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SPECTRUM ORBIT UTILIZATION PROGRAM DOCUMENTATION:
SOUP5 VERSION 3.8 USER'S MANUAL - VOLUME II
(APPENDICES A THROUGH G)

CR-174890
FINAL REPORT

(NASA-CR-174890)	SPECTRUM ORBIT UTILIZATION	N86-27928
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THROUGH G	Final Report (Operations	Unclas
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PREPARED UNDER CONTRACT No. NAS3-22885
FOR NASA LEWIS RESEARCH CENTER

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VOLUME II
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CR-174890
FINAL REPORT

10 JUNE 1985

ORBIT SPECTRUM UTILIZATION
COMPUTER PROGRAMS
USER MANUAL (COMPT. PROC.)

ERROR CORRECTIVE CODES
CHECKOUT
CHANNEL CAPACITY

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APPENDIX A
DATA INPUT FORMS

The following pages contain input forms which may be used to prepare data for the SOUP5V3.4 version of the R2BCSAT-83 data base. ^{ARE GIVEN} The contents of the fields on these forms were discussed in detail in Chapter 3 of this manual.

Scenario Card 3

SOUP5 INPUT

Scenario Key		Output Control Data		Report Thresholds		Antenna Pattern Gain Table Graph or (Deg.)													
Card Type	Report #	Not Used	Aggregate Reports	Detail Reports	Antenna Pattern Gain Table Graph or (Deg.)	Down and up Margin (dB)	Up Margin (dB)	Down CI (dB)	Up CI (dB)	Not Used	Number of Service Areas	Horizontal Extension (cm)	Normal Frequency Option	Blocking Flag	Number of Description Cards	Not Used - Must be Blank	Down Cards Present Flag	Up Cards Present Flag	
X	X	X	X	X	X	X	X	X	X	X	63	67	X	X	76	77	78	79	80
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

Scenario
Card 4

SOUP5 INPUT

Scenario Key	Card Type	Card Number	Description
X		9	X
X		10	X
1		11	X
2		12	X
3		13	X
4		14	X
5		15	X
6		16	X
7		17	X
8		18	X
		19	X
		20	X
		21	X
		22	X
		23	X
		24	X
		25	X
		26	X
		27	X
		28	X
		29	X
		30	X
		31	X
		32	X
		33	X
		34	X
		35	X
		36	X
		37	X
		38	X
		39	X
		40	X
		41	X
		42	X
		43	X
		44	X
		45	X
		46	X
		47	X
		48	X
		49	X
		50	X
		51	X
		52	X
		53	X
		54	X
		55	X
		56	X
		57	X
		58	X
		59	X
		60	X
		61	X
		62	X
		63	X
		64	X
		65	X
		66	X
		67	X
		68	X
		69	X
		70	X
		71	X
		72	X
		73	X
		74	X
		75	X
		76	X
		77	X
		78	X
		79	X
		80	X

ORIGINAL PAGE IS
OF POOR QUALITY

Scenario
Service Area
Downpath
Overrides
Card 53

Scenario Key	Card Type	ITU Admin		Area		Subcard Type	Antenna Pointing Tolerance		ΔG To Edge (dB)	Channelization	Point File Selection	Point Selection Codes	Beam Longitude Tolerance (Deg)	Antenna Keys		Flag	Sat. Transmit Power	Maximum Adjustment (dB)	Number of ESR	Point Overrides	
		ITU Admin	Area	Area Type	Earth Antenna (Ratio)		Satellite Antenna (Deg)	Satellite Trans.						Earth Receive							
X	X	X	X	X	X	18	9	9	9	X	X	X	X	X	X	X	57	9	9	9	9
X	X	X	X	X	X	19	9	9	9	X	X	X	X	X	X	56	9	9	9	9	9
X	X	X	X	X	X	20	9	9	9	X	X	X	X	X	X	55	9	9	9	9	9
X	X	X	X	X	X	21	9	9	9	X	X	X	X	X	X	54	9	9	9	9	9
X	X	X	X	X	X	22	9	9	9	X	X	X	X	X	X	53	9	9	9	9	9
X	X	X	X	X	X	23	9	9	9	X	X	X	X	X	X	52	9	9	9	9	9
X	X	X	X	X	X	24	9	9	9	X	X	X	X	X	X	51	9	9	9	9	9
X	X	X	X	X	X	25	9	9	9	X	X	X	X	X	X	50	9	9	9	9	9
X	X	X	X	X	X	26	9	9	9	X	X	X	X	X	X	49	9	9	9	9	9
X	X	X	X	X	X	27	9	9	9	X	X	X	X	X	X	48	9	9	9	9	9
X	X	X	X	X	X	28	9	9	9	X	X	X	X	X	X	47	9	9	9	9	9
X	X	X	X	X	X	29	9	9	9	X	X	X	X	X	X	46	9	9	9	9	9
X	X	X	X	X	X	30	9	9	9	X	X	X	X	X	X	45	9	9	9	9	9
X	X	X	X	X	X	31	9	9	9	X	X	X	X	X	X	44	9	9	9	9	9
X	X	X	X	X	X	32	9	9	9	X	X	X	X	X	X	43	9	9	9	9	9
X	X	X	X	X	X	33	9	9	9	X	X	X	X	X	X	42	9	9	9	9	9
X	X	X	X	X	X	34	9	9	9	X	X	X	X	X	X	41	9	9	9	9	9
X	X	X	X	X	X	35	9	9	9	X	X	X	X	X	X	40	9	9	9	9	9
X	X	X	X	X	X	36	9	9	9	X	X	X	X	X	X	39	9	9	9	9	9
X	X	X	X	X	X	37	9	9	9	X	X	X	X	X	X	38	9	9	9	9	9
X	X	X	X	X	X	38	9	9	9	X	X	X	X	X	X	37	9	9	9	9	9
X	X	X	X	X	X	39	9	9	9	X	X	X	X	X	X	36	9	9	9	9	9
X	X	X	X	X	X	40	9	9	9	X	X	X	X	X	X	35	9	9	9	9	9
X	X	X	X	X	X	41	9	9	9	X	X	X	X	X	X	34	9	9	9	9	9
X	X	X	X	X	X	42	9	9	9	X	X	X	X	X	X	33	9	9	9	9	9
X	X	X	X	X	X	43	9	9	9	X	X	X	X	X	X	32	9	9	9	9	9
X	X	X	X	X	X	44	9	9	9	X	X	X	X	X	X	31	9	9	9	9	9
X	X	X	X	X	X	45	9	9	9	X	X	X	X	X	X	30	9	9	9	9	9
X	X	X	X	X	X	46	9	9	9	X	X	X	X	X	X	29	9	9	9	9	9
X	X	X	X	X	X	47	9	9	9	X	X	X	X	X	X	28	9	9	9	9	9
X	X	X	X	X	X	48	9	9	9	X	X	X	X	X	X	27	9	9	9	9	9
X	X	X	X	X	X	49	9	9	9	X	X	X	X	X	X	26	9	9	9	9	9
X	X	X	X	X	X	50	9	9	9	X	X	X	X	X	X	25	9	9	9	9	9
X	X	X	X	X	X	51	9	9	9	X	X	X	X	X	X	24	9	9	9	9	9
X	X	X	X	X	X	52	9	9	9	X	X	X	X	X	X	23	9	9	9	9	9
X	X	X	X	X	X	53	9	9	9	X	X	X	X	X	X	22	9	9	9	9	9
X	X	X	X	X	X	54	9	9	9	X	X	X	X	X	X	21	9	9	9	9	9
X	X	X	X	X	X	55	9	9	9	X	X	X	X	X	X	20	9	9	9	9	9
X	X	X	X	X	X	56	9	9	9	X	X	X	X	X	X	19	9	9	9	9	9
X	X	X	X	X	X	57	9	9	9	X	X	X	X	X	X	18	9	9	9	9	9
X	X	X	X	X	X	58	9	9	9	X	X	X	X	X	X	17	9	9	9	9	9
X	X	X	X	X	X	59	9	9	9	X	X	X	X	X	X	16	9	9	9	9	9
X	X	X	X	X	X	60	9	9	9	X	X	X	X	X	X	15	9	9	9	9	9
X	X	X	X	X	X	61	9	9	9	X	X	X	X	X	X	14	9	9	9	9	9
X	X	X	X	X	X	62	9	9	9	X	X	X	X	X	X	13	9	9	9	9	9
X	X	X	X	X	X	63	9	9	9	X	X	X	X	X	X	12	9	9	9	9	9
X	X	X	X	X	X	64	9	9	9	X	X	X	X	X	X	11	9	9	9	9	9
X	X	X	X	X	X	65	9	9	9	X	X	X	X	X	X	10	9	9	9	9	9
X	X	X	X	X	X	66	9	9	9	X	X	X	X	X	X	9	9	9	9	9	9
X	X	X	X	X	X	67	9	9	9	X	X	X	X	X	X	8	9	9	9	9	9
X	X	X	X	X	X	68	9	9	9	X	X	X	X	X	X	7	9	9	9	9	9
X	X	X	X	X	X	69	9	9	9	X	X	X	X	X	X	6	9	9	9	9	9
X	X	X	X	X	X	70	9	9	9	X	X	X	X	X	X	5	9	9	9	9	9
X	X	X	X	X	X	71	9	9	9	X	X	X	X	X	X	4	9	9	9	9	9
X	X	X	X	X	X	72	9	9	9	X	X	X	X	X	X	3	9	9	9	9	9
X	X	X	X	X	X	73	9	9	9	X	X	X	X	X	X	2	9	9	9	9	9
X	X	X	X	X	X	74	9	9	9	X	X	X	X	X	X	1	9	9	9	9	9
X	X	X	X	X	X	75	9	9	9	X	X	X	X	X	X	0	9	9	9	9	9
X	X	X	X	X	X	76	9	9	9	X	X	X	X	X	X	9	9	9	9	9	9
X	X	X	X	X	X	77	9	9	9	X	X	X	X	X	X	8	9	9	9	9	9
X	X	X	X	X	X	78	9	9	9	X	X	X	X	X	X	7	9	9	9	9	9
X	X	X	X	X	X	79	9	9	9	X	X	X	X	X	X	6	9	9	9	9	9
X	X	X	X	X	X	80	9	9	9	X	X	X	X	X	X	5	9	9	9	9	9

Not Used

Scenario Overrides

Scenario
Service Area
Feederlink
Card 5-4

SOUP5 INPUT

Scenario Key	Card Type	ITU Admin	Area	Area Type	Service Area Key	Subcard Type	Up/Down Override	ITU Admin	Area	Area Type	Point Set Key Data	Only Satellite Longitude (Deg-E)	Pointing Error (Deg)	Rot. Error (Deg)	Satellite Latitude (Deg-N)	Channel Family	Polarization Angle (Deg)	
X	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	60	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	61	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	62	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	63	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	64	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	65	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	66	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	67	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	68	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	69	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	70	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	71	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	72	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	73	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	74	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	75	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	76	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	77	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	78	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	79	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	80	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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SOUP5 INPUT

Scenario
Service Area
Feederlink
Overrides
Card 5-5

Scenario Key		Service Area Key		Feederlink Overrides		Number of FLT Point Overrides										
Card Type	ITU Admin	Area	Area Type	Subcard Type	Pointing Tolerance	AG To Edge (dB)	Channelization	Point File Sel. Option	Point Selection Codes	Not Used	Beam Longitude Tolerance (Deg)	Beam File Sel. Options	Antenna Keys	Feederlink Transmit Power	Maximum Adjust (dB)	Number of FLT Point Overrides
9	10-12	13-15	16-17	18	Earth Antenna (Ratio)	Satellite Antenna (Deg)	9-31	32-35	36-39	40-41	42-46	47-56	57-62	EIRP (dBW) or CN (dB) or PFD (dBW/m ²) Power (W)	9-80	67-80
X	X	X	X	X	9	9	X	X	X	9	9	X	X	9	9	67
X	X	X	X	X	9	9	X	X	X	9	9	X	X	9	9	68
X	X	X	X	X	9	9	X	X	X	9	9	X	X	9	9	69
X	X	X	X	X	9	9	X	X	X	9	9	X	X	9	9	70
X	X	X	X	X	9	9	X	X	X	9	9	X	X	9	9	71
X	X	X	X	X	9	9	X	X	X	9	9	X	X	9	9	72
X	X	X	X	X	9	9	X	X	X	9	9	X	X	9	9	73
X	X	X	X	X	9	9	X	X	X	9	9	X	X	9	9	74
X	X	X	X	X	9	9	X	X	X	9	9	X	X	9	9	75
X	X	X	X	X	9	9	X	X	X	9	9	X	X	9	9	76
X	X	X	X	X	9	9	X	X	X	9	9	X	X	9	9	77
X	X	X	X	X	9	9	X	X	X	9	9	X	X	9	9	78
X	X	X	X	X	9	9	X	X	X	9	9	X	X	9	9	79
X	X	X	X	X	9	9	X	X	X	9	9	X	X	9	9	80

SOUP5 INPUT

RARC Key	Card Type	Official Flag	Antenna and Beam Parameters				Tolerances				Description										
			Antenna Beamwidth		Feederlink		Pointing		Rotational												
			Min. Satellite Antenna Beamwidth (Deg)	Max. Satellite Antenna Azial Ratio	Min. Satellite Antenna Diameter (m)	Max. Satellite Antenna Diameter (m)	Earth Antenna (Ratio)	Satellite Antenna (Deg)	Earth Antenna (Deg)	Satellite Antenna (Deg)		AG To Edge (db)									
X X X X	5	X	9 9 . 9 9	9 9 . 9 9	9 9 . 9 9	9 9 . 9 9	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	
1 2 3 4	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

Items Written With this Type can be Overriden by the Scenario Data

SOUPS INPUT

RARC Key	Card Type	Channelization Parameters													
		Feederlink				Down Path				Tile					
		Bandedge Frequency		Guardband Width		Bandedge Frequency		Guardband Width		Bandedge Frequency		Guardband Width		Band-Width Coord.	
		Lower (GHz)	Upper (GHz)	Lower (MHz)	Upper (MHz)	Lower (MHz)	Upper (MHz)	Lower (MHz)	Upper (MHz)	Lower (MHz)	Upper (MHz)	Lower (MHz)	Upper (MHz)	Lower (MHz)	Upper (MHz)
X	X	9	9	9	9	9	9	9	9	9	9	9	9	9	9
1	2	6	7	8	9	10	11	12	13	14	15	16	17	18	19
2	3	20	21	22	23	24	25	26	27	28	29	30	31	32	33
3	4	34	35	36	37	38	39	40	41	42	43	44	45	46	47
4	5	48	49	50	51	52	53	54	55	56	57	58	59	60	61
5	6	62	63	64	65	66	67	68	69	70	71	72	73	74	75
6	7	76	77	78	79	80									
7	8														
8	9														
9	0														

Parameters
Channelization

SOUP5 INPUT

Channelization Key	Card Type	Up/Down Flag	Lowest Center Frequency (GHz)	Number of Channels	Channel Bandwidth (MHz)	Channel Separation (MHz)	Channel Noise Bandwidth (MHz)	Top Baseband Frequency (MHz)	Peak-to-Peak Deviation (MHz)	Official Flag	Number of Channel Families	Description																																																																			
X	X	X	9 9 9	9	9	9	9	9	9	X	9																																																																				
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

Parameters
Channel Family

SOUPS INPUT

Channelization		Card Type	Channel Family Number	Channel Family Card Number	Number of Channels in Family	Channels																																																																						
1	X	2	1	1	1	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
2	X	2	1	1	1	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
3	X	2	1	1	1	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
4	X	2	1	1	1	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
5	X	2	1	1	1	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

