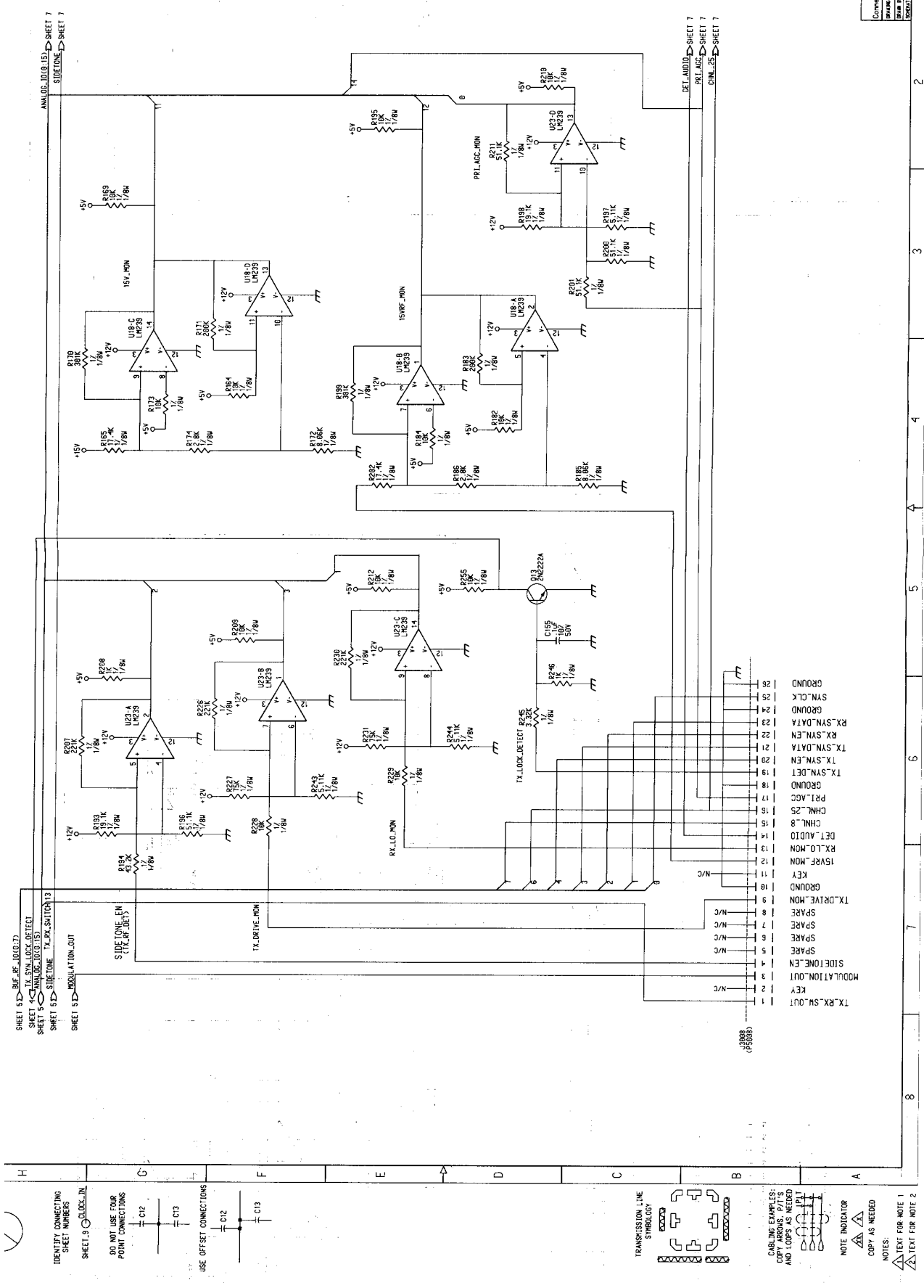
AND LOOPS AS NEEDED

NOTE INDICATOR

△X △X
COPY AS NEEDED

NOTES:

2 TEXT FOR NOTE 2





IDENTIFY CONNECTING
SHEET NUMBERS
SHEET 9 OF 10

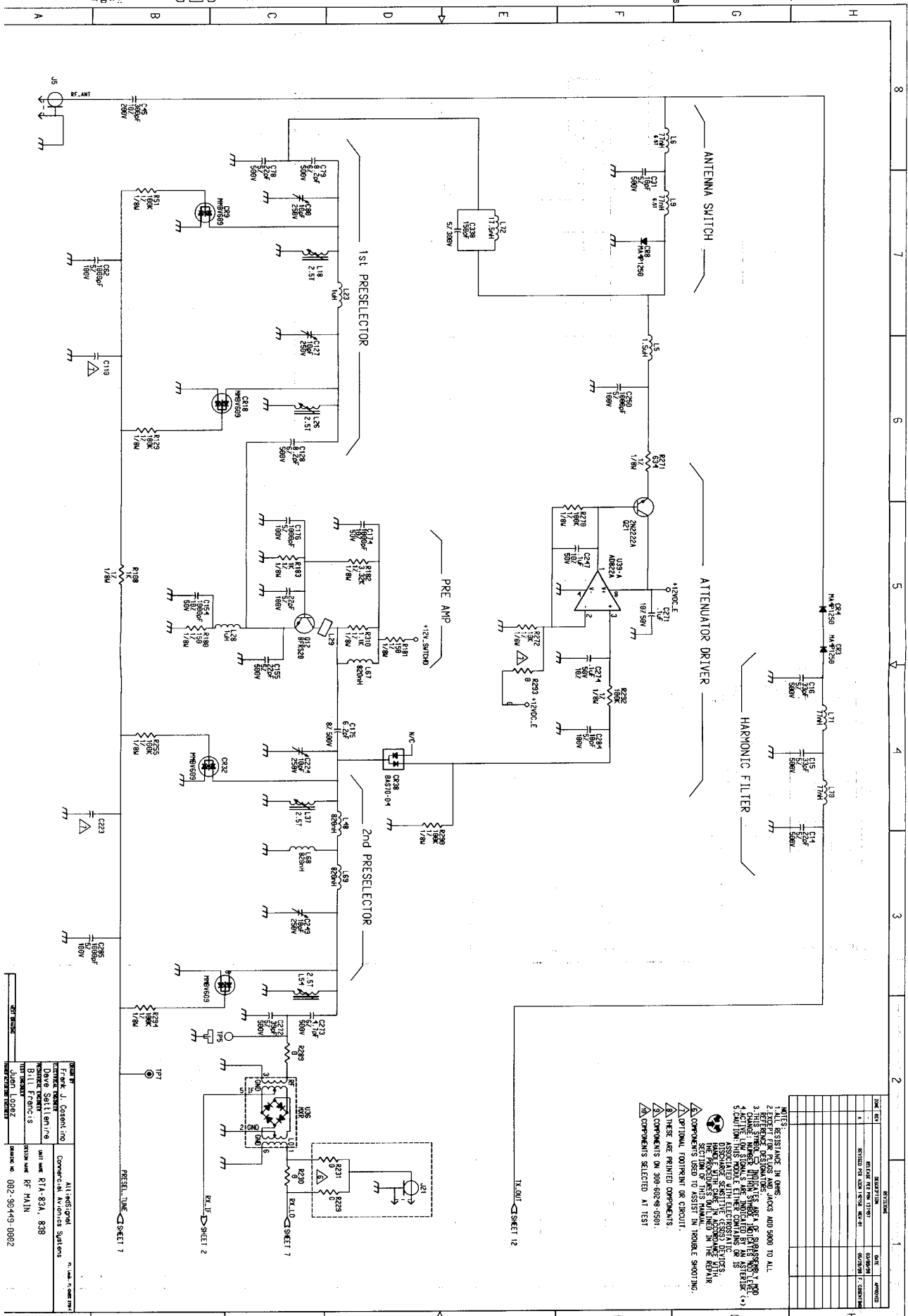
DO NOT USE FROM
POINT CONNECTIONS

90 DEGREE CONNECTIONS

100% TEST

CAUTION: THE
CIRCUITRY IS
NOT TO BE
USED FOR
ANY OTHER
PURPOSES
EXCEPT AS
NOTED

NOTES:



REV	DESCRIPTION	DATE	BY
1	INITIAL DESIGN	1998	FRANK J. COSENTINO
2	REVISION		
3	REVISION		
4	REVISION		
5	REVISION		
6	REVISION		
7	REVISION		
8	REVISION		
9	REVISION		
10	REVISION		

