

VIII. Measurement Results for AIS Physical Tests Cont'd:

6. DSC Co-Channel Rejection.

Specification: -10 dB to 0 dB Normal, 0.01 BER

* Unit unaffected by signal at maximum level. Below: First 36 data points of 8192. All data in spreadsheet on CD.

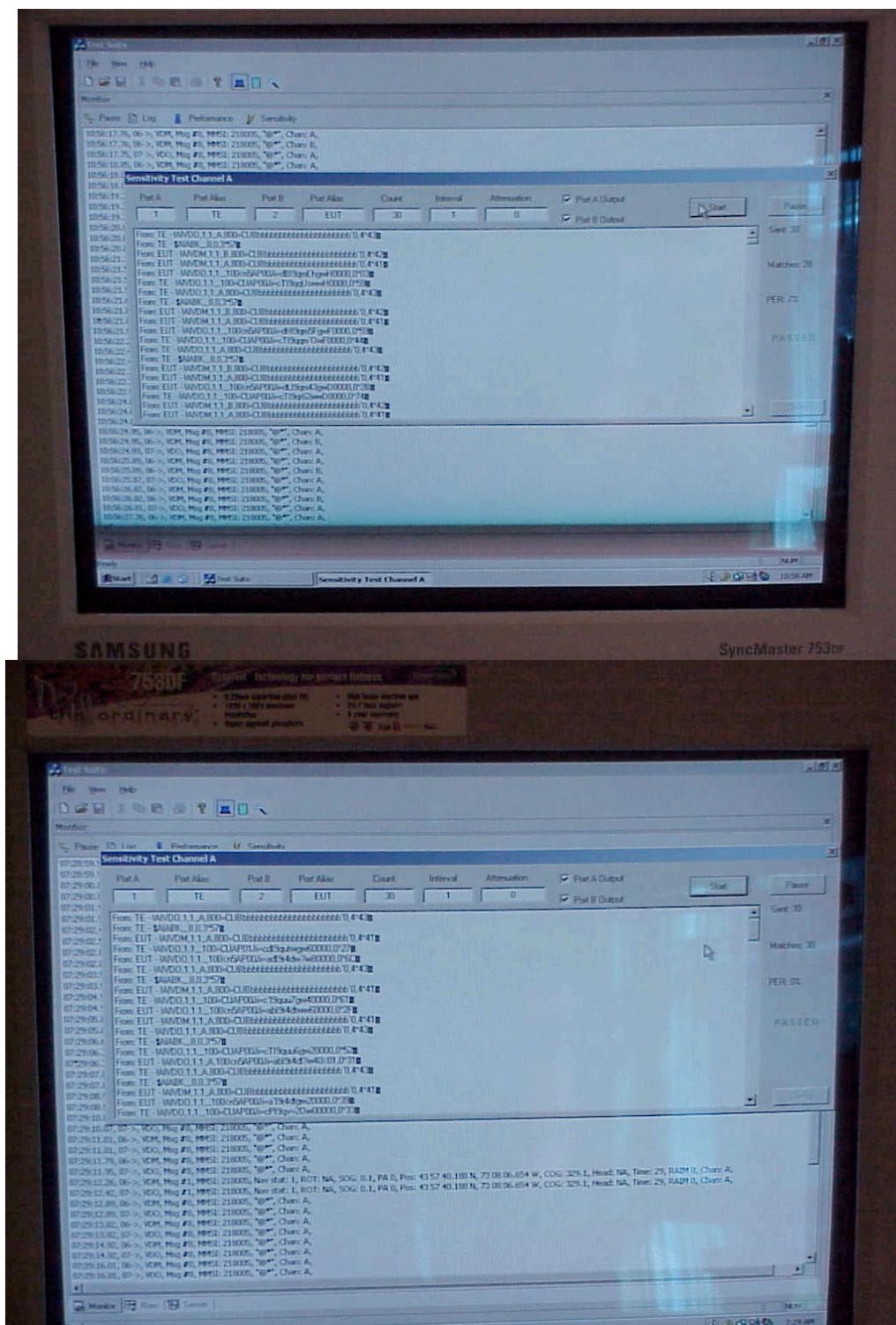
Mask	Data	Difference	Sorted diff.
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
1	1	0	0
1	1	0	0
0	0	0	0
0	0	0	0
1	1	0	0
1	1	0	0
1	1	0	0

VIII. Measurement Results for AIS Physical Tests Cont'd:

7. Adjacent Channel Selectivity.

25 kHz Specification: 70 dB Normal, 12.5 kHz Specification: 50 dB Normal

* Unit unaffected by signal at maximum level.



VIII. Measurement Results for AIS Physical Tests Cont'd:

7. DSC Adjacent Channel Selectivity.

70 dB Normal, 0.01 BER Normal

* Unit unaffected by signal at maximum level. Below: First 36 data points of 8192. All data in spreadsheet on CD.