Parameters
Protection Ratio

SOUP5 INPUT

Card Number	Protection Ratio Key	Segment										Segment										Not Used																	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
9	8	7	6	5	4	3	2	1	0	9	8	7	6	5	4	3	2	1	0	9	8	7	6	5	4	3	2	1	0	9	8	7	6	5	4	3	2	1	0
9	X	X	X	X						9	X	X	X	X						9	X	X	X	X						9	X	X	X	X					
8	X	X	X	X						8	X	X	X	X						8	X	X	X	X						8	X	X	X	X					
7	X	X	X	X						7	X	X	X	X						7	X	X	X	X						7	X	X	X	X					
6	X	X	X	X						6	X	X	X	X						6	X	X	X	X						6	X	X	X	X					
5	X	X	X	X						5	X	X	X	X						5	X	X	X	X						5	X	X	X	X					
4	X	X	X	X						4	X	X	X	X						4	X	X	X	X						4	X	X	X	X					
3	X	X	X	X						3	X	X	X	X						3	X	X	X	X						3	X	X	X	X					
2	X	X	X	X						2	X	X	X	X						2	X	X	X	X						2	X	X	X	X					
1	X	X	X	X						1	X	X	X	X						1	X	X	X	X						1	X	X	X	X					

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SOUP5 INPUT

Parameters
Ellipses

Beam Key		Aimpoint		Orientation Angle		Beam Description	
ITU Admin	Service Area	Latitude (Deg. N)	Longitude (Deg. E)	Orient. Angle (Deg.) or Ref. Pt. Latitude (Deg. E)	Ref. Pt. Longitude (Deg. E)	Major Axis (Deg.)	Minor Axis (Deg.)
1	X	0	0	0	0	0	0
2	X	0	0	0	0	0	0
3	X	0	0	0	0	0	0
4	X	0	0	0	0	0	0
5	X	0	0	0	0	0	0
6	X	0	0	0	0	0	0
7	X	0	0	0	0	0	0
8	X	0	0	0	0	0	0
9	X	0	0	0	0	0	0
10	X	0	0	0	0	0	0
11	X	0	0	0	0	0	0
12	X	0	0	0	0	0	0
13	X	0	0	0	0	0	0
14	X	0	0	0	0	0	0
15	X	0	0	0	0	0	0
16	X	0	0	0	0	0	0
17	X	0	0	0	0	0	0
18	X	0	0	0	0	0	0
19	X	0	0	0	0	0	0
20	X	0	0	0	0	0	0
21	X	0	0	0	0	0	0
22	X	0	0	0	0	0	0
23	X	0	0	0	0	0	0
24	X	0	0	0	0	0	0
25	X	0	0	0	0	0	0
26	X	0	0	0	0	0	0
27	X	0	0	0	0	0	0
28	X	0	0	0	0	0	0
29	X	0	0	0	0	0	0
30	X	0	0	0	0	0	0
31	X	0	0	0	0	0	0
32	X	0	0	0	0	0	0
33	X	0	0	0	0	0	0
34	X	0	0	0	0	0	0
35	X	0	0	0	0	0	0
36	X	0	0	0	0	0	0
37	X	0	0	0	0	0	0
38	X	0	0	0	0	0	0
39	X	0	0	0	0	0	0
40	X	0	0	0	0	0	0
41	X	0	0	0	0	0	0
42	X	0	0	0	0	0	0
43	X	0	0	0	0	0	0
44	X	0	0	0	0	0	0
45	X	0	0	0	0	0	0
46	X	0	0	0	0	0	0
47	X	0	0	0	0	0	0
48	X	0	0	0	0	0	0
49	X	0	0	0	0	0	0
50	X	0	0	0	0	0	0
51	X	0	0	0	0	0	0
52	X	0	0	0	0	0	0
53	X	0	0	0	0	0	0
54	X	0	0	0	0	0	0
55	X	0	0	0	0	0	0
56	X	0	0	0	0	0	0
57	X	0	0	0	0	0	0
58	X	0	0	0	0	0	0
59	X	0	0	0	0	0	0
60	X	0	0	0	0	0	0
61	X	0	0	0	0	0	0
62	X	0	0	0	0	0	0
63	X	0	0	0	0	0	0
64	X	0	0	0	0	0	0
65	X	0	0	0	0	0	0
66	X	0	0	0	0	0	0
67	X	0	0	0	0	0	0
68	X	0	0	0	0	0	0
69	X	0	0	0	0	0	0
70	X	0	0	0	0	0	0
71	X	0	0	0	0	0	0
72	X	0	0	0	0	0	0
73	X	0	0	0	0	0	0
74	X	0	0	0	0	0	0
75	X	0	0	0	0	0	0
76	X	0	0	0	0	0	0
77	X	0	0	0	0	0	0
78	X	0	0	0	0	0	0
79	X	0	0	0	0	0	0
80	X	0	0	0	0	0	0

SOUP5 INPUT SHEET

Parameters
Gain Pattern
Segmented Function

Gain Table Key	Card Type	Segment Sequences	Card Sequences in Segment	Upper Segment Limit Deg. or Ratio	Segment Equation Type	Limit Flag	Number of Coefficients	Coefficient (Float)	Coefficient (Float)	Coefficient (Float)	Coefficient (Float)	Coefficient (Float)	Coefficient (Float)	Coefficient (Float)
1 2 3 4	5	6 7 8 9	0 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							
X X X X	N	X X	0 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	X	0 1 2 3 4 5 6 7 8 9							
X X X X	N	X X	0 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	X	0 1 2 3 4 5 6 7 8 9							
X X X X	N	X X	0 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	X	0 1 2 3 4 5 6 7 8 9							
X X X X	N	X X	0 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	X	0 1 2 3 4 5 6 7 8 9							

APPENDIX B
INSTALLATION AND CHECKOUT PROCEDURES
FOR THE SOUP5 SYSTEM

This appendix describes the IBM job control language which can be used to run the SOUP5 system from a magnetic tape. ^{AS DESCRIBED.} Of course, many possible runtime sequences are possible.

The SOUP5 System is delivered in the form of a magnetic tape containing source code and data files and a card deck to run the system from the tape. The card deck is written in IBM 360/370 OS/MVS job control language (JCL) and must be rewritten in the language of the operating system of the computer on which it is to be installed. A listing of the card deck is attached as Table B-1. It performs the following steps:

1. Reads and copies the program source data card-image data files from tape to temporary disk files:
 - a. P1
 - b. P2
 - c. P3
 - d. DATA.P1
 - e. DATA.SCENARIO
 - f. DATA.PARAMS
2. Compiles and loads each of the three programs, generating temporary load modules for each program, as well as compiler source listings and maps and a loader cross-reference map.

3. Runs in sequence P1, P2, and P3, using the three temporary data files generated in step 1 and the DATA.CONTROL provided on cards in the JCL decks, for the TEST0008 scenario in DATA.SCENARIO.

The printed outputs this run are sent directly to the system printer, using 133 characters per line output with column 1 of each line controlling printer output spacing and page breaks, in accordance with the standard FORTRAN conventions.

Appendix C contains a copy of the output as run on an IBM-370 system, using the same tape as delivered.

The results of a run on any computer system should be almost identical to those in Appendix C. The possible exceptions are listed below:

1. The format and contents of the programs' compiler/loader source listings, maps, and cross references. No warning or fatal errors may occur.
2. The least significant digits in the outputs of P2 and P3 may vary due to machine precision differences. These must be resolved through numerical analysis.

The user may change input/output unit numbers (from the ones documented in Figure 1) by changing the first card of DATA.P1, DATA.P2, DATA.P3 for Program 1, 2 and 3 respectively. These files are documented in Chapter 3.

APPENDIX C
RESULTS OF JOB USING EXAMPLE JCL

~~The following pages contain~~ copies of a run using the delivered tape
and IBM OS/MVS Job Control Language card deck. ~~ALL~~ ~~ALSO~~ GIVEN

It includes source program compilation listings, load maps, and the
results of the TEST0008 scenario run by the deck:

Source program listings and load maps are not included in the User's Manual. They may be found in the Programmer's Manual.

SCENARIO/PLAN INPUT OVERRIDES FROM CONTROL

***** RARC PARAMETER OVERRIDES *****
 RAIN *** PROTECTION RATIO DATA ***
 POINTING TOL ROTATRL TOL DELTA ATTENUA **TEMPLATE** **CO-CHANNEL**
 SCENARIO CARD RARC E-ANT S-ANT E-ANT S-ANT G PCT WST KEYS (DB)
 KEY TYPE KEY (DEG) (DEG) (DB) MONTH DOWN FLT TOTL DOWN FLT TOTL

TEST0000 1 31.0

CHNLZTION **POINT DATA** BEAM DATA ***** ANTENNA DATA ***** RAIN ATTENU
 SCHEME ROMT SELECTION LONG. FILE ANT KEYS POLAR ASMPT/ ANT KEYS POLAR AIMPT/ CALC MRGN
 DOWN UP OPTN ESR FLT TOLER OPTN SAT ESR TYPE SUBSAT FLT SAT FLAG FLAG FLAG DB
 TEST0000 0 CTS4 P EBPIT PFM 2. P 77DT 77DR L S FSS1 77UR L A R 4.0

(CARD 2 CONTINUED)

****TRANSMITTER POWER DEFAULTS****
 ****DOWNPATH**** **FEEDERLINK**
 EIRP/POWER MAX EIRP/POWER MAX
 FLAG VALUE ADJ FLAG VALUE ADJ
 E 60. P 32. 0

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*****OUTPUT DATA OPTIONS*****
MARGIN THRESHOLDS (DB) PHI
AGGREGATE DETAIL ZERO
DOWN UP DOWN UP DEG
260. 260.

DET DET P3 P2 INFR
AGG 1 2 BIN GAIN MTRX

(CARD 3 CONTINUED)
MAX SINGLE INHIBIT
PHI/ VICTIM SAME-SERV INTERFER
NOM
HORIZON FRQ GROUP
KM OPT FLAG
NO. OF NO. OF CARDS
DESCR SERV. PRESENT
AREAS DOWN UP

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SCENARIO/PLAN INPUT DATA

***** RARC PARAMETER OVERRIDES *****
 RAIN RAIN PROTECTION RATIO DATA ***
 TEMPLATE **CO-CHANNEL**
 SCENARIO CARD RARC E-ANT S-ANT DELTA ATTENUA
 KEY TYPE (DEG) (DEG) (DB) MONTH PCT WST KEYS (DB)
 DOWN FLT TOTL DOWN FLT TOTL
 TEST0008 1 .000 0.00 0.00 0.00 0.00 0.00 0.0 0.0 0.0 31.0

CHNLZTION **POINT DATA** BEAM DATA ***** ANTENNA DATA ***** RAIN ATTENU
 SCHEME RQMT SELECTION LONG. FILE ANT KEYS POLAR ASMPT/ ***** FEEDERLINK***** MAX
 DOWN UP OPTN ESR FLT TOLER OPTN SAT ESR TYPE SUBSAT FLT SAT FLAG FLAG CALC MRCN
 TEST0008 2 CTS4 P EBPIT PFM 2.00 P 77DT 77DR L S FSS1 77UR L A R 4.0

(CARD 2 CONTINUED)
 ***** TRANSMITTER POWER DEFAULTS *****
 ***** DOWNPATH ***** FEEDERLINK *****
 EIRP/POWER MAX EIRP/POWER MAX
 FLAG VALUE ADJ FLAG VALUE ADJ
 E 60.00 0.0 P 32.00 0.0

***** OUTPUT DATA OPTIONS *****
 MARGIN THRESHOLDS (DB) PHI
 AGG 1 2 BIN GAIN MTRX. DET DET P3 P2 INFR AGGREGATE DETAIL ZERO
 Y Y Y Y N 100.0 100.0 260.0 260.0 2.0
 TEST0008 3

(CARD 3 CONTINUED)
 MAX SINGLE INHIBIT NOM NO. OF NO. OF CARDS
 PHI/ VICTIM SAME-SERV HORIZON FRQ GROUP DESC SERV. PRESENT
 PHI0 CHANNEL INTERFER KM OPT FLAG CARDS AREAS DOWN UP
 0.0 0 0 Y 200.000 M N 8 6 Y Y

***** ABOVE VALUES REFLECT SCENARIO VALUES AFTER BEING OVERRIDDEN BY
 VALUES FROM CONTROL FILE

SCENARIO DESCRIPTION CARDS

CARD DESCRIPTION
 TEST0008 4 1 *THIS SET HAS FOLLOWING CHARACTERISTICS NO BLOCKING, RAIN ATTN,
 TEST0008 4 2 * ALL POINTS SELECTED, 1 CHANNELIZATION, PROT RATIO
 TEST0008 4 3 *CALCULATED PROTECTING CHANNELS, CAN WITH 2/1 AND 1/1
 TEST0008 4 4 *CALCULATED PROTECTING CHANNELS, CAN WITH 2/1 AND 1/1

TESTCARD 4 7 * --- SAME AS TESTCARD5 EXCEPT NO BLOCKING --- *
 TESTCARD 4 8 * ---- TEST FOR OVER THE HORIZON CARRIER ---- *

RARC PARAMETER INPUT DATA

TEST3 PARAMETERS

GRNT MIN MAX MIN *****TOLERANCES***** DELTA-G
 RARC CARD OFCL S-ANT S-ANT FL POINTING ROTATIONAL TO
 KEY TYPE FLAG BMDTH AXRATIO ANT E-ANT S-ANT E-ANT S-ANT COEF
 TES4 1 Y 0.00 9.99 2.00 0.00 0.00 0.00 0.00 3.78

CHANNELIZATION PARAMETERS

***** UPPATH ***** *****DOWNPATH*****
 FREQUENCY GUARDBAND FREQURNCY GUARDBAND BAND
 LOWER UPPER LOWER UPPER LOWER UPPER LOWER UPPER WIDTH
 (GHZ) (GHZ) (MHZ) (MHZ) (GHZ) (MHZ) (MHZ) COEF
 TES4 2 17.300 17.800 10.00 10.00 12.200 12.700 10.00 10.00 1.80

RAIN ATTENUATION **PROTECTION DATA**

MAX PERCENT DOWN FLT TOTAL *****CO-CHANNEL*****
 RAIN WORST RATIO RATIO RATIO KEY KEY PR PR PR PR
 MRGN MONTH MONTH MONTH MONTH MONTH MONTH ZERO ZERO ZERO ZERO
 TES4 3 4.0 0.1000 T4DW T4DW T4DW T4DW 28.0 28.0 28.0 28.0 0.00 0.00 0.00 0.00

OFFICIAL PARAMETERS

NNNNNNNNNNNNNNNNNN

SCENARIO SERVICE AREA NO. 1

SCEN#PID CD SERVICE SB BLOCK
KEY TP AREA KEY CD CODE

TEST0000 5 AH0-RZ-TST 1 CANN

***** DOWNPATH DATA *****
BEAM-PTSET KEY ***** BEAM DATA *****
OVERRIDE SAT PTNG ROT SAT CHN POLAR
U/D SERVICE AREA -100.00 0.10 1.00 0.00 01 90.0

TEST0000 5 AH0-RZ-TST 2

***** SCENARIO DOWNPATH OVERRIDES *****
***** TRANSMITTER** NO.
DELTA G CHNL RGMTS PTSEL BMLNG BFSEL ANT ANT POL EIRP/POWER MAX PNT
E-ANT S-ANT .000 0.00 0.00 0.00 0.00 01 90.0
PTTOL PTTOL DB KEY OPTION OPTION OPTION KEY KEY FLAG FLAG VALUE ADJ OVER
TEST0000 5 AH0-RZ-TST 3 F -102.60 0.0 0