- NOTES:
1. ALL RESISTANCE IN OHMS
 2. EXCEPT FOR PLUGS AND JACKS AND 9000 TO ALL
 3. RESISTANCE VALUES ARE IN OHMS UNLESS OTHERWISE NOTED
 4. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
 5. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- ASSOCIATED WITH ELECTRONIC DEVICES
MADE WITH CARE IN A QUALITY MANUFACTURING SECTION OF THIS PLANT
- COMPONENTS USED TO ASSIST IN TROUBLE SHOOTING:
- △ OPTIMAL TROUBLE SHOOTING OR CIRCUIT
 - △ THESE ARE PRINTED COMPONENTS
 - △ COMPONENTS ON 308-662-6-0501
 - △ COMPONENTS SELECTED AT TEST

REV	DESCRIPTION	DATE	BY
1	INITIAL DESIGN	1998	FRANK J. COSENTINO
2	REVISION		
3	REVISION		
4	REVISION		
5	REVISION		
6	REVISION		
7	REVISION		
8	REVISION		
9	REVISION		
10	REVISION		



IDENTIFY CONNECTING
SHEET NUMBERS
SHEET 9 BLOCK 1N

DO NOT USE FINE
POINT CONNECTIONS

DO NOT USE FINE
POINT CONNECTIONS

DO NOT USE FINE
POINT CONNECTIONS

DO NOT USE FINE
POINT CONNECTIONS

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DO NOT USE FINE
POINT CONNECTIONS

NOTES:
COPY AS NOTED

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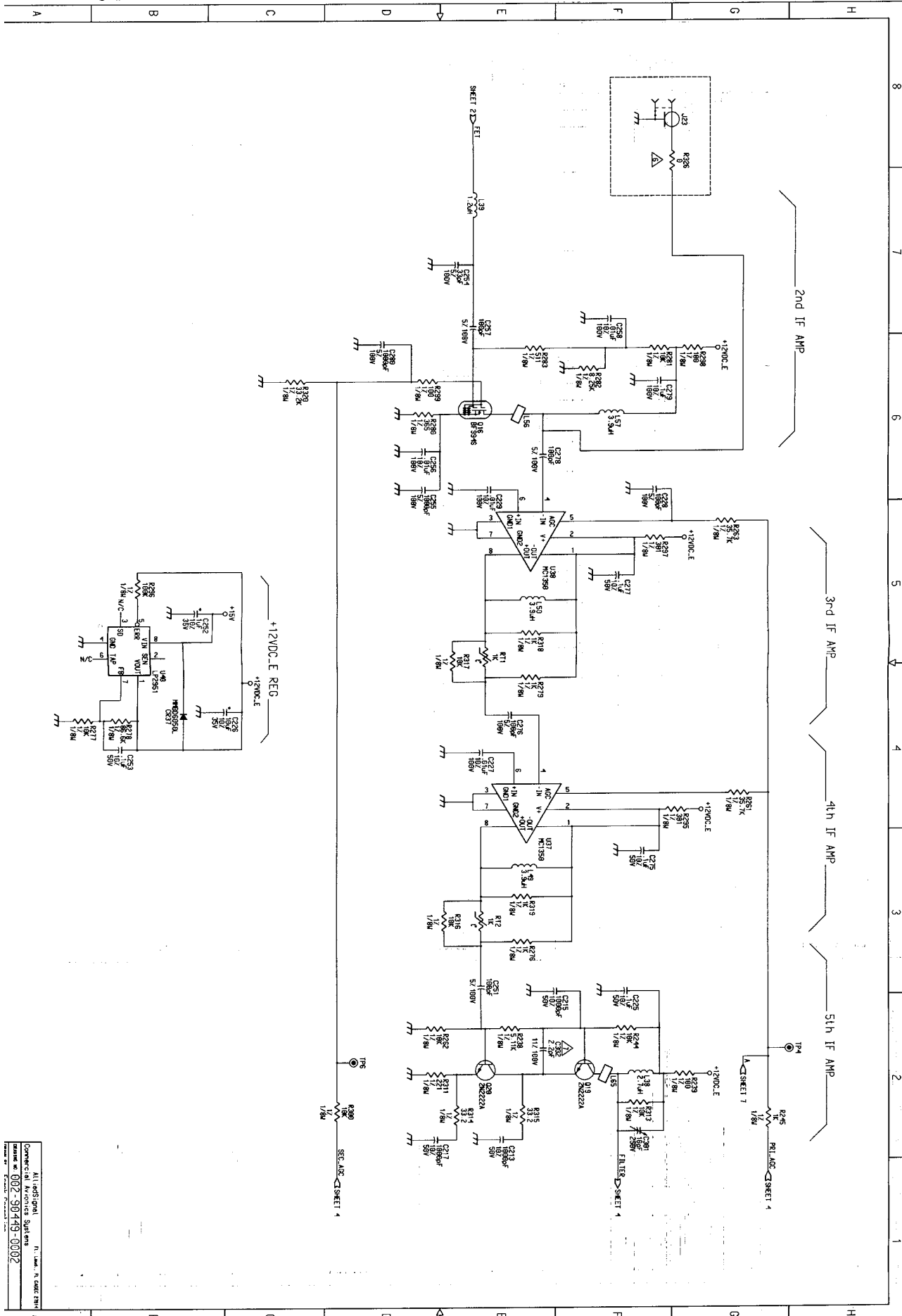
NOTE INDICATOR

NOTE INDICATOR

NOTE INDICATOR

NOTE INDICATOR

NOTE INDICATOR





IDENTITY CONNECTING
SHEET NUMBERS
SHEET 3 OF 3

DO NOT USE FOR
POINT CONNECTIONS

SE OFFSET CONNECTIONS

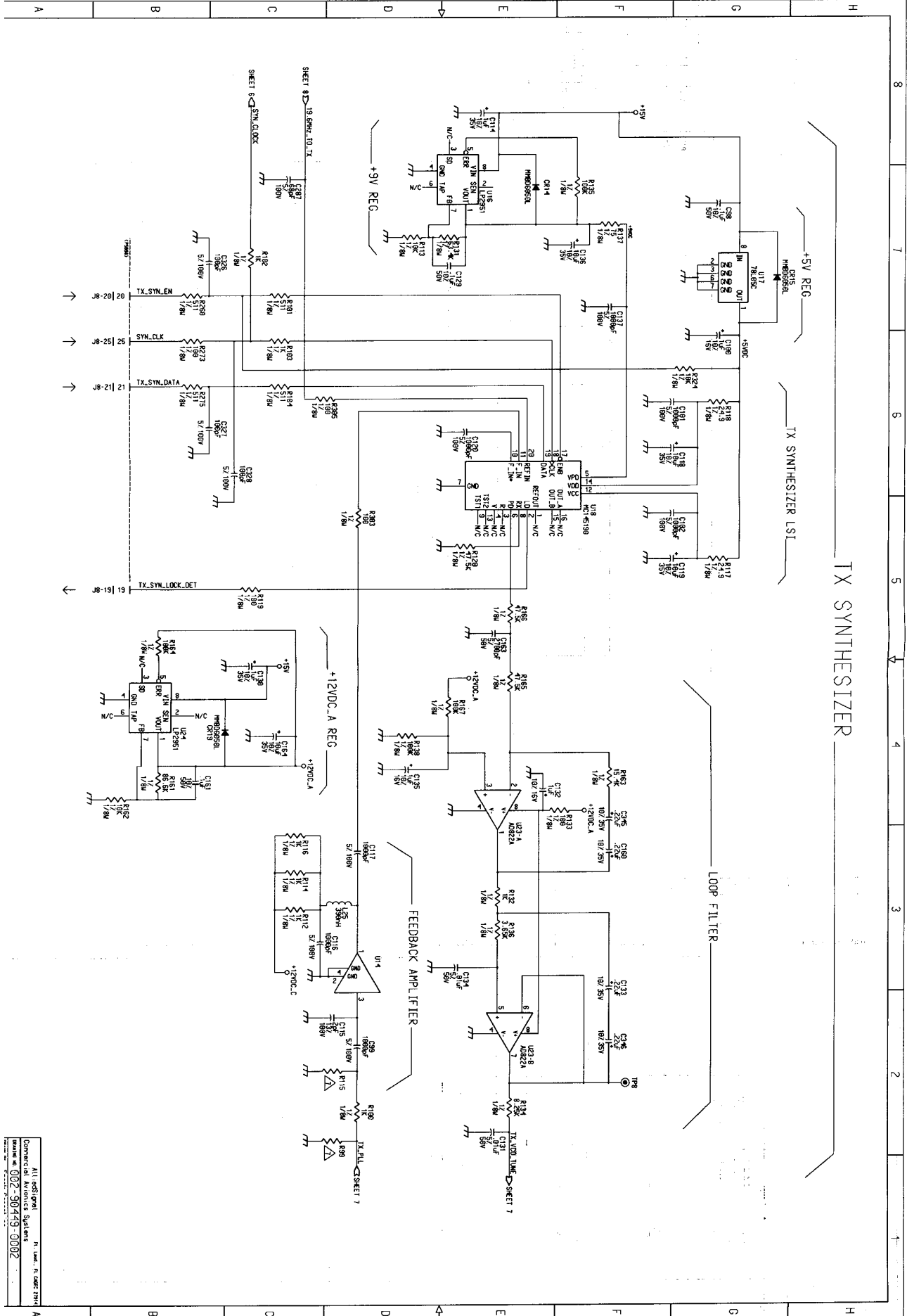
C12
C13

TRANSMISSION LINE
SYMBOLS

CABLE EXAMPLES:
COAXIAL CABLE
AND LOOPS AS REFERED

NOTE INDICATOR
COPY AS REFERED

NOTES:

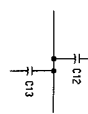




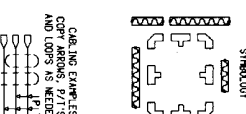
IDENTIFY CONNECTING
SHEET NUMBERS
SHEET 9 BLOCK 1A

DO NOT USE FLAME
POINT CONNECTIONS

OR OFFSET CONNECTIONS



TRANSMISSION LINE
SYMBOLS



NOTE INDICATOR

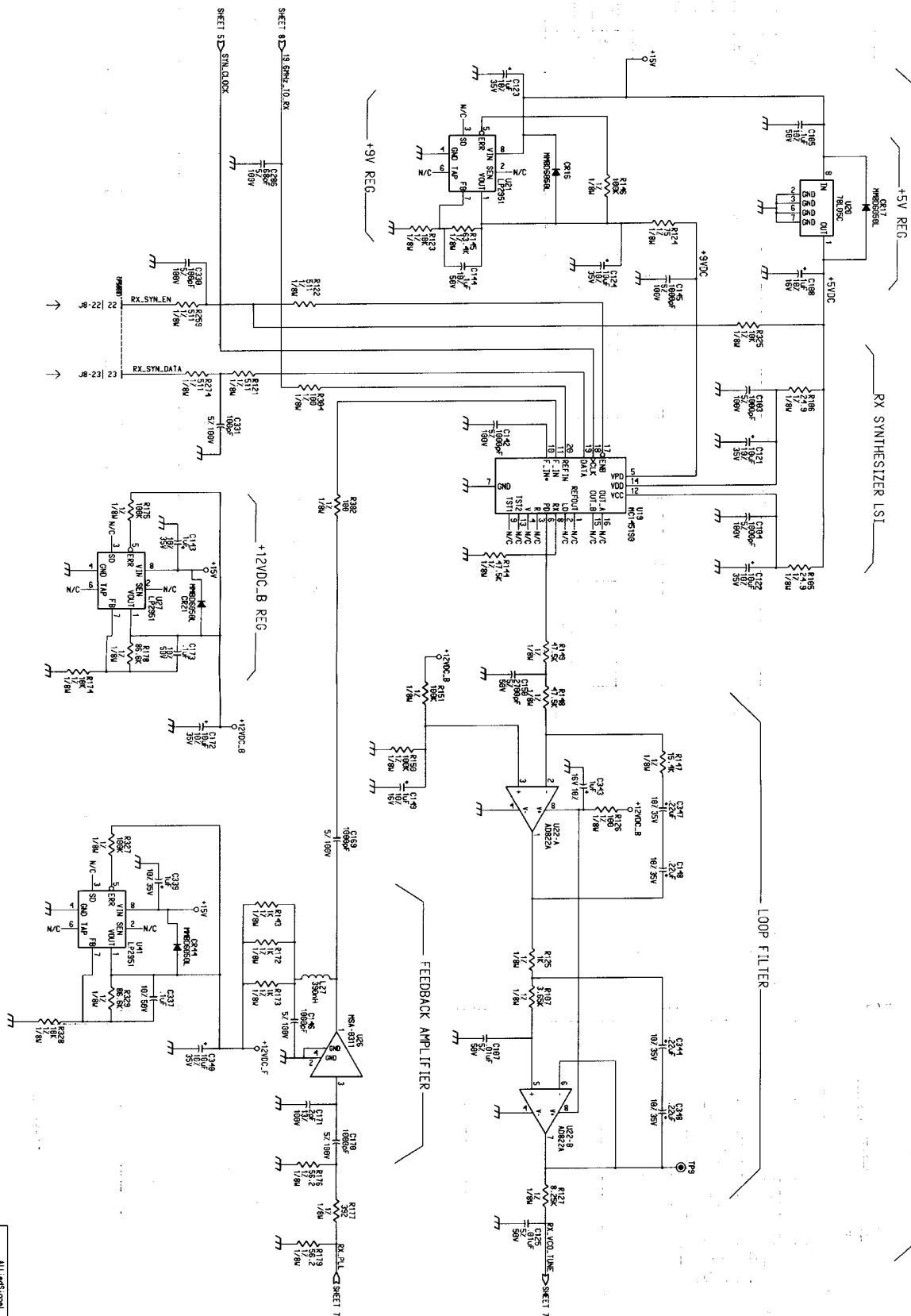
NOTE AS NOTED

RX SYNTHESIZER

RX SYNTHESIZER LSI

LOOP FILTER

FEEDBACK AMPLIFIER



Commercial Avionics Systems
90003R00CE.Flg schematic sheet 6



IDENTIFY CONNECTING
SHEET NUMBERS
SHEET 9 C LOCK IN

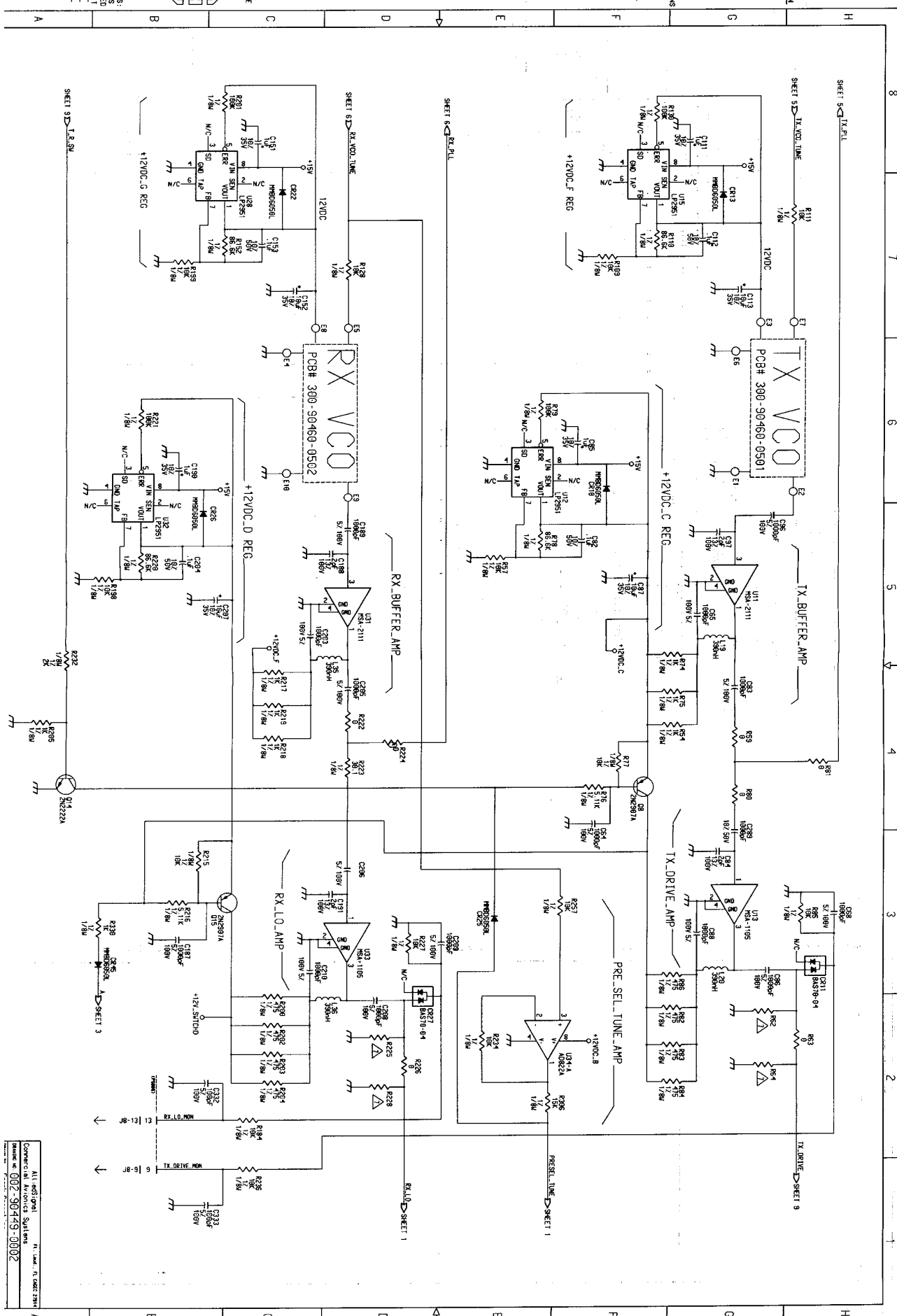
DO NOT USE FOR
POINT CONNECTIONS

ST OFFSET CONNECTIONS

ST OFFSET CONNECTIONS

TRANSMISSION LINE
SYMBOLS