Mask	Data	Difference	Sorted diff.
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
0	0	0	0
1	1	0	0
1	1	0	0
1	1	0	0
0	0	0	0
0	0	0	0
1	1	0	0
1	1	0	0
1	1	0	0

VIII. Measurement Results for AIS Physical Tests Cont'd:

8. Spurious Rejection.

Specification: 70 dB

Calculations for limited frequency band of interest "F1 to F2":

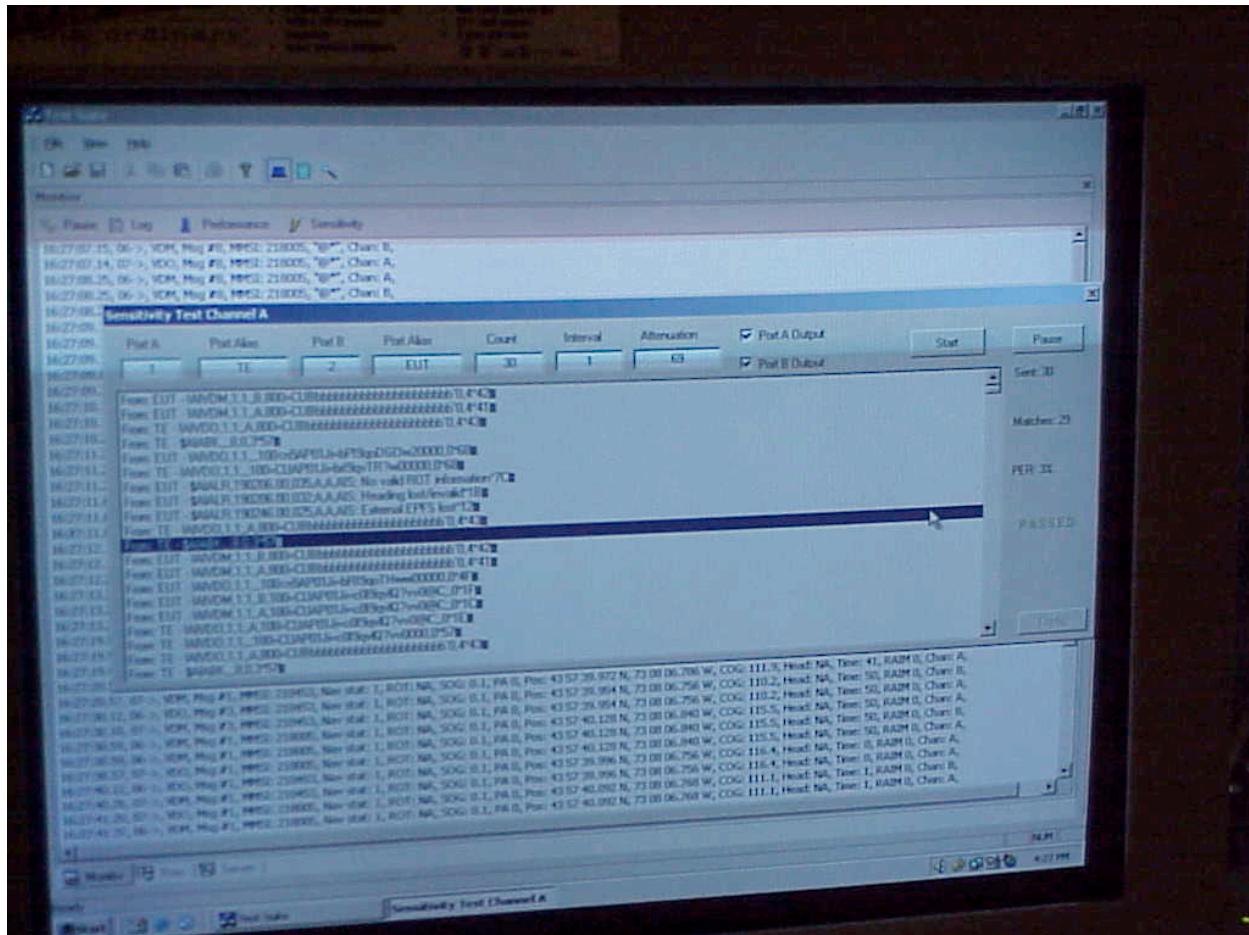
$$F1 = f_{l_0} - (f_{i1} + f_{i2}) - sr/2, \quad F2 = f_{l_0} + (f_{i1} + f_{i2}) + sr/2, \quad sr = 7 \text{ MHz} \quad (163 \text{ MHz} - 156 \text{ MHz})$$

Calculations for spurious responses outside the limited frequency band of interest "FS1 and FS2":

$$FS1 = nf_{lo} - f_i, FS2 = nf_{lo} + f_{i1}, n = 2$$

Channel	f _{lo} MHz	f _{ll} MHz	f _{l2} MHz	F1	F2	FS1	FS2
AIS1	140.575	21.4	0.455	115.22	165.355	259.75	302.55
AIS2	142.925	19.1	0.455	119.87	165.98	266.75	304.95
DSC	n/a	n/a	n/a	0.1	2000	n/a	n/a

* Unit is unaffected by maximum signal levels.



VIII. Measurement Results for AIS Physical Tests Cont'd:

8. DSC Spurious Rejection.

Specification: 70 dB at 0.01 BER

* Unit unaffected by signal at maximum level. Below: First 36 data points of 8192. All data in spreadsheet on CD.