TEST0000 5 AH0-RZ-TST 3

***** FEEDERLINK DATA *****
BEAM-PTSET KEY ***** BEAM DATA *****
OVERRIDE SAT PTNG ROT SAT CHN POLAR
U/D SERVICE AREA -100.00 0.10 1.00 0.00 01 90.0

TEST0000 5 AH0-RZ-TST 4

***** SCENARIO FEEDERLINK OVERRIDES *****
***** TRANSMITTER** NO.
DELTA G CHNL RGMTS PTSEL BMLNG BFSEL ANT ANT POL EIRP/POWER MAX PNT
E-ANT S-ANT .000 0.00 0.00 0.00 0.00 01 90.0
PTTOL PTTOL DB KEY OPTION OPTION OPTION KEY KEY FLAG FLAG VALUE ADJ OVER
TEST0000 5 AH0-RZ-TST 5 C 14.00 0.0 0

TEST0000 5 AH0-RZ-TST 5

SCENARIO SERVICE AREA NO. 2

SCENARIO CD SERVICE SB BLOCK
KEY TP AREA KEY CD CODE

TEST0008 5 CAN-PA-STD 1 CANW

***** DOWNPATH DATA *****
BEAM-PTSET KEY ***** BEAM DATA *****
OVERRIDE SAT PTNG ROT SAT CHN POLAR
U/D SERVICE AREA LONG ERR LAT FM ANGLE
-144.50 0.10 1.00 0.00 01 90.0

TEST0008 5 CAN-PA-STD 2

*****SCENARIO DOWNPATH OVERRIDES *****
DELTA SAT ESR ***** **TRANSMITTER** NO.
E-ANT S-ANT G CHNL RQMTS PTSEL BMLNG BFSEL ANT ANT POL EIRP/POWER MAX PNT
PTTOL PTTOL DB KEY OPTION OPTION OPTION KEY KEY FLAG FLAG VALUE ADJ OVER
.000 0.00 0.00 0.00 F -102.60 0.0 0

TEST0008 5 CAN-PA-STD 3

***** FEEDERLINK DATA *****
BEAM-PTSET KEY ***** BEAM DATA *****
OVERRIDE SAT PTNG ROT SAT CHN POLAR
U/D SERVICE AREA LONG ERR LAT FM ANGLE
-144.50 0.10 1.00 0.00 01 90.0

TEST0008 5 CAN-PA-STD 4

*****SCENARIO FEEDERLINK OVERRIDES *****
DELTA FLT SAT ***** **TRANSMITTER** NO.
E-ANT S-ANT G CHNL RQMTS PTSEL BMLNG BFSEL ANT ANT POL EIRP/POWER MAX PNT
PTTOL PTTOL DB KEY OPTION OPTION OPTION KEY KEY FLAG FLAG VALUE ADJ OVER
.000 0.00 0.00 0.00 C 14.00 0.0 .0

TEST0008 5 CAN-PA-STD 5

SCENARIO SERVICE AREA NO. 3

SCENARIO CD SERVICE SB BLOCK
KEY TP AREA KEY CD CODE

TEST0008 5 CAN-PE-STD 1 CANC

***** DOWNPATH DATA *****
BEAM-PTSET KEY ***** BEAM DATA *****
 OVERRIDE SAT PTNG ROT SAT CHN POLAR
U/D SERVICE AREA LONG ERR LAT FM ANGLE
-125.00 0.10 1.00 0.00 02 0.0

TEST0008 5 CAN-PE-STD 2

*****SCENARIO DOWNPATH OVERRIDES *****
DELTA SAT ESR *****
E-ANT S-ANT G CHNL RGMTS PTSEL BMLNG BFSEL ANT ANT POL EIRP/POWER MAX PNT
PTTOL PTTOL DB KEY OPTION OPTION OPTION KEY KEY FLAG FLAG VALUE ADJ OVER
.100 0.20 0.00 0.00 0.00 C 14.00 0.0 0

TEST0008 5 CAN-PE-STD 3

***** FEEDERLINK DATA *****
BEAM-PTSET KEY ***** BEAM DATA *****
 OVERRIDE SAT PTNG ROT SAT CHN POLAR
U/D SERVICE AREA LONG ERR LAT FM ANGLE
-125.00 0.10 1.00 0.00 01 0.0

TEST0008 5 CAN-PE-STD 4

*****SCENARIO FEEDERLINK OVERRIDES *****
DELTA FLI SAT *****
E-ANT S-ANT G CHNL RGMTS PTSEL BMLNG BFSEL ANT ANT POL EIRP/POWER MAX PNT
PTTOL PTTOL DB KEY OPTION OPTION OPTION KEY KEY FLAG FLAG VALUE ADJ OVER
.100 0.20 0.00 0.00 0.00 CPMB 77UC C 14.00 0.0 0

TEST0008 5 CAN-PE-STD 5

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SCENARIO SERVICE AREA NO. 4

SCENARIO CD SERVICE SB BLOCK
KEY TP AREA KEY CD CODE

TEST0008 5 CAN-ON-STD 1 CANG

```
***** DOWNPATH DATA *****
*BEAM-PTSET KEY* ***** BEAM DATA *****
  SAT PTNG ROT SAT CHN POLAR
  LONG ERR LAT' FM ANGLE
U/D SERVICE AREA -125.00 0.10 1.00 0.00 04 0.0
```

TEST0008 5 CAN-ON-STD 2

```
*****SCENARIO DOWNPATH OVERRIDES *****
DELTA SAT ESR **TRANSMITTER** NO.
E-ANT S-ANT G CHNL RQMTS PTSEL BMLNG BFSEL ANT ANT POL EIRP/POWER MAX PNT
PTTOL PTTOL DB KEY OPTION OPTION OPTION KEY KEY FLAG FLAG VALUE ADJ OVER
.000 0.00 0.00 0.00 0.00
```

TEST0008 5 CAN-ON-STD 3

C-11

```
***** FEEDERLINK DATA *****
*BEAM-PTSET KEY* ***** BEAM DATA *****
  SAT PTNG ROT SAT CHN POLAR
  LONG ERR LAT' FM ANGLE
U/D SERVICE AREA -125.00 0.10 1.00 0.00 01 0.0
```

TEST0008 5 CAN-ON-STD 4

```
*****SCENARIO FEEDERLINK OVERRIDES *****
DELTA FLT SAT **TRANSMITTER** NO.
E-ANT S-ANT G CHNL RQMTS PTSEL BMLNG BFSEL ANT ANT POL EIRP/POWER MAX PNT
PTTOL PTTOL DB KEY OPTION OPTION OPTION KEY KEY FLAG FLAG VALUE ADJ OVER
.000 0.00 0.00 0.00 0.00 01 0.00 0.00 TSUT 77UR C 14.00 0.0 0
```

TEST0008 5 CAN-ON-STD 5

SCENARIO SERVICE AREA NO. 5

SCENARIO CD: SERVICE SB BLOCK
KEY TP AREA KEY CD CODE

TEST0008 5 USA-CT-STC 1

```

***** DOWNPATH DATA *****
*BEAM-PTSET KEY* ***** BEAM DATA *****
  SAT PTNG ROT SAT CHN POLAR
  U/D SERVICE AREA  -135.00  0.10  1.00  0.00  03  0.0

```

TEST0008 5 USA-CT-STC 2

```

*****SCENARIO DOWNPATH OVERRIDES *****
DELTA          SAT ESR          **TRANSMITTER** NO.
E-ANT S-ANT   G  CHNL RQMTS  PTSEL BMLNG BFSEL ANT ANT  POL EIRP/POWER MAX PNT
PTTOL PTTOL  DB  KEY  OPTION OPTION OPTION KEY KEY  FLAG FLAG VALUE ADJ OVER
.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

```

TEST0008 5 USA-CT-STC 3

```

***** FEEDERLINK DATA *****
*BEAM-PTSET KEY* ***** BEAM DATA *****
  SAT PTNG ROT SAT CHN POLAR
  U/D SERVICE AREA  -135.00  0.10  1.00  0.00  01  0.0

```

TEST0008 5 USA-CT-STC 4

```

*****SCENARIO FEEDERLINK OVERRIDES *****
DELTA          FLI SAT          **TRANSMITTER** NO.
E-ANT S-ANT   G  CHNL RQMTS  PTSEL BMLNG BFSEL ANT ANT  POL EIRP/POWER MAX PNT
PTTOL PTTOL  DB  KEY  OPTION OPTION OPTION KEY KEY  FLAG FLAG VALUE ADJ OVER
.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

```

TEST0008 5 USA-CT-STC 5

SCENARIO SERVICE AREA NO. 6

SCENARIO CD SERVICE SB BLOCK
KEY TP AREA KEY CD CODE

TEST0008 5 ATN-TS-PNT 1

***** DOWNPATH DATA *****

BEAM-PTSET KEY ***** BEAM DATA *****
SAT PTNG ROT SAT CHN POLAR
U/D SERVICE AREA LONG ERR LAT FM ANGLE
U -70.00 0.10 1.00 0.00 03 0.0

TEST0008 5 ATN-TS-PNT 2

*****SCENARIO DOWNPATH OVERRIDES *****
DELTA SAT ESR **TRANSMITTER** NO.
E-ANT S-ANT G CHNL RGMTS PTSEL BMLNG BFSEL ANT ANT POL EIRP/POWER MAX PNT
PTTOL PTTOL DB KEY OPTION OPTION OPTION KEY KEY FLAG FLAG VALUE ADJ OVER
.000 0.00 0.00 0.00 0.00 0.00 P 1.00 0.0 0

TEST0008 5 ATN-TS-PNT 3

***** FEEDERLINK DATA *****
BEAM-PTSET KEY ***** BEAM DATA *****
SAT PTNG ROT SAT CHN POLAR
U/D SERVICE AREA LONG ERR LAT FM ANGLE
U -70.00 0.10 1.00 0.00 01 0.0

TEST0008 5 ATN-TS-PNT 4

***** SCENARIO FEEDERLINK OVERRIDES *****
DELTA FLI SAT **TRANSMITTER** NO.
E-ANT S-ANT G CHNL RGMTS PTSEL BMLNG BFSEL ANT ANT POL EIRP/POWER MAX PNT
PTTOL PTTOL DB KEY OPTION OPTION OPTION KEY KEY FLAG FLAG VALUE ADJ OVER
.000 0.00 0.00 0.00 0.00 0.00 P 2.00 0.0 0

TEST0008 5 ATN-TS-PNT 5

CHANNELIZATION INPUT DATA

CHZ KEY	CARD TYPE	UP/DOWN	LOWEST FREQ (GHZ)	NO. OF CHNLS	CHNL BNDWTH (MHZ)	CHNL SEP. (MHZ)	CH. NOISE BNDW (MHZ)	TOP B-B FRQ (MHZ)	P-P DEV (MHZ)	OFFL FLAG	NO. OF CHML FAMS
CTS1	1	U	17.400	40	10.00	10.00	22.00	2.00	8.00	N	1

CHNL FAM NUM	CARD NUM	NO. OF CHNLS IN FAM	CHANNELS
01	1	8	4 8 12 16 24 28 32 36

CHZ KEY	CARD TYPE	UP/DOWN	LOWEST FREQ (GHZ)	NO. OF CHNLS	CHNL BNDWTH (MHZ)	CHNL SEP. (MHZ)	CH. NOISE BNDW (MHZ)	TOP B-B FRQ (MHZ)	P-P DEV (MHZ)	OFFL FLAG	NO. OF CHML FAMS
CTS4	1	D	12.400	36	10.00	14.70	22.00	5.00	12.00	N	4

CHNL FAM NUM	CARD NUM	NO. OF CHNLS IN FAM	CHANNELS
01	1	5	1 3 5 7 9
02	1	5	2 4 6 8 10
03	1	1	2
04	1	1	15

PROTECTION RATIO TEMPLATE TABLE INPUT DATA

KEY NUM	CRD NUM	NO. OF SEG	*****			SEGMENT			PARAMETERS			*****		
			UPPER LIMIT	VALUE (DB)	SLOPE (DB)	UPPER LIMIT	VALUE (DB)	OFFSET	UPPER LIMIT	VALUE (DB)	SLOPE (DB)	UPPER LIMIT	VALUE (DB)	OFFSET
T4DW 1		5	-0.920	-23.000	71.000	-0.920	0.000	-0.274	0.000	35.600	-0.274	0.000	-0.274	
T4DW 2			0.274	0.000	0.000	0.000	0.000	0.920	0.000	-35.600	0.274	0.000	0.274	
T4DW 3			0.000	-23.000	-71.000	0.920	0.000	0.920	0.920					

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POINT SET AND POINT INPUT DATA

PNT CRD KEY TYP	SERVICE AREA	DN	UP/ OFFL	RN	NO. OF ZN	PNTS	COMMENT
AHRZ 1	AHO-RZ-TST	D	N	B	2		TEST FOR OVER HORIZON CARRIER
PNT CRD KEY TYP	SERVICE AREA	DN	UP/ OFFL	RN <td>NO. OF ZN</td> <td>PNTS</td> <td>COMMENT</td>	NO. OF ZN	PNTS	COMMENT
AHRZ 1	AHO-RZ-TST	D	N	B	2		TEST FOR OVER HORIZON CARRIER
PNT CRD KEY TYP	SERVICE AREA	DN	UP/ OFFL	RN <td>NO. OF ZN</td> <td>PNTS</td> <td>COMMENT</td>	NO. OF ZN	PNTS	COMMENT
AHRZ 1	AHO-RZ-TST	D	N	B	2		TEST FOR OVER HORIZON CARRIER
AHRZ 2		1	P	40.00	60.00	0. B	2 P 40.00 70.00 0. B
PNT CRD KEY TYP	SERVICE AREA	DN	UP/ OFFL	RN <td>NO. OF ZN</td> <td>PNTS</td> <td>COMMENT</td>	NO. OF ZN	PNTS	COMMENT
CA4D 1	CAN-ON-STD	D	N	B	3		CANADA ONTARIO AREA. CANADIAN TEST DATA
PNT CRD KEY TYP	SERVICE AREA	DN	UP/ OFFL	RN <td>NO. OF ZN</td> <td>PNTS</td> <td>COMMENT</td>	NO. OF ZN	PNTS	COMMENT
CA4D 1	CAN-ON-STD	D	N	B	3		CANADA ONTARIO AREA. CANADIAN TEST DATA
CA4D 2		1	P	70.00	-95.00	0. B	2 P 70.00 -80.00 0. B 3 P 60.00 80.00 0. B
PNT CRD KEY TYP	SERVICE AREA	DN	UP/ OFFL	RN <td>NO. OF ZN</td> <td>PNTS</td> <td>COMMENT</td>	NO. OF ZN	PNTS	COMMENT
CA4D 1	CAN-PA-STD	D	N	B	8		CANADA PACIFIC AREA. CANADIAN TEST DATA
PNT CRD KEY TYP	SERVICE AREA	DN	UP/ OFFL	RN <td>NO. OF ZN</td> <td>PNTS</td> <td>COMMENT</td>	NO. OF ZN	PNTS	COMMENT
CA4D 1	CAN-PA-STD	D	N	B	8		CANADA PACIFIC AREA. CANADIAN TEST DATA
CA4D 2		1	P	70.00	-141.00	0. B	2 P 70.00 -120.00 0. B
CA4D 3		4	P	49.00	-114.00	0. B	5 I 70.00 -130.00 2085 C
CA4D 3		7	E	81.00	-145.00	0. B	8 I 70.00 -130.00 0. B
PNT CRD KEY TYP	SERVICE AREA	DN	UP/ OFFL	RN <td>NO. OF ZN</td> <td>PNTS</td> <td>COMMENT</td>	NO. OF ZN	PNTS	COMMENT
CA4D 1	CAN-PA-STD	D	N	B	8		CANADA PACIFIC AREA. CANADIAN TEST DATA
PNT CRD KEY TYP	SERVICE AREA	DN	UP/ OFFL	RN <td>NO. OF ZN</td> <td>PNTS</td> <td>COMMENT</td>	NO. OF ZN	PNTS	COMMENT
CA4D 1	CAN-PA-STD	D	N	B	8		CANADA PACIFIC AREA. CANADIAN TEST DATA
CA4D 2		1	P	70.00	-141.00	0. B	2 P 70.00 -120.00 0. B
CA4D 3		4	P	49.00	-114.00	0. B	5 I 70.00 -130.00 2085 C
CA4D 3		7	E	81.00	-145.00	0. B	8 I 70.00 -130.00 0. B
PNT CRD KEY TYP	SERVICE AREA	DN	UP/ OFFL	RN <td>NO. OF ZN</td> <td>PNTS</td> <td>COMMENT</td>	NO. OF ZN	PNTS	COMMENT
CA4D 1	CAN-PA-STD	D	N	B	8		CANADA PACIFIC AREA. CANADIAN TEST DATA
PNT CRD KEY TYP	SERVICE AREA	DN	UP/ OFFL	RN <td>NO. OF ZN</td> <td>PNTS</td> <td>COMMENT</td>	NO. OF ZN	PNTS	COMMENT
CA4D 1	CAN-PA-STD	D	N	B	8		CANADA PACIFIC AREA. CANADIAN TEST DATA
CA4D 2		1	P	70.00	-141.00	0. B	2 P 70.00 -120.00 0. B
CA4D 3		4	P	49.00	-114.00	0. B	5 I 70.00 -130.00 2085 C
CA4D 3		7	E	81.00	-145.00	0. B	8 I 70.00 -130.00 0. B