NOTE INDICATOR
COPY AS NOTED



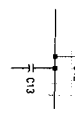


IDENTIFY CONNECTING
SHEET NUMBERS
SHEET 5 OF 5

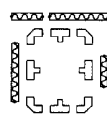
DO NOT USE FOR
POINT CONNECTIONS



SE OFFSET CONNECTIONS



TRANSMISSION LINE
SYMBOLS

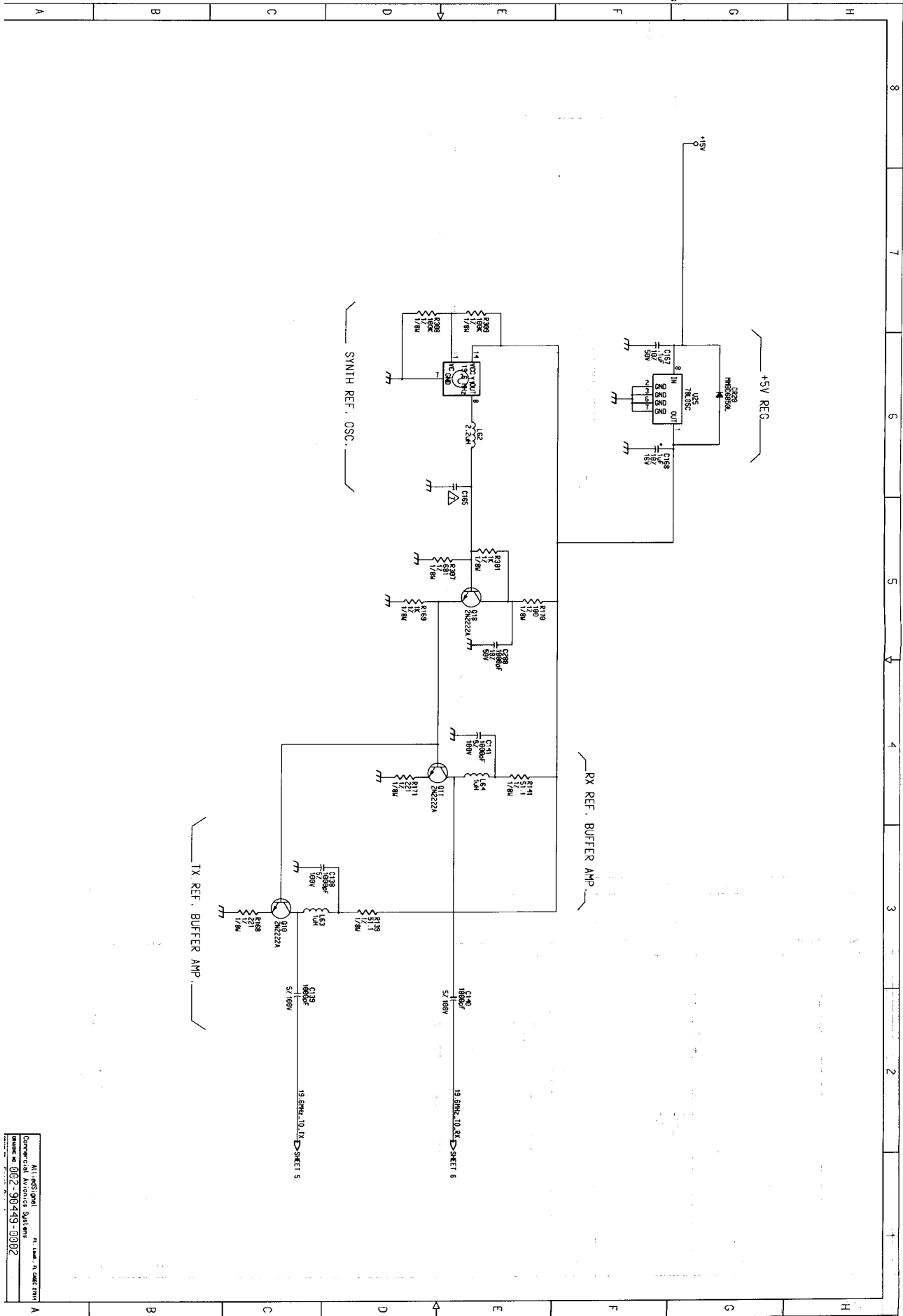


EXAMPLES
OF THE
AND LOOPS AS KEPT

NOTE INDICATOR

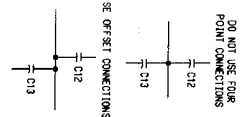
CONF AS KEPT

NOTES

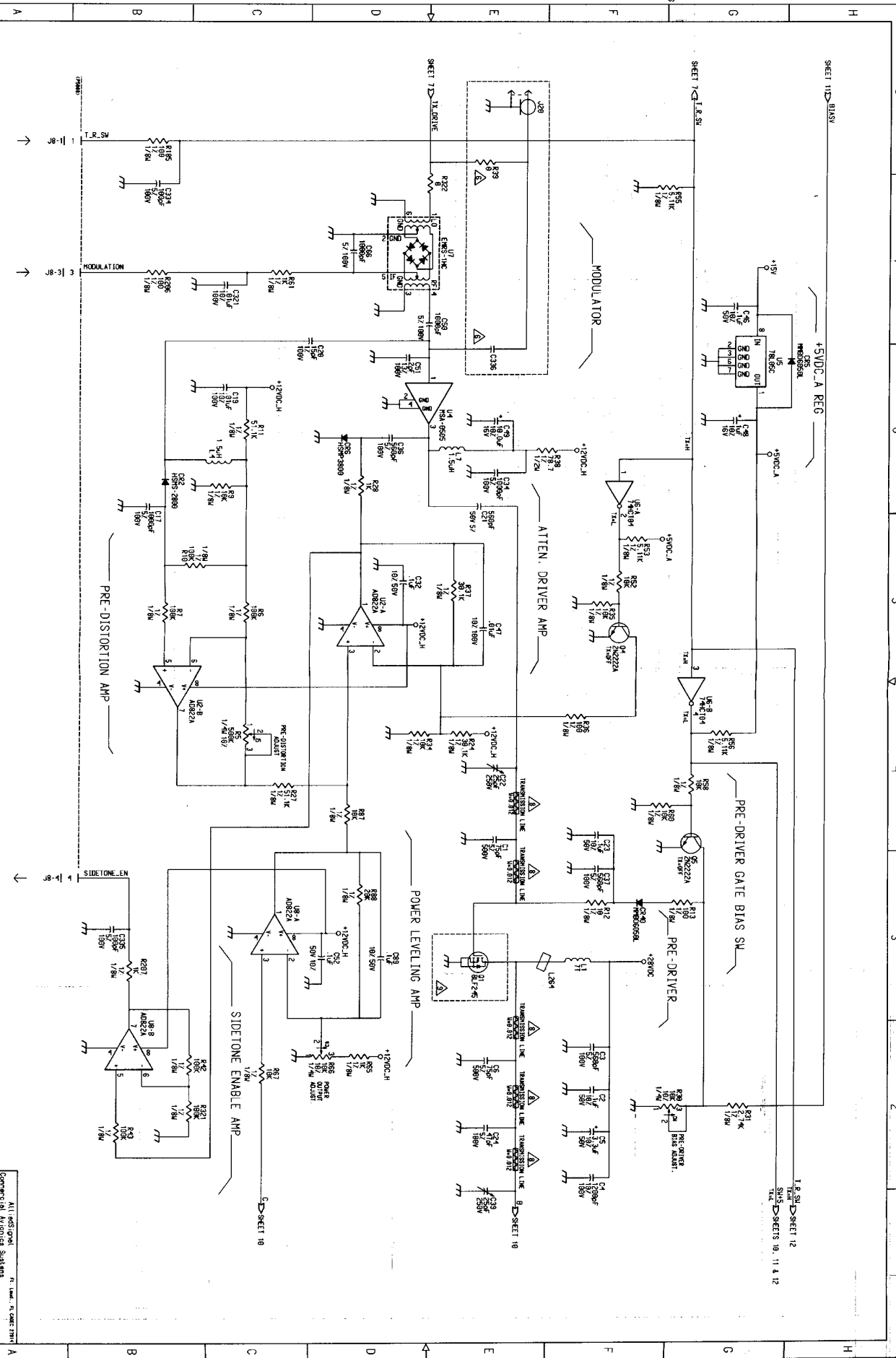




IDENTITY CONNECTIONS
SHEET 3 COLOR LINE
DO NOT USE FOR
POINT CONNECTIONS



TRANSMISSION LINE
SYMBOLS
CIRCUIT EXAMPLES
COPY RIGHTS 8/1/13
AND LOGS AS KEPT
NOTE INDICATOR
COPY AS KEPT
NOTES