PNT CRD KEY TYP	PNT PNT NUM TYP	LOCATION		ELEV. RN METERS ZN	UP/ DN	OFFL SET	RN NO. OF ZN PNTS	COMMENT	PNT PNT NUM TYP	LOCATION		ELEV. RN METERS ZN	PNT PNT NUM TYP	LOCATION		ELEV. RN METERS ZN
		LAT.	LONG.							LAT.	LONG.			LAT.	LONG.	
CA3D 2	1 P	56.90	-89.00	0. B					2 P	52.80	-95.20	0. B	3 P	49.80	-95.20	0. B
CA3D 2	4 P	70.00	-106.00	0. D					5 P	49.80	-95.20	0. A	6 I	52.00	-100.01	10. B
UPD 1 USA-CT-STC D N A 2																
UCPD 2	1 B	41.80	-87.70	0. A					2 B	48.00	-89.50	0. B				
UPD 2																
UPD 3																
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UPD 100																

UCPU	1	USA-CT-STC	U	N	B	1	PNT PNT NUM TYP	LOCATION LAT.	LONG.	ELEV. RN METERS ZN	PNT PNT NUM TYP	LOCATION LAT.	LONG.	ELEV. RN METERS ZN
UCPU	2		1	F	41.80	-87.70	0.	B						

BEAM INPUT DATA

```

***** BEAM ID *****
*** BEAM KEY *** SAT PTNG ERR
U/D SERVICE AREA LONG. ROT ERR
D AHJ-RZ -TST -100.00 0.10 1.00
D CAN-ON -STD -125.00 0.10 1.00
D CAN-PA -STD -145.00 0.10 1.00
D CAN-PE -STD -125.00 0.10 1.00
D USA-CT -STC -135.00 0.10 1.00
U ATN-TS -PNT -70.00 0.10 1.00
U CAN-PA -STD -145.00 0.10 1.00
U CAN-PE -STD -125.00 0.10 1.00
U USA-CT -STC -135.00 0.10 1.00

ORIENT/REFERENCE ANG.
ORIENT/
FLAG REF. LAT REF. LNG REF. LNG
MAJOR MINOR OFFL
AXIS AXIS FLAG
C 0.00 0.00 0.00 0.60 0.60 N
0 147.98 0.00 3.88 0.77 N
0 155.81 0.00 3.04 0.95 N
0 149.71 0.00 2.26 1.08 N
R 26.70 -89.00 4.08 1.74 N
C 0.00 0.00 0.60 0.60 N
C 0.00 0.00 0.60 0.60
C 0.00 0.00 0.60 0.60
R 26.70 -89.00 2.91 1.24 N

```

ANTENNA INPUT DATA

ANT KEY	EARTH/ SPACE	XMIT/ RCV	E-ANT DIAM/ CVRAGE ANG FLAG VALUE	EAP	FIG OF MERIT/ RCVR NOISE T FLAG VALUE	GAIN TABLKEY CO X	OFFL FLAG
77DR	E	R	D 0.75	0.55	N 1200.00	13 24	N
77DT	S	T	0.00	0.55	0.00	12 22	N
77UC	S	R	0.00	0.55	M 15.74	12 22	N
77UR	S	R	0.00	0.55	N 1500.00	12 22	N
CPMB	E	T	D 4.00	0.55	0.00	41AA 42AA	N
FSS1	E	T	D 4.50	0.55	0.00	31 23	N
TSUT	E	T	D 7.00	0.55	0.00	31 23	N

CPM 42 FEEDERLINK

GAIN TABLE INPUT DATA

TBL CRD PAT OPT NO. OF
KEY TYP TYP FLG CARDS DESCRIPTION
12 1 1 0 5 77WARC SATELLITE TRANSMIT COPOLAR

SEG SUB SEG SEQ	LIMIT	EGU TYP	LIMFL	NUM COEFS	COEFF	COEFF	COEFF	COEFF	COEFF
12 2 A A	1.58000	2 Z	3	12.000	0.00000	2.0000			
12 2 B A	3.16000	1 Z	1	30.000					
12 2 C A	998.000	3 Z	4	17.500	25.000	1.0000	0.00000		
12 2 D A	999.000	4 Z	2	0.00000	0.00000				

TBL CRD PAT OPT NO. OF
KEY TYP TYP FLG CARDS DESCRIPTION
13 1 1 0 6 77 WARC EARTH STATION RECEIVE COPOLAR REGION 2

SEG SUB SEG SEQ	LIMIT	EGU TYP	LIMFL	NUM COEFS	COEFF	COEFF	COEFF	COEFF	COEFF
13 2 A A	0.250000	1 Z	1	0.00000					
13 2 B A	0.707000	2 Z	3	12.000	0.00000	2.0000			
13 2 C A	1.26000	3 Z	4	9.0000	20.000	1.0000	0.00000		
13 2 D A	15.1400	3 Z	4	8.5000	25.000	1.0000	0.00000		
13 2 E A	999.000	1 Z	1	38.000					

TBL CRD PAT OPT NO. OF
KEY TYP TYP FLG CARDS DESCRIPTION
22 1 1 0 5 77 WARC SATELLITE TRANSMIT CROSSPOLAR

SEG SUB SEG SEQ	LIMIT	EGU TYP	LIMFL	NUM COEFS	COEFF	COEFF	COEFF	COEFF	COEFF
22 2 A A	0.330000	3 Z	4	40.000	40.000	-1.0000	1.0000		
22 2 B A	1.67000	1 Z	1	33.000					

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TBL CRD PAT OPT NO. OF
KEY TYP TYP FLG CARDS DESCRIPTION

23	1	1	0	4	UPLINK TRANSMIT CROSSPOLAR ORI	SEQ SUB SEQ SEQ	LIMIT	EQU TYP	LIMFL	COEFFS	NUM	COEFF	COEFF	COEFF	COEFF
23	2	A	A	4.10000	1	Z	1	25.000							
23	2	B	A	174.400	3	Z	4	9.7000				1.0000	0.00000		
23	2	C	A	999.000	4	Z	2	10.000				0.00000			

TBL CRD PAT OPT NO. OF
KEY TYP TYP FLG CARDS DESCRIPTION

24	1	1	0	8	77 WARC EARTH STATION RECEIVE CROSSPOLAR REGION 2	SEQ SUB SEQ SEQ	LIMIT	EQU TYP	LIMFL	COEFFS	NUM	COEFF	COEFF	COEFF	COEFF
24	2	A	A	0.250000	1	Z	1	25.000							
24	2	B	A	0.440000	3	Z	4	30.000				40.000	-1.0000	1.0000	
24	2	C	A	1.40000	1	Z	1	20.000							
24	2	D	A	2.00000	3	Z	4	30.000				25.000	1.0000	1.0000	
24	2	E	A	7.24000	1	Z	1	30.000							
24	2	F	A	15.1400	3	Z	4	8.5000				25.000	1.0000	0.00000	
24	2	G	A	999.000	1	Z	1	38.000							

TBL CRD PAT OPT NO. OF
KEY TYP TYP FLG CARDS DESCRIPTION

31	1	2	0	5	FSS GCIR 1976 PATTERN MAIN LOBE GAUSSIAN COPULAR	SEQ SUB SEQ SEQ	LIMIT	EQU TYP	LIMFL	COEFFS	NUM	COEFF	COEFF	COEFF	COEFF
31	2	A	A	0.354000	2	F	3	12.000				0.00000	2.0000		
31	2	B	A	0.711000	1	P	1	20.000							
31	2	C	A	47.9200	4	F	2	-32.000				25.000			
31	2	D	A	999.000	4	F	2	10.000				0.00000			

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41AA 1 4 0 3 CPM-82 UPLINK TRANSIT CO-POLARIZED

CRD	NO. OF	PARAMS	PARAM	PARAM	PARAM	PARAM	PARAM	PARAM	PARAM
41AA 2	1	13	0.5000	-12.00	0.0000	0.6350	36.00	-20.00	36.30
41AA 3	2		45.00	-20.00	-12.60	29.00	-25.00	-10.00	

TBL CRD PAI DPT NO. OF
KEY TYP TYP FLG CARDS DESCRIPTION

42AA 1 4 0 3 CPM-82 UPLINK TRANSIT CROSS-POLARIZED

CRD	NO. OF	PARAMS	PARAM	PARAM	PARAM	PARAM	PARAM	PARAM	PARAM
42AA 2	1	13	0.4930	0.0000	-30.00	0.0000	0.0000	0.0000	8.910
42AA 3	2		-999.0	0.0000	0.0000	9.000	-20.00	-10.00	

TOTAL NUMBER OF ERRORS = 0

ERRORS BY ERROR LEVEL

LEVEL = 20	COUNT = 0
LEVEL = 21	COUNT = 0
LEVEL = 22	COUNT = 0
LEVEL = 0	COUNT = 0
LEVEL = 0	COUNT = 0
LEVEL = 0	COUNT = 0
LEVEL = 0	COUNT = 0
LEVEL = 97	COUNT = 0
LEVEL = 98	COUNT = 0
LEVEL = 99	COUNT = 0

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VERSION 3 MOD 8DEV FEB 84, 160 S/A

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CONTROL DATA

SCENARIO LEVEL DATA

AIMPOINT/ SUBSEAT UP DOWN	RAIN CALC	OUTPUT OPTIONS	MARGIN THRESHOLDS (DB) AGGREGATE DOWN UP	DETAIL DOWN UP	PHI ZERO DEG	NDM FRQ OPT	BLOCK FLAG	NO. OF DESCR LINES	NO. OF SERV. AREAS	HORIZON	MAX RAIN MARGIN UP
1	2	111100	100 0 100.0 260.0	260.0	2.0	2	0	8	6	200.00	4.00

INHIBIT SINGLE
SAME-SERV VICTIM MAXIMUM
INTERFER CHANNEL PHI/PHIO
1 0 0.00

SCENARIO DESCRIPTION CARDS

*THIS SET HAS FOLLOWING CHARACTERISTICS. NO BLOCKING, RAIN ATTN, *
 * ALL POINTS SELECTED, 1 CHANNELIZATION, PROT RATIO *
 *CALCULATED, POINTING ERRORS, C/N WITH G/T AND TEMP, BEAM CALL *
 *BY ID, NCM FREQ=1, SOME CARRIERS OVER HORIZON *
 *DB, RAIN MARGIN, CANONSTD HAS C/N WITH MANY FEEDERLINKS. *
 *USES FAST ROLL-OFF SATELLITE ANTENNA AND CPM FEEDERLINK ANTENNA. *
 * --- SAME AS TEST0005 EXCEPT NO BLOCKING --- *
 * ---- TEST FOR OVER THE HORIZON CARRIER ---- *

CONTROL DATA

RARC PARAMETERS

KEY	PCI-MST MONTH	MAX RAIN MARGIN	FEEDERLINK		GUARDBAND(MHZ)		FREQUENCY (GHZ)		DOWNPATH	
			FREQUENCY (GHZ) LOWER	FREQUENCY (GHZ) UPPER	LOWER	UPPER	LOWER	UPPER	LOWER	UPPER
TES4	0.1	4.0	17.300	17.800	10.00	10.00	12.200	12.700	10.00	10.00
*****PROTECTION RATIO***** *****INDICES***** *****CO-CHANNEL ***** UP DOWN TOTAL UP DOWN TOTAL 28.00 28.00 31.00 1 1 1 1.800 0.000 0.00 2.00 T4DW T4DW T4DW										

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CONTROL DATA

SERVICE AREA TABLE

NFRVAT 6

INDEX	ADMIN	AREA	ARTYPE	IBLKCD
1	AHO	RZ	TST	CANW
2	CAN	PA	STD	CANW
3	CAN	PE	STD	CANC
4	CAN	ON	STD	CANC
5	USA	CT	STC	
6	ATN	TS	PNT	

CONTROL DATA

BEAM TABLE

NUMBER OF BEAMS= 9

INDEX	KEY	AXSMJ	AXSHN	AIMLT	AIMLN	IOARFL	ORAN1	ORAN2
1	DAMPZIST	0.60	0.60	40.00	-70.00	0	0.00	0.00
2	UCAMPASTD	3.04	0.95	57.13	-126.32	1	155.91	0.00
3	UCAMPASTD	0.60	0.60	51.00	-126.00	0	0.00	0.00
4	DCAMPASTD	2.26	1.08	56.79	-101.61	1	149.71	0.00
5	UCAMPASTD	0.60	0.60	54.00	-92.00	0	0.00	0.00
6	DCAMPINSTD	3.88	0.77	52.06	-88.60	1	147.98	0.00
7	DUFACTSTC	4.08	1.74	36.40	-98.10	2	26.70	-89.00
8	DUFACTSTC	2.91	1.24	36.40	-98.10	2	26.70	-89.00
9	UATHTSPNT	0.60	0.60	0.00	0.00	0	0.00	0.00

CONTROL DATA

ANTENNA TABLE

NUMBER OF ANTENNAS= 7

INDEX	KEY	IDCFL	DIACV	IFNFL	TEMTG	EAP	ICGN	IXGN
1	77DR	1	0.75	2	1200.00	0.55	1	2
2	77DT	0	0.00	0	0.00	0.55	3	4
3	TSUT	1	7.00	0	0.00	0.55	7	8
4	77UR	0	0.00	2	1500.00	0.55	3	4
5	CPMB	1	4.00	0	0.00	0.55	5	6
6	77UC	0	0.00	1	15.74	0.55	3	4
7	FSS1	1	4.50	0	0.00	0.55	7	8

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CONTROL DATA

GAIN AND GAIN ENTRY TABLES

NOI= 8 LGET= 180

*****GAIN ENTRY TABLE*****										
I	KGAIN	NSPAT	IGENT	IGCAL	INOSG	PARAM/ IEGTY	PARAM/ LIMIT*	PARAM/ NCOEFF	PARAM/ COEFF	PARAM/ COEFF
*****GAIN TABLE*****										
1	13	1	24	0	5	77	WARC EARTH STATION RECEIVE COPOLAR REGION 2			
					1	1	-0.250000	1	0.000000	2.00000
					2	2	-0.707000	3	12.0000	0.000000
					3	3	-1.26000	4	9.00000	20.0000
					4	3	-15.1400	4	8.50000	25.0000
					5	1	-999.000	1	38.0000	0.000000
2	24	1	94	0	7	77	WARC EARTH STATION RECEIVE CROSSPOLAR REGION 2			
					1	1	-0.250000	1	25.0000	-1.00000
					2	3	-0.440000	4	30.0000	40.0000
					3	1	-1.40000	1	20.0000	1.00000
					4	3	-2.00000	4	30.0000	25.0000
					5	1	-7.24000	1	30.0000	1.00000
					6	3	-15.1400	4	8.50000	25.0000
					7	1	-999.000	1	38.0000	0.000000
3	12	1	1	0	4	77	WARC SATELLITE TRANSMIT COPOLAR			
					1	2	-1.58000	3	12.0000	0.000000
					2	1	-3.16000	1	30.0000	2.00000
					3	3	-998.000	4	17.5000	25.0000
					4	4	-999.000	2	0.000000	0.000000
4	22	1	53	0	4	77	WARC SATELLITE TRANSMIT CROSSPOLAR			
					1	3	-0.330000	4	40.0000	-1.00000
					2	1	-1.67000	1	38.0000	40.0000
					3	3	-998.000	4	40.0000	40.0000
					4	4	-999.000	2	0.000000	0.000000
5	41	4	153	0	10		CPM-82 UPLINK TRANSIT CO-POLARIZED			
					1	1	-12.0000	0.000000	0.000000	36.0000
					2	2	45.0000	-20.0000	-15.0000	-25.0000

6	42	4	167	0	13	CPM-B2	UPLINK TRANSMIT CROSS-POLARIZED			
	0.493000		0.000000		-30.0000	0.000000	0.000000			0.000000
	8.91000		-929.000		0.000000	0.000000	9.00000			-20.0000
	-10.0000									

7	31	2	132	0	4	FSS CCIR 1978 PATTERN MAIN LOBE GAUSSIAN COPOLAR			
	1	2	0.354000		3	12.0000	0.000000		2.00000
	2	1	0.711000		1	20.0000			
	3	4	47.9000		2	-32.0000	25.0000		
	4	4	999.000		2	10.0000	0.000000		

8	23	1	77	0	3	UPLINK TRANSMIT CROSSPOLAR ORI			
	1	3	-4.10000		1	25.0000			1.00000
	2	3	-174.400		4	9.70000	25.0000		
	3	4	-999.000		2	10.0000	0.000000		

* SEGMENT LIMIT IS ABSOLUTE VALUE OF NUMBER,
 * IF NEGATIVE THE LIMIT IS ON PHI/PHI ZERO.
 * IF POSITIVE THE LIMIT IS ON PHI