1 R.S. SHEET 12
SHEET 10, 11 & 12
TAL



IDENTIFY CONNECTING
SHEET NUMBERS
SHEET 3 C10X IN

DO NOT USE FOR
POINT CONNECTIONS

SE OFFSET CONNECTIONS

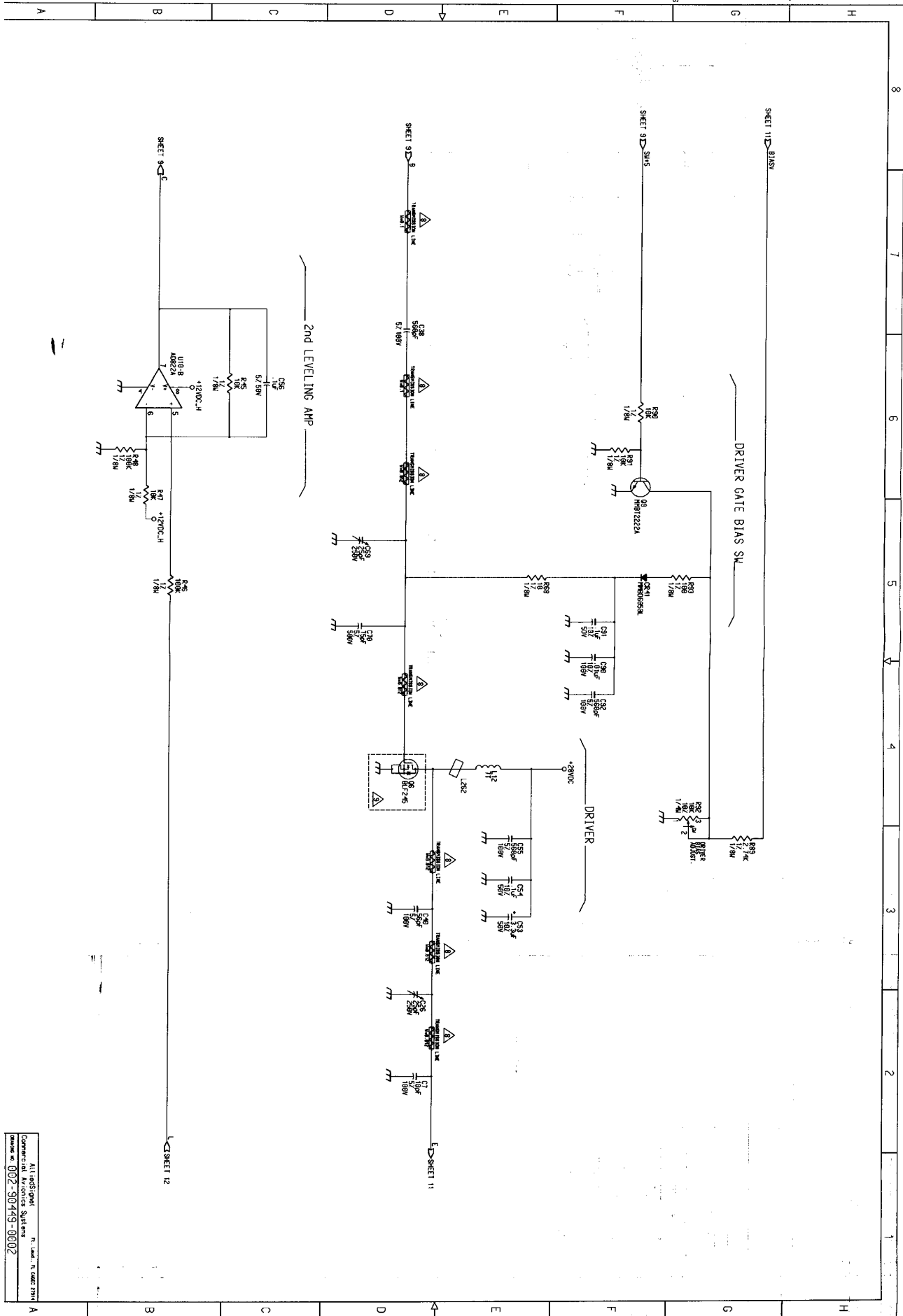
C12
C13

TRANSMISSION LINE
SYMBOLS

CABLEING EXAMPLES:
COPPER ARMS, PTT'S
AND LOGS AS KEPT

NOTE INDICATOR
COPY AS KEPT

NOTES:

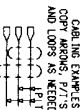
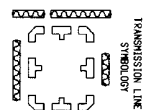
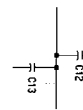




IDENTIFY CONNECTING
SHEET NUMBERS
SHEET 9 OF 10

DO NOT USE FOUR
POINT CONNECTIONS

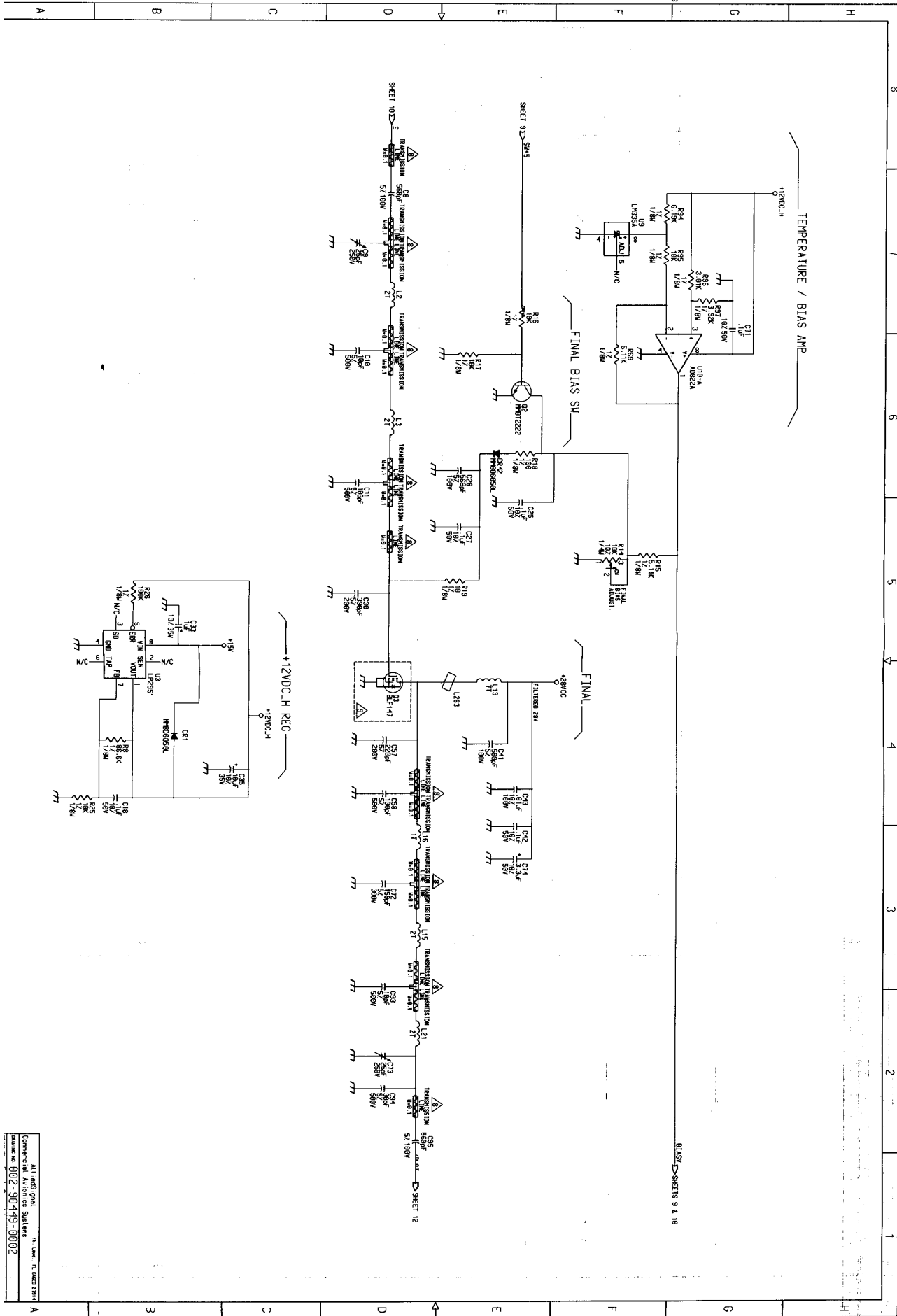
SE OFFSET CONNECTIONS



NOTE: INDICATOR

COPY AS NEEDED

NOTES:





IDENTITY CONNECTING
SHEET NUMBERS
SHEET 9 CLOX IN

DO NOT USE FOUR
POINT CONNECTIONS

SE OFFSET CONNECTIONS

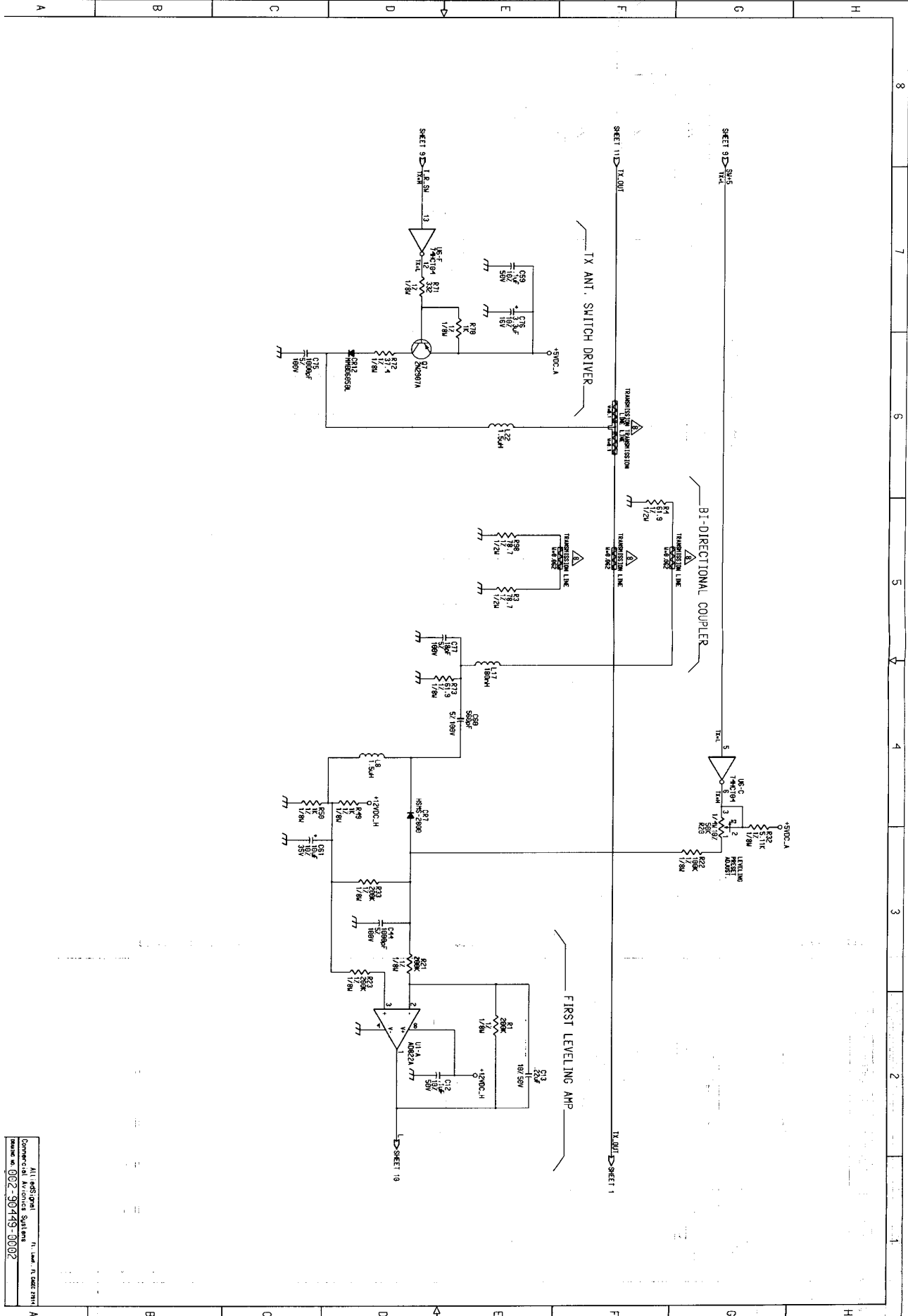
C12
C13

TRANSMISSION LINE
SYMBOLS

CABLE LINE EXAMPLES
COPY ARROWS P.1/3
AND LOOPS AS NEEDED

NOTE INDICATOR
COPY AS NEEDED

NOTES:





IDENTIFY CONNECTING
SHEET NUMBERS
SHEET 3 OF 3

DO NOT USE FOUR
POINT CONNECTIONS

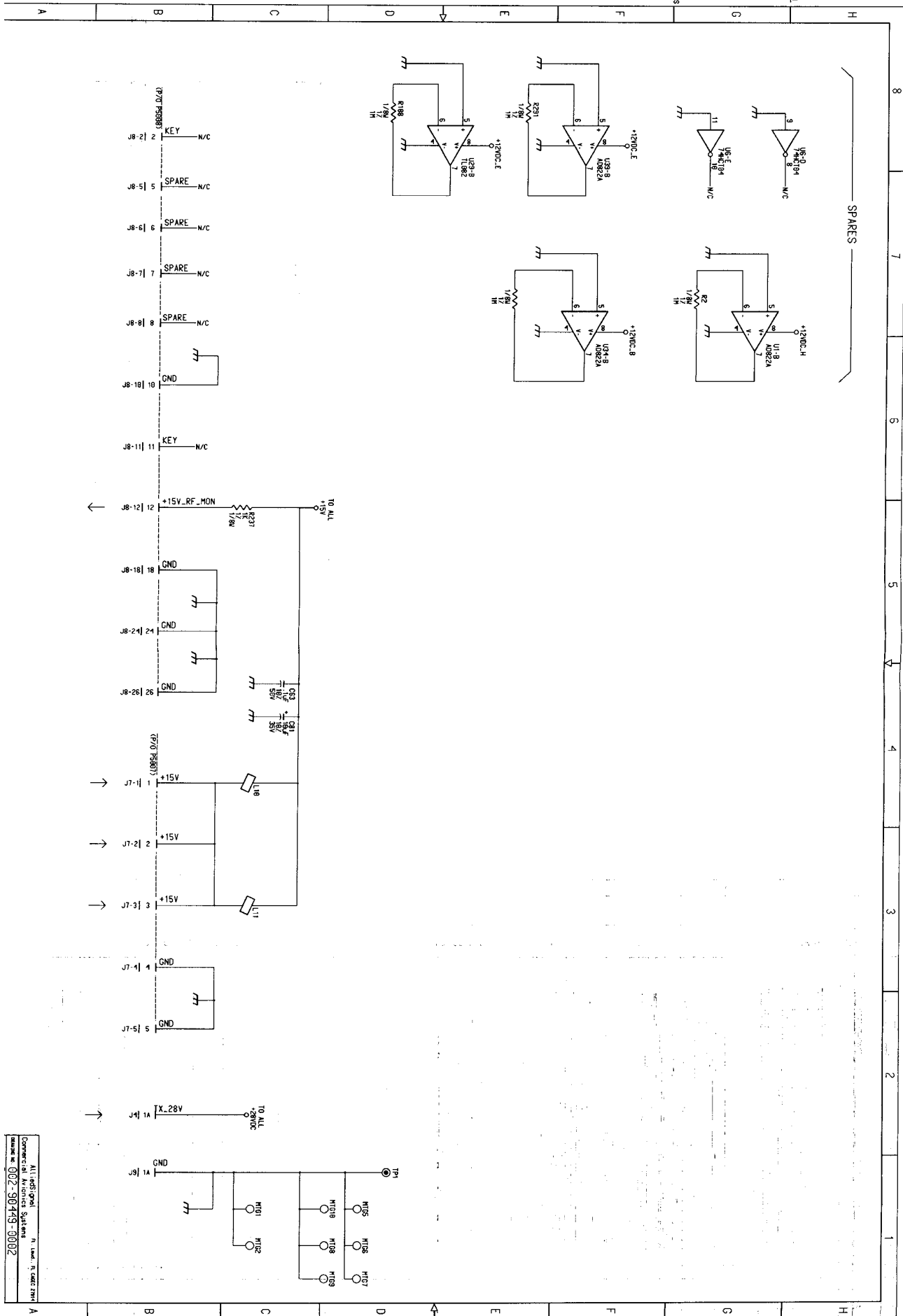
SE DIFFERENT CONNECTIONS

C12
C13

TRANSMISSION LINE
SYMBOLS

CABLEING EXAMPLES:
COPY ARROWS, P/T'S
AND LOOPS AS NEEDED

NOTE INDICATOR
COPY AS NEEDED





IDENTIFY CONNECTING
SHEET NUMBERS

SHEET 3 OF 3

DO NOT USE FOUR
POINT CONNECTIONS

USE OFFSET CONNECTIONS

NOTE: INDICATOR
COPY AS HELD

NOTES:
TEXT FOR NOTE 1
TEXT FOR NOTE 2

USE OFFSET CONNECTIONS

NOTE: INDICATOR
COPY AS HELD

NOTES:
TEXT FOR NOTE 1
TEXT FOR NOTE 2

USE OFFSET CONNECTIONS

NOTE: INDICATOR
COPY AS HELD

NOTES:
TEXT FOR NOTE 1
TEXT FOR NOTE 2

USE OFFSET CONNECTIONS

NOTE: INDICATOR
COPY AS HELD

NOTES:
TEXT FOR NOTE 1
TEXT FOR NOTE 2

USE OFFSET CONNECTIONS

NOTE: INDICATOR
COPY AS HELD

NOTES:
TEXT FOR NOTE 1
TEXT FOR NOTE 2

USE OFFSET CONNECTIONS

NOTE: INDICATOR
COPY AS HELD

NOTES:
TEXT FOR NOTE 1
TEXT FOR NOTE 2

USE OFFSET CONNECTIONS

NOTE: INDICATOR
COPY AS HELD

NOTES:
TEXT FOR NOTE 1
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TEXT FOR NOTE 1
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COPY AS HELD

NOTES:
TEXT FOR NOTE 1
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USE OFFSET CONNECTIONS

NOTE: INDICATOR
COPY AS HELD

NOTES:
TEXT FOR NOTE 1
TEXT FOR NOTE 2

USE OFFSET CONNECTIONS

NOTE: INDICATOR
COPY AS HELD

NOTES:
TEXT FOR NOTE 1
TEXT FOR NOTE 2

USE OFFSET CONNECTIONS

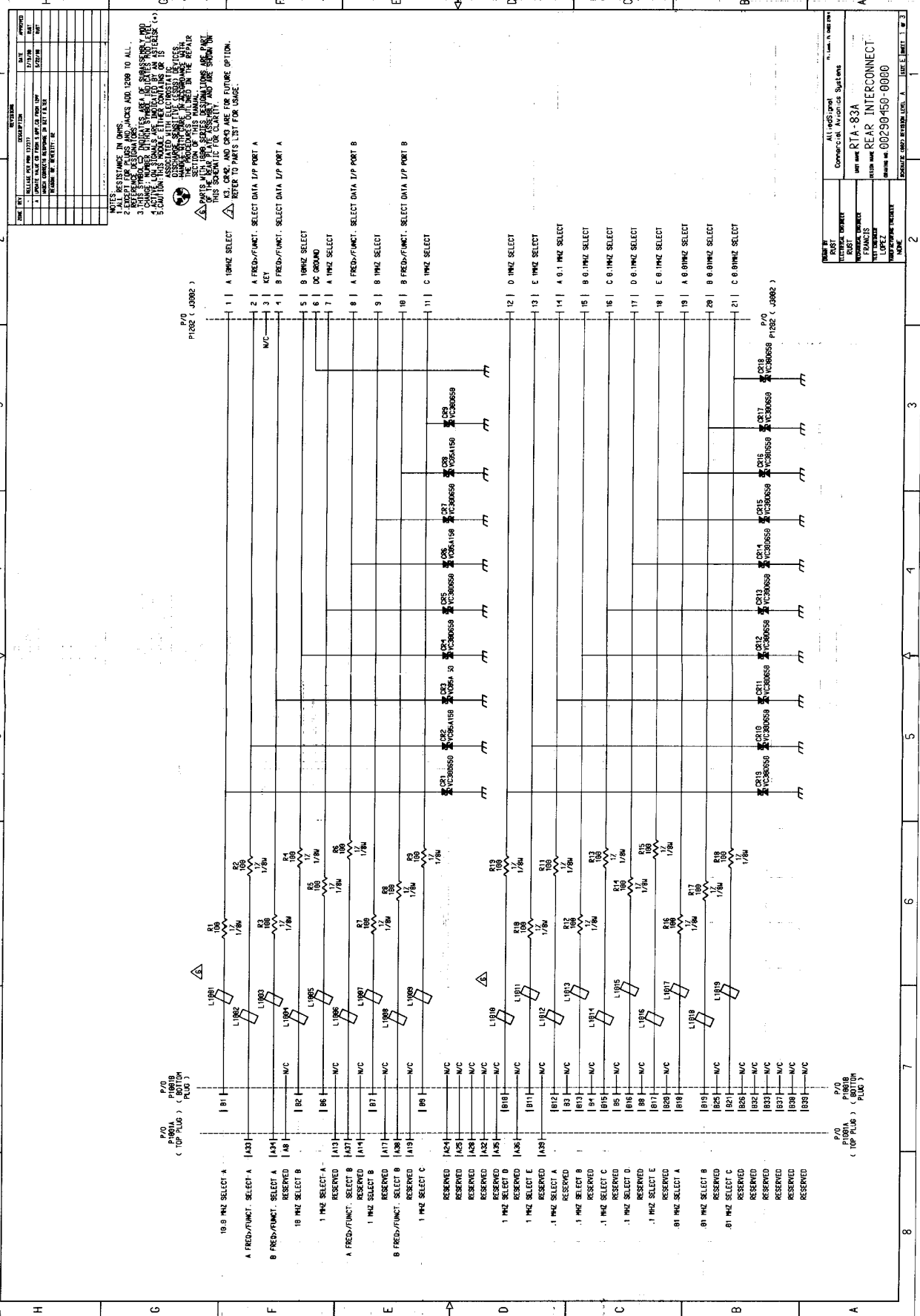
NOTE: INDICATOR
COPY AS HELD

NOTES:
TEXT FOR NOTE 1
TEXT FOR NOTE 2

USE OFFSET CONNECTIONS

NOTE: INDICATOR
COPY AS HELD

NOTES:
TEXT FOR NOTE 1
TEXT FOR NOTE 2



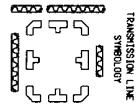


IDENTIFY CONNECTING
SHEET NUMBERS
SHEET 1.9 (CLOCK IN)