UP AND DOWN TABLE SIZES

PT SETS		POINTS		CHZINTS		CH FANS		CHANNLS	
UP	DN	UP	DN	UP	DN	UP	DN	UP	DN
6	6	18	22	1	1	1	4	8	12

FEEDERLINK DATA

PATH TABLE

```

*****IN BINARY FILE*****
IDX  SM  CHP  P  SAT  PWR  ADJ  S  A  E  A  PL  PTL  FI  ANG  G  SATLONG  LAT  SAT
1  1  4  1  4-102.6  0.0  0.0  0.00  .000  2  90.0  3.78  -100.00  0.00  1
2  3  4  1  4-102.6  0.0  0.00  .000  2  90.0  3.78  -144.50  0.00  1
3  5  6  1  2  14.0  0.0  0.20  .100  2  0.0  3.78  -125.00  0.00  1
4  6  4  1  3  124.0  0.0  0.00  .000  2  0.0  3.78  -125.00  0.00  1
5  8  4  1  3  251.0  0.0  0.00  .000  2  0.0  3.78  -135.00  0.00  1
6  9  4  1  3  1.0  0.0  0.00  .000  2  0.0  3.78  -70.00  0.00  1

*****BEAM KEY*****
F  T  U/D  SERVICE AREA  PNT  ERR  ROT  SNT  KEY  CHZ  CH
1  2  0  D  AHD-RZ-TST  0.100  1.000  77UR  CTS1  01
2  0  0  U  CAN-PA-STD  0.100  1.000  77UR  CTS1  01
3  0  0  U  CAN-PE-STD  0.100  1.000  77UC  CTS1  01
4  0  0  D  CAN-ON-STD  0.100  1.000  77UR  CTS1  01
5  2  0  U  USA-CT-STC  0.100  1.000  77UR  CTS1  01
6  2  0  U  ATN-TS-PNT  0.100  1.000  77UR  CTS1  01

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FEEDERLINK DATA

CHANNELIZATION TABLE

INDEX	KEY	FRGL	NCHNZ	CHBW	CHSEP	CHNSBW	TBBFRQ	PPDEV
1	CTS1	17.400	40	10.00	10.00	22.00	2.00	8.00

CHANNEL FAMILY AND CHANNEL TABLES

INDEX	KEY	I1CHN	I9CHN	ICHNZ	CHANNELS (24 PER LINE)
1	CTS101	1	8	1	4 8 12 16 24 28 32 36

FEEDERLINK DATA

POINT SET AND POINT TABLE

ISERVA= 1 IENDP= 2

INDEX	PTLAT	PTLNG	PTELE	IRNZN	IEANT	IEPFL	EPWR
1	40.00	60.00	0.	2	3	2	14.0
2	40.00	70.00	0.	2	3	2	14.0

ISERVA= 2 IENDP= 5

INDEX	PTLAT	PTLNG	PTELE	IRNZN	IEANT	IEPFL	EPWR
3	50.00	-130.00	0.	3	3	2	14.0
4	51.00	-126.00	0.	3	3	2	14.0
5	49.00	-120.00	0.	3	3	2	14.0

ISERVA= 3 IENDP= 7

INDEX	PTLAT	PTLNG	PTELE	IRNZN	IEANT	IEPFL	EPWR
6	56.90	-89.00	0.	3	5	2	14.0
7	52.80	-99.20	0.	3	5	2	14.0

ISERVA= 4 IENDP= 10

INDEX	PTLAT	PTLNG	PTELE	IRNZN	IEANT	IEPFL	EPWR
8	70.00	-95.00	0.	2	3	2	14.0
9	70.00	-80.00	0.	2	3	2	14.0
10	60.00	90.00	0.	2	3	2	14.0

ISERVA= 5 IENDP= 11

INDEX	PTLAT	PTLNG	PTELE	IRNZN	IEANT	IEPFL	EPWR
11	41.80	-87.70	0.	2	7	3	30.0

ISERVA= 6 IENDP= 12

INDEX	PTLAT	PTLNG	PTELE	IRNZN	IEANT	IEPFL	EPWR
12	50.00	0.	0.	1	1	1	2.0

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DOWNPATH DATA

PATH TABLE

I	2M	ANT	CHP	P	SAT	PWR	S	A	E	A	FL	PTL	FI	ANG	G	SATLONG	LAT	SAT	*****BEAM KEY*****	F	T	U/D	SERVICE	AREA	ERR	PNT	RUT	SANT	KEY	CHZ	CH	
1	1	2	1	4-102.6	0.0	0.00	0.00	0.00	2	90.0	3.78	-100.00	0.00	1	2	0	D	AHD-RZ-TST	0.100	1.000	77DT	CTS4	01									
2	2	2	1	4-102.6	0.0	0.00	0.00	2	90.0	3.78	-144.50	0.00	1	2	0	D	CAN-PA-STD	0.100	1.000	77DT	CTS4	01										
3	4	2	2	14.0	0.0	0.20	100	2	0.0	3.78	-125.00	0.00	1	2	0	D	CAN-PE-STD	0.100	1.000	77DT	CTS4	02										
4	6	2	3	3	124.0	0.0	0.00	0.00	2	0.0	3.78	-125.00	0.00	1	2	0	D	CAN-QN-STD	0.100	1.000	77DT	CTS4	04									
5	7	2	4	3	251.0	0.0	0.00	0.00	2	0.0	3.78	-135.00	0.00	1	2	0	D	USA-CT-STC	0.100	1.000	77DT	CTS4	03									
6	9	2	4	3	1.0	0.0	0.00	0.00	2	0.0	3.78	-70.00	0.00	1	2	0	U	ATN-TS-PNT	0.100	1.000	77DT	CTS4	03									

DOWNPATH DATA

CHANNELIZATION TABLE

INDEX	KEY	FRQL	NCHNZ	CHBW	CHSEP	CHNSBW	TBFRG	PPDEV
1	CTS4	12.400	36	10.00	14.70	22.00	5.00	12.00

CHANNEL FAMILY AND CHANNEL TABLES

INDEX	KEY	I1CHN	IPCHN	ICHNZ	CHANNELS (24 PER LINE)
1	CTS401	1	5	1	1 3 5 7 9
2	CTS402	6	10	1	2 4 6 8 10
3	CTS404	12	12	1	15
4	CTS403	11	11	1	2

DOWNPATH DATA

POINT SET AND POINT TABLE

ISERVA= 1 IENDP= 2

INDEX	PTLAT	PTLNG	PTELE	IRNZN	IEANT	IEPFL	EPWR
1	40.00	60.00	0.	2	1	0	0.
2	40.00	70.00	0.	2	1	0	0.

ISERVA= 2 IENDP= 10

INDEX	PTLAT	PTLNG	PTELE	IRNZN	IEANT	IEPFL	EPWR
3	70.00	-141.00	0.	2	1	0	0.
4	70.00	-120.00	0.	2	1	0	0.
5	60.00	-120.00	0.	2	1	0	0.
6	49.00	-114.00	0.	2	1	0	0.
7	70.00	-130.00	2989.	3	1	0	0.
8	49.00	-120.00	0.	2	1	0	0.
9	81.00	-145.00	0.	4	1	0	0.
10	70.00	-130.00	0.	2	1	0	0.

ISERVA= 3 IENDP= 16

INDEX	PTLAT	PTLNG	PTELE	IRNZN	IEANT	IEPFL	EPWR
11	56.90	-89.00	0.	2	1	0	0.
12	52.80	-95.20	0.	2	1	0	0.
13	49.80	-95.20	0.	2	1	0	0.
14	70.00	-106.00	0.	4	1	0	0.
15	49.80	-95.20	0.	1	1	0	0.
16	52.00	-100.01	10.	2	1	0	0.

ISERVA= 4 IENDP= 19

INDEX	PTLAT	PTLNG	PTELE	IRNZN	IEANT	IEPFL	EPWR
17	70.00	-95.00	0.	2	1	0	0.
18	70.00	-80.00	0.	2	1	0	0.
19	60.00	80.00	0.	2	1	0	0.

ISERVA= 5 IENDP= 21

INDEX	PTLAT	PTLNG	PTELE	IRNZN	IEANT	IEPFL	EPWR
20	41.00	-87.70	0.	1	1	0	0.

ISERVA= 6 IFENDP= 22

INDEX	PTLAT	PTLNG	PTELE	IRNZN	IEANT	IEPFL	EPIWR
22	0.00	0.00	0.	3	1	0	0.

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P2 OUTPUTS *****

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INIT -- 170 UNITS INBIN = 7 INBINL= 8 INBINR= 9 IOUTEN= 11 IERUST= 12
IARST= 8 IARSTL= 9 IARSTR= 14 IARSTRS= 15 IOUTS2= 16 IDIAG= 13 IRPTL= 17 IRPTS= 17 IRPTS= 0 IMATRX= 0
LINES PER PAGE OR REPORTS = 54

RMPDIR

***WARNING-- THE 1TH TEST POINT, WHICH BELONGS TO SERVICE AREA AHO-RZ-TST,
IS OVER THE HORIZON OF ITS SATELLITE.

RMPDIR

***WARNING-- THE 2TH TEST POINT, WHICH BELONGS TO SERVICE AREA AHO-RZ-TST,
IS OVER THE HORIZON OF ITS SATELLITE.

RMPDIR

***WARNING-- THE 10TH TEST POINT, WHICH BELONGS TO SERVICE AREA CAN-ON-STD,
IS OVER THE HORIZON OF ITS SATELLITE.

RDCHEL

***WARNING-- CHANNEL SCHEME 1 FOR IUP=2 VIOLATES THE RARC PARAMETERS.
LOWEST FREQ= 12.40000 GHZ NO. OF CHNLS=36 CHNL SEPAR. = 0.1470000E-01GHZ
CHNL BANDWIDTH= 0.9999998E-02GHZ

RMPDIR

***WARNING-- THE 1TH TEST POINT, WHICH BELONGS TO SERVICE AREA AHO-RZ-TST,
IS OVER THE HORIZON OF ITS SATELLITE.

RMPDIR

***WARNING-- THE 2TH TEST POINT, WHICH BELONGS TO SERVICE AREA AHO-RZ-TST,
IS OVER THE HORIZON OF ITS SATELLITE.

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WARNING THE 19TH TEST POINT, WHICH BELONGS TO SERVICE AREA CAN-JN-STD,
IS OVER THE HORIZON OF ITS SATELLITE.

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INIT -- 100 UNITS INBIN = 7 INBINU = 8 INBIND = 9 IOUTBN = 11 IEROUT = 12
JAGGE = 8 JAGGOS = 9 JREINCE = 15 JREINER = 14 IDIAG = 13 IRPTI = 17 IRPTS = 16 IRPT3 = 12 IMATRX = 14
LINES PER PAGE OR REPORTS = 60

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* SERVICE AREA # INTERFERED (OFFERING)	SAT LING	* EARTH STA # LAT LONG DEG-N DEG-E	C/I C/N DB W/SOM	PF DB	RVC'D POWER DBW	<*><*><*> GND-CO DB	ANTENNA GND-X DB	GAINS SAT-CO DB	***** SAT-X DB	EQUIV GAIN DB	INTRF CAT	PDL	TRAN PWR DB-W
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER													
AMRZTST	AMRZTST	50.0	-120.0	-27.04	-173.83	-214.16	-10.00	-10.00	0.00	-3.97	N NN NN	CO	-1.02
AMRZTST	AMRZTST	51.0	-126.0	-22.11	-179.26	-219.08	-10.00	-10.00	0.00	-3.48	N NN NN	CO	-6.47
AMRZTST	AMRZTST	49.0	-120.0	-44.48	-157.56	-196.72	-10.00	-10.00	0.00	-2.80	N NN NN	CO	15.14
AMRZTST	AMRZTST	56.9	-89.0	-45.90	-161.07	-195.29	-6.67	-10.00	0.00	5.45	N NN NN	X	8.44
AMRZTST	AMRZTST	52.8	-95.2	-44.44	-161.92	-196.76	-6.81	-10.00	0.00	4.68	N NN NN	X	7.63
AMRZTST	AMRZTST	70.0	-95.0	-48.22	-158.26	-192.98	-3.37	-4.51	0.00	8.25	N NN NN	X	8.24
AMRZTST	AMRZTST	70.0	-80.0	-49.41	-158.44	-191.79	-3.30	-4.44	0.00	9.69	N NN NN	X	8.02
AMRZTST	AMRZTST	60.0	80.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	X	=100.0
AMRZTST	AMRZTST	41.8	-87.7	-57.68	-155.35	-183.52	-7.59	-7.77	0.00	10.59	N NN NN	X	14.77
AMRZTST	AMRZTST	0.0	0.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	X	3.01
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER													
CAMPSTN	CAMPSTN	50.0	-130.0	14.00	-107.33	-109.41	59.60	34.60	16.81	103.85	CARRIER	CO	-1.02
CAMPSTN	CAMPSTN	51.0	-126.0	14.00	-112.88	-109.41	59.60	34.60	9.81	109.41	CARRIER	CO	-6.47
CAMPSTN	CAMPSTN	49.0	-120.0	14.00	-91.42	-109.41	59.60	28.34	16.81	87.94	CARRIER	CO	15.14
CAMPSTN	CAMPSTN	40.0	60.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	X	=100.0
CAMPSTN	CAMPSTN	40.0	70.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	X	=100.0
CAMPSTN	CAMPSTN	50.0	-130.0	-3.20	-104.13	-106.22	59.60	34.60	44.25	103.85	N NN NN	CO	-1.02
CAMPSTN	CAMPSTN	51.0	-126.0	-3.27	-109.61	-106.14	59.60	34.60	9.81	109.41	N NN NN	CO	-6.47
CAMPSTN	CAMPSTN	49.0	-120.0	-3.41	-88.01	-106.01	59.60	34.60	16.81	87.94	N NN NN	CO	15.14
CAMPSTN	CAMPSTN	56.9	-89.0	82.38	-158.47	-191.80	-3.74	-10.00	0.00	9.28	N NN NN	X	8.44
CAMPSTN	CAMPSTN	52.8	-95.2	83.57	-159.31	-192.98	-3.89	-10.00	0.00	8.78	N NN NN	X	7.63
CAMPSTN	CAMPSTN	70.0	-95.0	71.35	-155.61	-180.76	-0.56	-1.70	19.81	20.64	N NN NN	X	8.24
CAMPSTN	CAMPSTN	70.0	-80.0	72.36	-155.82	-181.78	-0.44	-1.58	19.81	19.94	N NN NN	X	8.02
CAMPSTN	CAMPSTN	60.0	80.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	X	=100.0
CAMPSTN	CAMPSTN	41.8	-87.7	65.68	-141.32	-175.09	6.94	6.76	0.00	19.51	N NN NN	X	14.77
CAMPSTN	CAMPSTN	0.0	0.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	X	3.01
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER													
CAMPSTN	CAMPSTN	56.9	-89.0	14.00	-103.93	-107.11	54.62	24.74	16.81	97.78	CARRIER	CO	6.44
CAMPSTN	CAMPSTN	52.8	-95.2	14.00	-104.47	-107.11	54.62	24.74	16.81	98.32	CARRIER	CO	7.63
CAMPSTN	CAMPSTN	40.0	60.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	X	=100.0
CAMPSTN	CAMPSTN	40.0	70.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	X	=100.0
CAMPSTN	CAMPSTN	50.0	-130.0	90.75	-164.96	-197.85	-1.26	-2.40	12.51	12.19	N NN NN	X	-1.02
CAMPSTN	CAMPSTN	51.0	-126.0	94.95	-170.38	-202.05	-1.22	-2.36	14.04	13.45	N NN NN	X	-6.47
CAMPSTN	CAMPSTN	49.0	-120.0	71.07	-148.76	-178.17	-1.24	-2.38	16.73	15.65	N NN NN	X	15.14
CAMPSTN	CAMPSTN	56.9	-89.0	-4.00	-99.93	-103.11	54.62	24.74	43.16	97.78	N NN NN	CO	8.44
CAMPSTN	CAMPSTN	52.8	-95.2	-3.86	-100.60	-103.24	54.62	24.74	43.70	98.32	N NN NN	CO	7.63
CAMPSTN	CAMPSTN	70.0	-95.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	CO	8.24
CAMPSTN	CAMPSTN	70.0	-80.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	CO	8.02
CAMPSTN	CAMPSTN	60.0	80.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	X	=100.0
CAMPSTN	CAMPSTN	41.8	-87.7	61.17	-141.79	-168.27	6.19	6.02	19.81	24.05	N NN NN	CO	14.77
CAMPSTN	CAMPSTN	0.0	0.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	CO	3.01
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER													
CAMPSTN	CAMPSTN	70.0	-95.0	14.00	-98.99	-109.41	59.60	34.60	7.62	95.51	CARRIER	CO	8.24
CAMPSTN	CAMPSTN	70.0	-80.0	14.00	-99.65	-109.41	59.60	34.60	7.62	96.17	CARRIER	CO	8.02
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER													
AMRZTST	AMRZTST	40.0	60.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	X	=100.0
AMRZTST	AMRZTST	40.0	70.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	X	=100.0
AMRZTST	AMRZTST	50.0	-130.0	48.47	-164.96	-197.85	-1.26	-2.40	12.51	10.60	N NN NN	X	-1.02
AMRZTST	AMRZTST	51.0	-126.0	48.47	-170.38	-202.05	-1.22	-2.36	14.04	10.60	N NN NN	X	-6.47
AMRZTST	AMRZTST	49.0	-120.0	48.47	-148.76	-178.17	-1.24	-2.38	16.73	10.60	N NN NN	X	15.14
AMRZTST	AMRZTST	56.9	-89.0	48.47	-148.76	-178.17	-1.24	-2.38	16.73	10.60	N NN NN	X	8.44
AMRZTST	AMRZTST	52.8	-95.2	48.47	-158.47	-191.80	-3.74	-10.00	0.00	9.28	N NN NN	X	7.63
AMRZTST	AMRZTST	70.0	-95.0	48.47	-158.47	-191.80	-3.74	-10.00	0.00	8.78	N NN NN	X	8.24
AMRZTST	AMRZTST	70.0	-80.0	48.47	-158.47	-191.80	-3.74	-10.00	0.00	9.28	N NN NN	X	8.02
AMRZTST	AMRZTST	60.0	80.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	X	=100.0
AMRZTST	AMRZTST	41.8	-87.7	48.47	-148.76	-178.17	-1.24	-2.38	16.73	10.60	N NN NN	X	14.77
AMRZTST	AMRZTST	0.0	0.0	999.90	999.90	999.99	99.00	99.00	99.00	99.00	N NN NN	X	3.01

* SERVICE AREA	SAT	* EARTH STA	C/I	FFD	RVC'D	ANTENNA	GAINS	EQUIV	INTRF	POL	TRAN
INTERFERE	DE3-E	LAT LONG	C/N	DB	POWER	GRD-X	SAT-CD	GAIN	CAT		PWR
		DEG-M	DB W/3M	DBW	DB	DB	DB	DB			DB-N
CAPESTRD	-125.0	49.0	-120.0	-64.95	-148.76	-183.11	10.62	10.75	N NN NN	X	15.14
CAMPSTRD	-125.0	56.9	-89.0	999.90	-999.99	-99.00	-99.00	-99.00	N NN NN		8.44
CAMPSTRD	-125.0	52.8	-95.2	999.90	-999.99	-99.00	-99.00	-99.00	N NN NN		7.53
CAMPSTRD	-125.0	70.0	-85.0	142.28	-95.36	-105.78	35.92	95.51	N NN NN	CO	8.24
CAMPSTRD	-125.0	70.0	-80.0	142.65	-95.65	-105.41	36.58	96.17	N NN NN	CO	8.02
ADITSPT	-125.0	0.0	0.0	999.90	-999.90	-99.00	-99.00	-99.00	N NN NN		3.01
USACTSTC	-135.0	41.8	-87.7	15.40	-96.15	-108.01	34.48	90.24	CARRIER	CD	14.77
ARRZTST	-135.0	40.0	60.0	999.90	-999.90	-999.99	-99.00	-99.00	N NN NN		=100.0
ARRZTST	-135.0	40.0	70.0	999.90	-999.90	-999.99	-99.00	-99.00	N NN NN		=100.0
CAIFASTD	-135.0	50.0	-130.0	84.09	-157.14	-192.10	9.80	17.95	N NN NN	X	-1.02
CAMPSTRD	-135.0	51.0	-126.0	88.78	-162.57	-196.79	6.60	18.72	N NN NN	X	-6.47
CAMPSTRD	-135.0	49.0	-120.0	63.55	-140.96	-171.56	6.59	22.33	N NN NN	X	15.14
CAMPSTRD	-135.0	56.9	-89.0	63.12	-151.17	-171.13	3.47	29.85	N NN NN	CO	8.44
CAMPSTRD	-135.0	52.8	-95.2	60.06	-152.00	-168.07	3.31	33.59	N NN NN	CO	7.63
USACTSTC	-135.0	41.8	-87.7	-3.80	-92.35	-104.21	34.48	90.24	N NN NN	CO	14.77
ADITSPT	-135.0	0.0	0.0	999.90	-999.90	-999.99	-99.00	-99.00	N NN NN		3.01
ADITSPT	-70.0	0.0	0.0	18.53	-108.36	-104.89	49.81	105.57	CARRIER	CO	3.01
ARRZTST	-70.0	40.0	60.0	999.90	-999.90	-999.99	-99.00	-99.00	N NN NN		=100.0
ARRZTST	-70.0	40.0	70.0	999.90	-999.90	-999.99	-99.00	-99.00	N NN NN		=100.0
CAMPSTRD	-70.0	50.0	-130.0	109.61	-174.18	-214.50	0.00	-3.98	N NN NN	X	-1.02
CAMPSTRD	-70.0	51.0	-126.0	115.01	-179.58	-219.90	0.00	-3.98	N NN NN	X	-6.47
CAMPSTRD	-70.0	49.0	-120.0	93.31	-157.87	-198.19	0.00	-3.98	N NN NN	X	15.14
CAMPSTRD	-70.0	56.9	-89.0	102.88	-164.43	-207.76	0.00	-6.99	N NN NN	CO	8.44
CAMPSTRD	-70.0	52.8	-95.2	103.63	-165.19	-208.52	0.00	-6.99	N NN NN	CO	7.63
CAMPSTRD	-70.0	70.0	-95.0	103.38	-164.93	-208.26	0.00	-6.99	N NN NN	CO	8.24
CAMPSTRD	-70.0	70.0	-80.0	103.56	-165.11	-208.44	0.00	-6.99	N NN NN	CO	8.02
USACTSTC	-70.0	60.0	80.0	999.90	-999.90	-999.99	-99.00	-99.00	N NN NN		=100.0
ADITSPT	-70.0	41.8	-87.7	56.24	-157.79	-201.12	49.81	105.57	N NN NN	CO	14.77
ADITSPT	-70.0	0.0	0.0	-4.00	-104.36	-100.89	55.76	49.81	N NN NN	CO	3.01

RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER

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* SERVICE AREA # INTERFERED	SAT LONG DEG-E	* EARTH STA # LAT LONG DEG-N DEG-E	C/I C/N DB	PFDD DB W/3GM	RVC "D" POWER DRN	***** GND-CO DB	ANTENNA GND-X DB	GAINS SAT-CO DB	***** SAT-X DB	EQUIV GAIN DB	INTRF CAT	FOL	TRAN PWR DB-W	TOT C/N DB
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER														
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER														
ABRZTST	ABRZTST	40.0	60.0	999.90	-999.90	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	25.60	11.9
CAMPASTD	-144.5	40.0	60.0	999.90	-999.90	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	25.60	11.9
CAMPASTD	-125.0	40.0	60.0	999.90	-999.90	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	25.60	11.9
CAMPASTD	-125.0	40.0	60.0	999.90	-999.90	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	25.60	11.9
USACTSTC	-135.0	40.0	60.0	999.90	-999.90	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	X	26.45	11.9
AINTSPNT	-70.0	40.0	60.0	999.90	-999.90	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	X	24.00	11.9
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER														
ABRZTST	ABRZTST	40.0	70.0	999.90	-999.90	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	25.60	11.9
CAMPASTD	-144.5	40.0	70.0	999.90	-999.90	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	25.60	11.9
CAMPASTD	-125.0	40.0	70.0	999.90	-999.90	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	25.60	11.9
CAMPASTD	-125.0	40.0	70.0	999.90	-999.90	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	25.60	11.9
USACTSTC	-135.0	40.0	70.0	999.90	-999.90	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	X	26.45	11.9
AINTSPNT	-70.0	40.0	70.0	999.90	-999.90	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	X	24.00	11.9
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER														
CAMPASTD	-144.5	70.0	-141.0	16.27	-101.97	-108.11	37.22	12.22	36.82	7.77	74.04 CARRIER	CO	25.60	11.9
ABRZTST	-100.0	70.0	-141.0	194.31	-259.28	-302.42	-0.78	-0.78	5.89	0.00	6.11 N NN NN	CO	100.0	11.9
CAMPASTD	-144.5	70.0	-141.0	0.00	-101.97	-108.11	37.22	12.22	36.82	7.77	74.04 N NN NN	CO	25.60	11.9
CAMPASTD	-125.0	70.0	-141.0	51.52	-125.27	-159.63	4.96	4.96	13.02	8.50	22.03 N NN NN	X	26.45	11.9
CAMPASTD	-125.0	70.0	-141.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	X	20.93	11.9
USACTSTC	-135.0	70.0	-141.0	55.18	-133.77	-163.29	12.76	7.22	6.86	2.43	20.67 N NN NN	X	24.00	11.9
AINTSPNT	-70.0	70.0	-141.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	X	0.00	11.9
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER														
CAMPASTD	-144.5	70.0	-120.0	15.98	-102.26	-108.40	37.22	12.22	36.76	7.77	73.98 CARRIER	CO	25.60	11.8
ABRZTST	-100.0	70.0	-120.0	192.08	-257.05	-300.48	-0.78	-0.78	7.48	0.00	7.42 N NN NN	CO	100.0	11.8
CAMPASTD	-144.5	70.0	-120.0	0.00	-102.26	-108.40	37.22	12.22	36.76	7.77	73.98 N NN NN	CO	25.60	11.8
CAMPASTD	-125.0	70.0	-120.0	35.17	-105.70	-143.57	4.98	4.98	32.49	8.50	38.00 N NN NN	X	26.45	11.8
CAMPASTD	-125.0	70.0	-120.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	X	20.93	11.8
USACTSTC	-135.0	70.0	-120.0	49.47	-125.29	-157.87	12.80	7.22	15.42	3.86	26.18 N NN NN	X	24.00	11.8
AINTSPNT	-70.0	70.0	-120.0	95.88	-166.19	-204.28	-0.78	-0.78	0.00	0.00	5.24 N NN NN	X	0.00	11.8
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER														
CAMPASTD	-144.5	60.0	-120.0	18.93	-99.31	-105.46	37.22	12.22	39.33	7.77	76.55 CARRIER	CO	25.60	12.7
ABRZTST	-100.0	60.0	-120.0	195.17	-257.29	-300.63	-0.78	-0.78	6.88	0.00	6.91 N NN NN	CO	100.0	12.7
CAMPASTD	-144.5	60.0	-120.0	0.00	-99.31	-105.46	37.22	12.22	39.33	7.77	76.55 N NN NN	CO	25.60	12.7
CAMPASTD	-125.0	60.0	-120.0	37.73	-105.02	-143.18	4.70	4.70	32.77	8.50	37.98 N NN NN	X	26.45	12.7
CAMPASTD	-125.0	60.0	-120.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	X	20.93	12.7
USACTSTC	-135.0	60.0	-120.0	48.82	-120.38	-154.28	12.53	7.22	19.92	3.86	29.35 N NN NN	X	24.00	12.7
AINTSPNT	-70.0	60.0	-120.0	97.99	-165.36	-203.45	-0.78	-0.78	0.00	0.00	5.24 N NN NN	X	0.00	12.7
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER														
CAMPASTD	-144.5	49.0	-114.0	15.65	-102.59	-108.73	37.22	12.22	35.94	7.77	73.16 CARRIER	CO	25.60	11.7
ABRZTST	-100.0	49.0	-114.0	191.09	-256.39	-299.82	-0.78	-0.78	7.45	0.00	7.37 N NN NN	CO	100.0	11.7
CAMPASTD	-144.5	49.0	-114.0	0.00	-102.59	-108.73	37.22	12.22	35.94	7.77	73.16 N NN NN	CO	25.60	11.7
CAMPASTD	-125.0	49.0	-114.0	33.26	-103.52	-141.99	4.46	4.46	32.99	8.50	38.93 N NN NN	X	26.45	11.7
CAMPASTD	-125.0	49.0	-114.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	X	20.93	11.7
USACTSTC	-135.0	49.0	-114.0	37.98	-111.46	-146.71	12.31	7.22	23.62	3.86	36.70 N NN NN	X	24.00	11.7
AINTSPNT	-70.0	49.0	-114.0	94.05	-164.69	-203.78	-0.78	-0.78	0.00	0.00	5.24 N NN NN	X	0.00	11.7
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER														
CAMPASTD	-144.5	70.0	-170.0	18.29	-99.95	-106.09	37.22	12.22	37.81	7.77	75.03 CARRIER	CO	25.60	12.6
ABRZTST	-100.0	70.0	-170.0	193.96	-256.76	-300.06	-0.78	-0.78	6.65	0.00	6.72 N NN NN	CO	100.0	12.6
CAMPASTD	-144.5	70.0	-170.0	0.00	-99.95	-106.09	37.22	12.22	37.81	7.77	75.03 N NN NN	CO	25.60	12.6
CAMPASTD	-125.0	70.0	-170.0	43.15	-112.05	-149.84	4.96	4.96	34.85	8.50	31.01 N NN NN	X	26.45	12.6
CAMPASTD	-125.0	70.0	-170.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	X	20.93	12.6

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DETAIL REPORT # 1 FOR TEST008 DOWN

MAX C/I = 260.00

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* SERVICE AREA * INTERFERED	SAT LONG DEG-E	* EARTH STA * LAT LONG DEG-N DEG-E	C/I C/N DB	PFDD DB M/SOM	RVC'D POWER DBM	***** GND-CO DB	ANTENNA GND-X DB	GAINS SAT-CO DB	***** SAT-X DB	EQUIV GAIN DB	INTRF CAT	FOL	TRAN FNR DB-U	TOT C/N DB
USACTSTC	-135.0	70.0	-130.0	53.88	-129.82	-159.97	12.77	7.22	9.53	3.86	22.71	N NN NN	X	24.00
ATMTPNT	-70.0	70.0	-130.0	95.58	-163.58	-201.68	-0.78	-0.78	0.00	0.00	5.24	N NN NN	X	0.00
CANPASTD	-144.5	49.0	-120.0	17.44	-100.80	-106.95	37.22	12.22	37.59	7.77	74.81	CARRIER	CO	25.60
AMRZTST	-100.0	49.0	-120.0	193.92	-257.64	-300.87	-0.78	-0.78	0.00	0.00	6.42	N NN NN	CO	100.0
CANPASTD	-144.5	49.0	-120.0	0.00	-100.80	-106.95	37.22	12.22	37.59	7.77	74.81	N NN NN	CO	25.60
CANPASTD	-125.0	49.0	-120.0	44.11	-113.43	-151.05	4.41	4.41	24.05	8.50	29.81	N NN NN	X	26.45
CANPASTD	-125.0	49.0	-120.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	X	20.93
USACTSTC	-135.0	49.0	-120.0	44.39	-116.75	-151.34	12.25	7.22	23.25	3.86	31.99	N NN NN	X	24.00
ATMTPNT	-70.0	49.0	-120.0	96.12	-164.98	-203.07	-0.78	-0.78	0.00	0.00	5.24	N NN NN	X	0.00
CANPASTD	-144.5	81.0	-145.0	15.64	-102.60	-108.74	37.22	12.22	35.18	7.77	72.40	CARRIER	CO	25.60
AMRZTST	-100.0	81.0	-145.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	100.0
CANPASTD	-144.5	81.0	-145.0	0.00	-102.60	-108.74	37.22	12.22	35.18	7.77	72.40	N NN NN	CO	25.60
CANPASTD	-125.0	81.0	-145.0	42.76	-115.10	-151.50	5.28	5.28	21.85	8.50	28.82	N NN NN	X	26.45
CANPASTD	-125.0	81.0	-145.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	X	20.93
USACTSTC	-135.0	81.0	-145.0	52.61	-132.53	-161.35	13.08	7.22	6.86	3.38	21.37	N NN NN	X	24.00
ATMTPNT	-70.0	81.0	-145.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	X	0.00
CANPASTD	-144.5	70.0	-130.0	17.19	-101.05	-107.19	37.22	12.22	37.81	7.77	75.03	CARRIER	CO	25.60
AMRZTST	-100.0	70.0	-130.0	194.20	-258.10	-301.39	-0.78	-0.78	0.00	0.00	6.72	N NN NN	CO	100.0
CANPASTD	-144.5	70.0	-130.0	0.00	-101.05	-107.19	37.22	12.22	37.81	7.77	75.03	N NN NN	CO	25.60
CANPASTD	-125.0	70.0	-130.0	43.34	-113.35	-150.53	4.96	4.96	24.85	8.50	31.03	N NN NN	X	26.45
CANPASTD	-125.0	70.0	-130.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	X	20.93
USACTSTC	-135.0	70.0	-130.0	54.06	-131.10	-161.25	12.77	7.22	9.53	3.86	22.71	N NN NN	X	24.00
ATMTPNT	-70.0	70.0	-130.0	98.76	-167.87	-205.95	-0.78	-0.78	0.00	0.00	5.25	N NN NN	X	0.00
CANPASTD	-125.0	56.9	-89.0	15.27	-102.97	-109.11	37.23	12.23	35.21	8.50	72.44	CARRIER	CO	25.60
AMRZTST	-100.0	56.9	-89.0	181.44	-251.02	-290.56	2.07	2.07	12.98	0.00	16.80	N NN NN	X	100.0
CANPASTD	-144.5	56.9	-89.0	45.56	-117.89	-154.67	5.02	5.02	31.91	7.77	28.50	N NN NN	X	25.60
CANPASTD	-125.0	56.9	-89.0	0.00	-102.97	-109.11	37.23	12.23	35.21	8.50	72.44	N NN NN	CO	26.45
CANPASTD	-125.0	56.9	-89.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	20.93
USACTSTC	-135.0	56.9	-89.0	32.86	-110.97	-141.97	12.33	7.23	30.04	3.86	42.37	N NN NN	CO	24.00
ATMTPNT	-70.0	56.9	-89.0	96.23	-164.25	-205.34	-0.77	-0.77	0.00	0.00	2.24	N NN NN	CO	0.00
CANPASTD	-125.0	52.8	-95.2	18.41	-99.83	-105.97	37.23	12.23	38.07	8.50	75.30	CARRIER	CO	26.45
AMRZTST	-100.0	52.8	-95.2	185.39	-251.87	-291.37	1.92	1.92	12.60	0.00	15.85	N NN NN	X	100.0
CANPASTD	-144.5	52.8	-95.2	46.31	-114.99	-152.28	4.87	4.87	24.30	7.77	30.32	N NN NN	X	25.60
CANPASTD	-125.0	52.8	-95.2	0.00	-99.83	-105.97	37.23	12.23	38.07	8.50	75.30	N NN NN	CO	26.45
CANPASTD	-125.0	52.8	-95.2	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	20.93
USACTSTC	-135.0	52.8	-95.2	33.80	-108.61	-139.77	12.17	7.23	32.02	3.86	44.19	N NN NN	CO	24.00
ATMTPNT	-70.0	52.8	-95.2	99.36	-164.24	-205.33	-0.77	-0.77	0.00	0.00	2.24	N NN NN	CO	0.00
CANPASTD	-125.0	49.8	-95.2	16.43	-101.81	-107.95	37.23	12.23	36.01	8.50	73.24	CARRIER	CO	26.45
AMRZTST	-100.0	49.8	-95.2	183.10	-251.39	-291.05	1.84	1.84	12.40	0.00	16.11	N NN NN	X	100.0
CANPASTD	-144.5	49.8	-95.2	45.62	-116.43	-153.57	4.81	4.81	22.81	7.77	28.04	N NN NN	X	25.60
CANPASTD	-125.0	49.8	-95.2	0.00	-101.81	-107.95	37.23	12.23	36.01	8.50	73.24	N NN NN	CO	26.45
CANPASTD	-125.0	49.8	-95.2	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	20.93
USACTSTC	-135.0	49.8	-95.2	30.55	-107.27	-138.50	12.10	7.23	33.28	3.86	45.32	N NN NN	CO	24.00
ATMTPNT	-70.0	49.8	-95.2	97.00	-164.16	-205.25	-0.77	-0.77	0.00	0.00	2.24	N NN NN	CO	0.00
CANPASTD	-125.0	70.0	-100.0	14.00	-103.24	-110.38	37.23	12.23	35.29	8.50	72.50	CARRIER	CO	26.45
AMRZTST	-100.0	70.0	-100.0	184.40	-255.45	-294.79	2.76	2.76	9.97	0.00	12.40	N NN NN	X	100.0
CANPASTD	-144.5	70.0	-100.0	33.73	-107.35	-145.12	5.19	5.19	32.41	7.77	35.01	N NN NN	X	25.60

ORIGINAL PAGE IS OF POOR QUALITY

* SERVICE AREA * INFERRED INTERFERING	SAT LUNG	* EARTH STA * LAT LUNG	C/I DB W/3dB	PFED DB	RVC "D" POWER DBM	** ** ** ** GND--C DB	ANTENNA GND--X DB	GAINS SAT--CO DB	***** SAT--X DB	EQUIV GAIN DB	INTRF CAT	FOL	TRAN PWR DB-N	TOT C/N DB
CANPESTD	-125.0	70.0	-106.0	0.00	-104.24	-99.00	37.23	35.29	8.50	72.52	N NN NN	CO	26.45	
CANONSTD	-125.0	70.0	-106.0	0.00	-121.35	-99.00	12.50	20.97	3.86	33.45	N NN NN	CO	24.00	
AHTSPNT	-70.0	70.0	-106.0	97.43	-166.72	-207.81	-0.77	0.00	0.00	2.25	N NN NN	CO	0.00	
CANPESTD	-125.0	49.8	-95.2	17.00	-101.24	-107.39	37.23	36.01	8.50	73.24	CARRIER	CO	26.45	12.2
AHTSPNT	-100.0	49.8	-95.2	183.23	-250.95	-290.62	1.84	12.40	0.00	16.11	N NN NN	X	100.0	
CANPESTD	-144.5	49.8	-95.2	45.48	-115.73	-152.87	4.81	22.81	7.77	29.03	N NN NN	X	25.60	
CANONSTD	-125.0	49.8	-95.2	0.00	-101.24	-107.39	37.23	36.01	8.50	73.24	N NN NN	CO	26.45	
AHTSPNT	-125.0	49.8	-95.2	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	20.93	
USACTSTC	-135.0	49.8	-95.2	30.48	-106.64	-137.86	12.10	33.28	3.86	45.38	N NN NN	CO	24.00	
AHTSPNT	-70.0	49.8	-95.2	97.33	-163.62	-204.71	-0.77	0.00	0.00	2.24	N NN NN	CO	0.00	
CANPESTD	-125.0	52.0	-100.0	19.97	-98.27	-104.41	37.23	39.50	8.50	76.73	CARRIER	CO	26.45	13.0
AHTSPNT	-100.0	52.0	-100.0	187.95	-253.08	-292.37	1.87	10.75	0.00	14.83	N NN NN	X	100.0	
CANPESTD	-144.5	52.0	-100.0	44.63	-111.30	-149.04	4.79	27.74	7.77	33.35	N NN NN	X	25.60	
CANONSTD	-125.0	52.0	-100.0	0.00	-98.27	-104.41	37.23	39.50	8.50	76.73	N NN NN	CO	26.45	