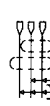
DO NOT USE FORK
POINT CONNECTIONS



USE OFFSET CONNECTIONS

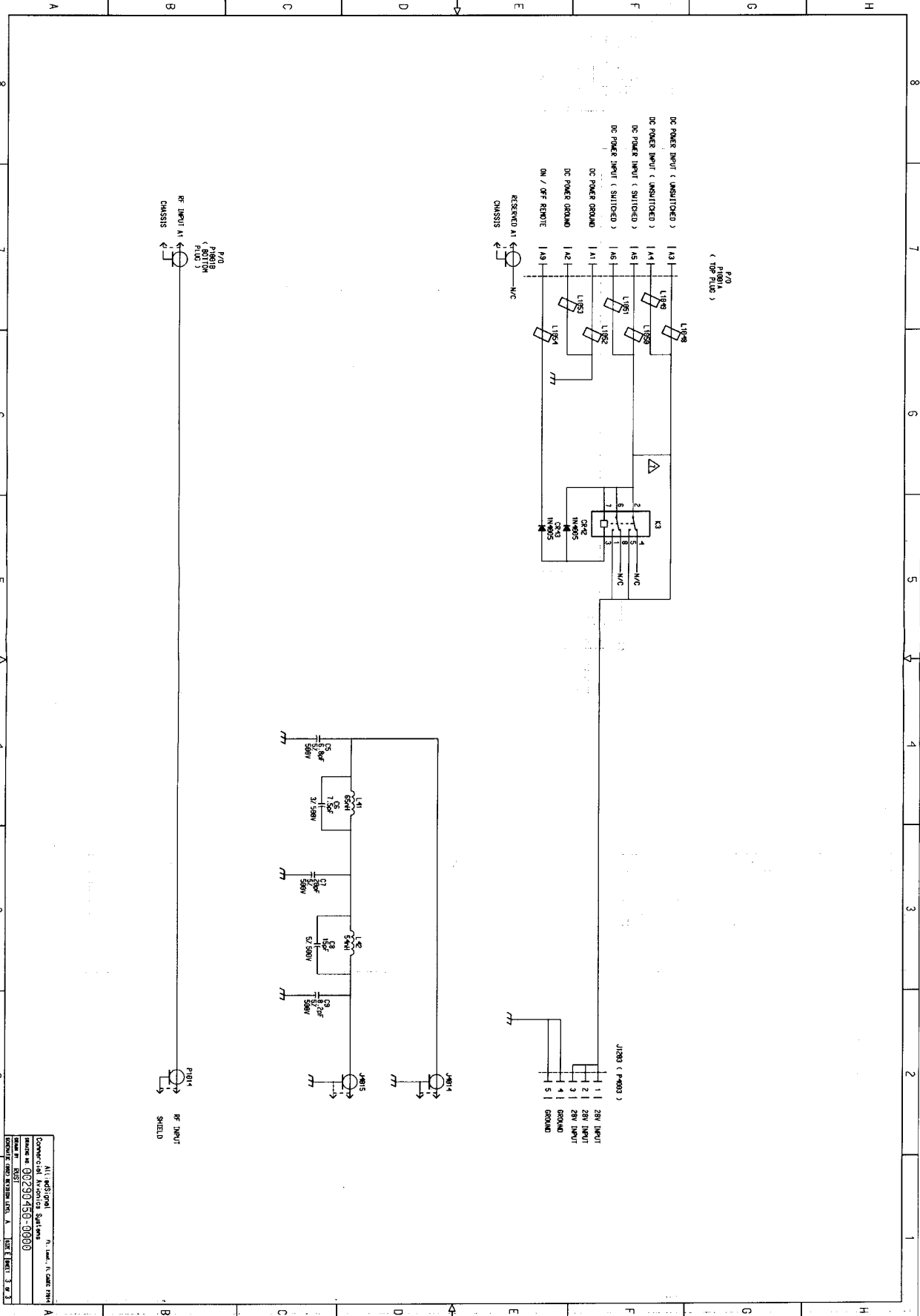


CHASSIS EXAMPLES:
COPY LAYOUTS, P/1'S
AND LAYOUTS AS NEEDED



NOTE: INDICATOR

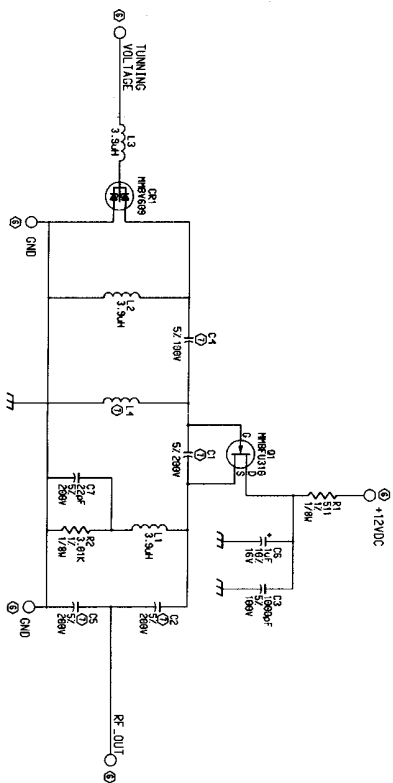
NOTES:
COPY AS NEEDED
TEXT FOR NOTE 1
TEXT FOR NOTE 2



A square frame is shown with four T-shaped blocks at the corners and four 1x3 blocks along the edges. The top edge has a 1x3 block, the right edge has a 1x3 block, the bottom edge has a 1x3 block, and the left edge has a 1x3 block. The four corners are filled with T-shaped blocks.

△△

NOTES:



⑤ "e" POINTS		⑦ (COMPONENT VALUES)	
TX = -0501	PY = -0502	IX = -0501	RY = -0502
TX = 12.32	PY = 12.32	IX = 12.32	RY = 12.32
E2 = 0.0000	Q1 = 0.0000	E2 = 0.0000	Q1 = 0.0000
E1 = 0.00	Q2 = 0.00	E1 = 0.00	Q2 = 0.00
E3 = 0.00	Q3 = 0.00	E3 = 0.00	Q3 = 0.00
E4 = 0.00	Q4 = 0.00	E4 = 0.00	Q4 = 0.00
E5 = 0.00	Q5 = 0.00	E5 = 0.00	Q5 = 0.00
E6 = 0.00	Q6 = 0.00	E6 = 0.00	Q6 = 0.00
E7 = 0.00	Q7 = 0.00	E7 = 0.00	Q7 = 0.00
E8 = 0.00	Q8 = 0.00	E8 = 0.00	Q8 = 0.00
E9 = 0.00	Q9 = 0.00	E9 = 0.00	Q9 = 0.00
E10 = 0.00	Q10 = 0.00	E10 = 0.00	Q10 = 0.00

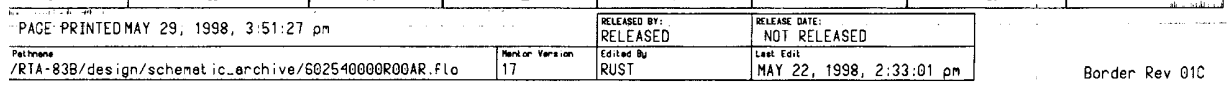
[illegible]

1. THIS RESISTANCE IN OHMS.
2. EXCEPT FOR PLUGS AND JACKS ADD WATT TO ALL
3. REFERENCE DESIGNATIONS (SEE NOTE 6 BELOW)
4. CHANCE NUMBER WITHIN SERIAL NUMBER OF PLUGS AND JACKS
5. ACTIVE AND INACTIVE ARE INDICATED BY AN ASTERISK (*)
6. SCHEMATIC SYMBOLS FOR ETHER CHANNELS ARE

DISAGREE SENSITIVE (SENS) DEVICES,
HANDLE WITH CARE IN ACCORDANCE WITH
SECTION OF THIS MANUAL

6. THIS UNIT REQUIRES A 240 VOLT, 50 HZ AC POWER LINE
EQUIPPED WITH A 15 AMP FUSE. THE UNIT IS SUPPLIED WITH
DESIGNATION OF ASST 5632 (12)

FRANK COSSENTINO Electrical Technology Dave Seiltenin Richard Seiltenin Bill Francis Jeff Harvey	All-Positional Commercial Avionics Systems
--	---



THE UNIVERSITY OF CHICAGO



DUTY CYCLE TABLE		
DUTY CYCLE	WATTAGE	AIR FLOW cfm
100%	167.5	18.0
75%	132.5	16.5
50%	97.5	13.5
25%	62.5	11.0
0%	27.5	8.5

NOTES:

- 2 - ALL APPROPRIATE DATA MUST BE MARKED ON THE IDENTIFICATION LABEL PRIOR TO SHIPMENT.
- 3 - FORCED AIR COOLING, BULK AIR SUPPLY CONDITIONS:
TEMPERATURE LESS THAN 40°C
HUMIDITY LESS THAN 70%
PRESSURE DROP THROUGH LRU IS 25MM H₂O
FLOW RATE PER DUTY CYCLE TABLE.
- 4 - PRIMARY DIMENSIONS ARE IN INCHES. MILLIMETERS ARE SHOWN FOR REFERENCE ONLY.
- 5 - ALL SCREW OF RIVET HEADS SHALL BE WITHIN THIS DIMENSION.
- 6 - MAXIMUM UNIT WEIGHT IS 11.0 LBS., 5.0 KG.  SYMBOL DENOTES UNIT CENTER OF GRAVITY.
- 7 - THE 4.88 DIMENSION APPLIES ACROSS THE CONNECTOR PLATE ON THE CHASSIS COVER AND ATTACHING HARDWARE SHALL NOT EXCEED 4.91 (124.7MM).

9 - EXTERNAL SURFACE FINISH IS TEXTURED POLYURETHANE PAINT.

RTA-83A VHF Communications Transceiver, Dimensional Outline Drawing
Figure 203



RTA-83A VHF Communications System Interwiring Diagram
Figure 204