AHTSPNT	-125.0	52.0	-100.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	20.93	
USACTSTC	-135.0	52.0	-100.0	34.99	-108.16	-139.40	12.09	32.28	3.86	44.38	N NN NN	CO	24.00	
AHTSPNT	-70.0	52.0	-100.0	100.99	-164.31	-205.40	-0.77	0.00	0.00	2.24	N NN NN	CO	0.00	
CANONSTD	-125.0	70.0	-95.0	10.03	-108.21	-114.36	37.32	35.92	7.62	73.24	CARRIER	CO	20.93	-124.6
AHTSPNT	-100.0	70.0	-95.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	100.0	
CANPESTD	-144.5	70.0	-95.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	25.60	
CANONSTD	-125.0	70.0	-95.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	26.45	
AHTSPNT	-125.0	70.0	-95.0	0.00	-108.21	-114.36	37.32	35.92	7.62	73.24	N NN NN	CO	20.93	
AHTSPNT	-70.0	70.0	-95.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	0.00	
CANONSTD	-125.0	70.0	-80.0	9.94	-108.30	-114.44	37.32	36.58	7.62	73.90	CARRIER	CO	20.93	-124.6
AHTSPNT	-100.0	70.0	-80.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	100.0	
CANPESTD	-144.5	70.0	-80.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	25.60	
CANONSTD	-125.0	70.0	-80.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	26.45	
AHTSPNT	-125.0	70.0	-80.0	0.00	-108.30	-114.44	37.32	36.58	7.62	73.90	N NN NN	CO	20.93	
AHTSPNT	-70.0	70.0	-80.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	0.00	
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER														
CANONSTD	-100.0	60.0	-99.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	100.0	
CANPESTD	-144.5	60.0	-99.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	25.60	
CANONSTD	-125.0	60.0	-99.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	26.45	
AHTSPNT	-70.0	60.0	-99.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N NN NN	CO	0.00	
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER														
USACTSTC	-135.0	60.0	-99.0	12.41	-105.83	-111.97	37.19	34.16	3.86	71.35	CARRIER	CO	24.00	10.6
AHTSPNT	-100.0	60.0	-99.0	177.12	-246.04	-289.09	-0.81	17.21	0.00	17.52	N NN NN	X	100.0	
CANPESTD	-144.5	60.0	-99.0	44.90	-128.01	-156.87	12.60	16.77	7.77	25.27	N NN NN	X	25.60	
CANONSTD	-125.0	60.0	-99.0	33.77	-114.28	-145.74	11.55	32.98	8.50	34.85	N NN NN	CO	26.45	
AHTSPNT	-135.0	60.0	-99.0	9.00	-105.83	-111.97	37.19	34.16	3.86	71.35	N NN NN	CO	24.00	
AHTSPNT	-70.0	60.0	-99.0	92.53	-163.35	-204.50	-0.81	0.00	0.00	2.20	N NN NN	CO	0.00	
USACTSTC	-135.0	60.0	-99.0	10.62	-107.62	-113.76	37.19	33.11	3.86	70.35	CARRIER	CO	24.00	9.3
AHTSPNT	-100.0	60.0	-99.0	177.42	-248.95	-291.48	-0.81	14.84	0.00	13.47	N NN NN	X	100.0	
CANPESTD	-144.5	60.0	-99.0	40.72	-122.22	-154.48	12.68	16.05	7.77	22.43	N NN NN	X	25.60	
CANONSTD	-125.0	60.0	-99.0	21.99	-104.21	-136.63	11.92	32.72	8.50	43.42	N NN NN	CO	26.45	
AHTSPNT	-135.0	60.0	-99.0	0.00	-107.62	-113.76	37.19	33.11	3.86	70.35	N NN NN	CO	24.00	

DETAIL REPORT # 1 FOR TEST0008 DOWN

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MAX C/I = 260.00

* SERVICE AREA #	SAT LING	* EARTH STA #	C/I	PF	RVC'D	*****	ANTENNA	GAINS	*****	EQUIV	INTRF	POL	TRAN	TOT
INTFERED INFRING	DEG-E	LAT LUNG	DB	DB	POWER	GND-CO	GND-X	SAT-CO	SAT-X	GAIN	CAT	CO	PWR	C/N
		DEG-N	W/SQM	DBW	DBW	DB	DB	DB	DB	DB	NIN	CO	DR-W	DB
ATNTSPNT	-70.0	48.0	-89.5	91.40	-164.02	-205.16	-0.81	0.00	0.00	2.20	N	NN	0.00	
ATNTSPNT	-70.0	0.0	0.0	2.13	-116.11	-122.25	37.19	12.19	49.81	87.00	CARRIER	CO	0.00	2.0
AHURZIST	-100.0	0.0	0.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N	NN	100.0	
CANPASTD	-144.5	0.0	0.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N	NN	25.60	
CANPESTD	-125.0	0.0	0.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N	NN	26.45	
CANONSTD	-125.0	0.0	0.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N	NN	20.93	
USACTSTC	-135.0	0.0	0.0	999.90	-999.90	-999.99	-99.00	-99.00	-99.00	-99.00	N	NN	24.00	
ATNTSPNT	-70.0	0.0	0.0	0.00	-116.11	-122.25	37.19	12.19	49.81	87.00	N	NN	0.00	

* SERVICE AREA # INTERFERED INTERFERING	RAIN ATN DB	X-POL DISC DB	CANT ANGLE DEG	ELEV # ANGLE DEG	OFF-AXIS ANGLE DEG	SAT DEG	SLNT # RANGE 10**6 M	ON-AXIS E. STA DB	GAIN* SAT DB	REL POL ANGLE DEG	FREQ GHZ	RN ZN	ANT-BMWIDTH E.S. DEG	SM SAT DEG	BK DEG
AHRZTST	4.00	22.20	-76.04	-51.49	0.000	1.994	46.964	59.60	49.81	0.00	17.550	B	0.17	0.53	N
AHRZTST	4.00	19.01	-66.08	-54.07	0.000	2.885	47.161	59.60	49.81	0.00	17.550	B	0.17	0.53	N
AHRZTST	0.00	99.00	-99.90	-51.45	0.000	1.994	46.964	59.60	49.81	0.00	17.550	B	0.17	0.53	N
AHRZTST	0.00	99.00	-99.90	-54.07	0.000	2.885	47.161	59.60	49.81	0.00	17.550	B	0.17	0.53	N
CANPASTD	0.00	99.00	-99.90	26.01	48.661	6.759	38.974	59.60	49.81	0.00	17.550	C	0.17	0.53	N
CANPASTD	0.00	99.00	-99.90	26.68	48.587	6.361	38.913	59.60	49.81	0.00	17.550	C	0.17	0.53	N
CANPASTD	0.00	99.00	-99.90	30.58	48.825	5.877	38.559	59.60	49.81	0.00	17.550	C	0.17	0.53	N
CANPASTD	0.00	99.00	-99.90	24.50	26.712	3.172	39.116	54.74	49.81	90.00	17.550	C	0.30	0.53	N
CANPASTD	0.00	99.00	-99.90	29.48	27.075	3.472	38.657	54.74	49.81	90.00	17.550	C	0.30	0.53	N
CANONSTD	0.00	99.00	-99.90	11.39	25.986	4.130	40.437	59.60	49.81	90.00	17.550	B	0.17	0.53	N
CANONSTD	0.00	99.00	-99.90	10.18	25.822	3.496	40.565	59.60	49.81	90.00	17.550	B	0.17	0.53	N
CANONSTD	0.00	99.00	-99.90	99.90	-99.900	-99.900	45.687	59.60	49.81	-99.90	17.550	B	0.00	0.00	N
USACTSTC	0.00	99.00	-99.90	40.11	38.338	2.147	37.771	55.76	49.81	-99.90	17.550	B	0.27	0.53	N
ATHSPNT	0.00	99.00	-99.90	-99.90	-99.900	-99.900	43.724	55.76	49.81	-99.90	17.550	C	0.00	0.00	N
CANPASTD	3.20	42.15	-87.16	31.04	0.000	0.364	38.519	59.60	49.81	0.00	17.550	C	0.17	0.53	N
CANPASTD	3.27	42.71	-90.00	29.04	0.000	0.000	38.697	59.60	49.81	0.00	17.550	C	0.17	0.53	N
CANPASTD	3.41	38.20	83.49	29.06	0.000	0.715	38.695	59.60	49.81	0.00	17.550	C	0.17	0.53	N
AHRZTST	0.00	99.00	-99.90	-99.90	-99.900	-99.900	46.833	59.60	49.81	-99.90	17.550	B	0.00	0.00	N
AHRZTST	0.00	99.00	-99.90	-99.90	-99.900	-99.900	46.454	59.60	49.81	-99.90	17.550	B	0.00	0.00	N
CANPASTD	0.00	99.00	-99.90	31.04	0.000	0.364	38.519	59.60	49.81	0.00	17.550	C	0.17	0.53	N
CANPASTD	0.00	99.00	-99.90	29.04	0.000	0.000	38.697	59.60	49.81	0.00	17.550	C	0.17	0.53	N
CANPASTD	0.00	99.00	-99.90	29.06	0.000	0.715	38.695	59.60	49.81	0.00	17.550	C	0.17	0.53	N
CANPASTD	0.00	99.00	-99.90	9.44	20.392	2.173	40.645	54.74	49.81	90.00	17.550	C	0.30	0.53	N
CANPASTD	0.00	99.00	-99.90	14.81	20.687	2.298	40.079	54.74	49.81	90.00	17.550	C	0.30	0.53	N
CANONSTD	0.00	99.00	-99.90	4.16	20.060	1.088	41.218	59.60	49.81	90.00	17.550	B	0.17	0.53	N
CANONSTD	0.00	99.00	-99.90	-0.23	19.847	1.222	41.704	59.60	49.81	90.00	17.550	B	0.17	0.53	N
CANONSTD	0.00	99.00	-99.90	99.90	-99.900	-99.900	44.835	59.60	49.81	-99.90	17.550	B	0.00	0.00	N
USACTSTC	0.00	99.00	-99.90	15.72	10.057	4.016	39.986	55.76	49.81	-99.90	17.550	B	0.27	0.53	N
ATHSPNT	0.00	99.00	-99.90	-99.90	-99.900	-99.900	47.500	55.76	49.81	-99.90	17.550	C	0.00	0.00	N
CANPESTD	4.00	39.13	-0.89	17.94	0.030	0.398	39.759	54.74	49.81	0.00	17.550	C	0.30	0.53	N
CANPESTD	3.86	40.64	-1.24	23.68	0.030	0.381	39.195	54.74	49.81	0.00	17.550	C	0.30	0.53	N
AHRZTST	0.00	99.00	-99.90	-99.90	-99.900	-99.900	47.211	59.60	49.81	-99.90	17.550	B	0.00	0.00	N
AHRZTST	0.00	99.00	-99.90	-99.90	-99.900	-99.900	47.079	59.60	49.81	-99.90	17.550	B	0.00	0.00	N
CANPASTD	0.00	99.00	-99.90	32.49	21.400	3.310	38.393	59.60	49.81	90.00	17.550	C	0.17	0.53	N
CANPASTD	0.00	99.00	-99.90	31.59	21.327	2.877	38.471	59.60	49.81	90.00	17.550	C	0.17	0.53	N
CANPASTD	0.00	99.00	-99.90	33.57	21.369	2.244	38.300	59.60	49.81	90.00	17.550	C	0.17	0.53	N
CANPESTD	0.00	99.00	-99.90	17.94	0.030	0.398	39.759	54.74	49.81	0.00	17.550	C	0.30	0.53	N
CANPESTD	0.00	99.00	-99.90	23.68	0.030	0.381	39.195	54.74	49.81	0.00	17.550	C	0.30	0.53	N
CANONSTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	0.000	59.60	49.81	-99.90	17.550	B	0.00	0.00	N
CANONSTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	0.000	59.60	49.81	-99.90	17.550	B	0.00	0.00	N
CANONSTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	0.000	59.60	49.81	-99.90	17.550	B	0.00	0.00	N
USACTSTC	0.00	99.00	-99.90	28.75	10.770	1.574	38.723	55.76	49.81	-99.90	17.550	B	0.27	0.53	N
ATHSPNT	0.00	99.00	-99.90	-99.90	-99.900	-99.900	46.118	55.76	49.81	-99.90	17.550	C	0.00	0.00	N
CANONSTD	3.63	29.83	-17.04	8.63	0.000	2.161	40.732	59.60	40.62	0.00	17.550	B	0.17	3.45	N
CANONSTD	4.00	28.43	-13.12	5.33	0.000	1.617	41.089	59.60	40.62	0.00	17.550	B	0.17	2.78	N
CANONSTD	4.00	14.82	-32.41	-34.14	0.000	5.100	45.411	59.60	40.62	0.00	17.550	B	0.17	1.13	N
AHRZTST	0.00	99.00	-99.90	-99.90	-99.900	-99.900	47.211	59.60	40.62	-99.90	17.550	B	0.00	0.00	N
AHRZTST	0.00	99.00	-99.90	-99.90	-99.900	-99.900	47.079	59.60	40.62	-99.90	17.550	B	0.00	0.00	N
CANPASTD	0.00	99.00	-99.90	32.49	21.400	3.310	38.393	59.60	40.62	90.00	17.550	C	0.17	1.23	N
CANPASTD	0.00	99.00	-99.90	31.59	21.327	2.877	38.471	59.60	40.62	90.00	17.550	C	0.17	1.23	N

* SERVICE AREA * INTFERED INTFRING	RAIN ATN	X-POL DISC	CANT ANGLE DEG	ELEV * ANGLE DEG	OFF-AXIS E. STA DEG	ANGLE * SAT DEG	SLNT * RANGE 10**6 M	ON-AXIS E. STA DB	GAIN* SAT DB	REL POL ANGLE DEG	FREQ GHZ	RN ZN	ANT-BMWDTH E.S. DEG	SM BK
CAMPASTD	0.00	99.00	-99.90	33.57	21.369	2.843	38.300	59.60	40.62	90.00	17.550	C	0.17	N
CAMPSTSD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	0.000	54.74	40.62	-99.90	17.550	C	0.00	N
CAMPSTSD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	0.000	54.74	40.62	-99.90	17.550	C	0.00	N
CAMPSTSD	0.00	99.00	-99.90	8.63	0.000	2.161	40.732	59.60	40.62	0.00	17.550	B	0.17	N
CAMPSTSD	0.00	99.00	-99.90	5.33	0.000	1.617	41.089	59.60	40.62	0.00	17.550	B	0.17	N
CAMPSTSD	0.00	99.00	-99.90	-34.14	0.000	5.100	45.411	59.60	40.62	0.00	17.550	B	0.17	N
CAMPSTSD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	46.118	55.76	40.62	-99.90	17.550	C	0.00	N
USACTSTC	3.80	40.59	1.31	22.32	0.000	0.735	39.326	55.76	39.80	0.00	17.550	B	0.27	N
AHORZTST	0.00	99.00	-99.90	-99.90	-99.900	-99.900	47.078	59.60	39.80	-99.90	17.550	B	0.00	N
AHORZTST	0.00	99.00	-99.90	-99.90	-99.900	-99.900	46.817	59.60	39.80	-99.90	17.550	B	0.00	N
CAMPASTD	0.00	99.00	-99.90	32.49	10.416	4.388	38.393	59.60	39.80	90.00	17.550	C	0.17	N
CAMPASTD	0.00	99.00	-99.90	30.98	10.373	4.053	38.524	59.60	39.80	90.00	17.550	C	0.17	N
CAMPASTD	0.00	99.00	-99.90	31.95	10.381	3.355	38.439	59.60	39.80	90.00	17.550	C	0.17	N
CAMPSTSD	0.00	99.00	-99.90	13.85	10.503	2.226	40.179	54.74	39.80	0.00	17.550	C	0.30	N
CAMPSTSD	0.00	99.00	-99.90	19.48	10.656	1.990	39.605	54.74	39.80	0.00	17.550	C	0.30	N
USACTSTC	0.00	99.00	-99.90	22.32	0.000	0.735	39.326	55.76	39.80	0.00	17.550	B	0.27	N
ATNTSPNT	0.00	99.00	-99.90	-99.90	-99.900	-99.900	46.891	55.76	39.80	-99.90	17.550	C	0.00	N
ATNTSPNT	4.00	34.53	180.00	11.47	0.000	0.000	40.428	55.76	49.81	0.00	17.550	C	0.27	N
AHORZTST	0.00	99.00	-99.90	-99.90	-99.900	-99.900	45.643	59.60	49.81	-99.90	17.550	B	0.00	N
AHORZTST	0.00	99.00	-99.90	-99.90	-99.900	-99.900	46.196	59.60	49.81	-99.90	17.550	B	0.00	N
CAMPASTD	0.00	99.00	-99.90	10.18	80.348	15.214	40.565	59.60	49.81	90.00	17.550	C	0.17	N
CAMPASTD	0.00	99.00	-99.90	12.10	80.394	15.017	40.363	59.60	49.81	90.00	17.550	C	0.17	N
CAMPASTD	0.00	99.00	-99.90	16.61	80.988	14.852	39.895	59.60	49.81	90.00	17.550	C	0.17	N
CAMPSTSD	0.00	99.00	-99.90	23.09	59.017	12.827	39.252	54.74	49.81	0.00	17.550	C	0.30	N
CAMPSTSD	0.00	99.00	-99.90	25.31	59.665	13.239	39.041	54.74	49.81	0.00	17.550	C	0.30	N
CAMPSTSD	0.00	99.00	-99.90	9.48	57.176	12.963	40.641	59.60	49.81	0.00	17.550	B	0.17	N
CAMPSTSD	0.00	99.00	-99.90	11.15	57.032	12.417	40.463	59.60	49.81	0.00	17.550	B	0.17	N
CAMPSTSD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	45.291	59.60	49.81	-99.90	17.550	B	0.00	N
USACTSTC	0.00	99.00	-99.90	38.45	71.819	12.491	37.900	55.76	49.81	0.00	17.550	B	0.27	N
ATNTSPNT	0.00	99.00	-99.90	11.47	0.000	0.000	40.428	55.76	49.81	0.00	17.550	C	0.27	N

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* SCENARIO DESCRIPTION  
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* THIS SET HAS FOLLOWING CHARACTERISTICS. NO BLOCKING, RAIN ATTN,  
* ALL POINTS SELECTED, 1 CHANNELIZATION, PROT RATIO  
* CALCULATED, POINTING ERRORS, C/N WITH G/T AND TEMP, BEAM CALL  
* BY ID, NOM FREQ=1, SOME CARRIERS OVER HORIZON  
* DB, RAIN MARGIN, CANDNSTD HAS C/N WITH MANY FEEDERLINKS.  
* USES FAST ROLL-OFF SATELLITE ANTENNA AND CPM FEEDERLINK ANTENNA.  
* --- SAME AS TEST0005 EXCEPT NO BLOCKING ---  
* ---- TEST FOR OVER THE HORIZON CARRIER ----  
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ORIGINAL PAGE IS
OF POOR QUALITY

* SERVICE AREA # INTFERED INFRING	RAIN ATN DB	X-POL DISC DB	CANT ANGLE DEG	ELEV * ANGLE DEG	OFF-AXIS E STA DEG	ANGLE DEG	SLNT * RANGE 10**6 M	#ON-AXIS E STA DB	GAIN* SAT DB	REL POL ANGLE DEG	FREQ GHZ	RN ZN	ANT-BMWIDTH E.S. SAT DEG	SM BK
AHORZTST	9.09	24.79	67.82	-51.45	0.000	1.994	46.964	37.22	49.81	0.00	12.459	B	2.28	0.53
AHORZTST	9.09	24.79	67.82	-51.45	0.000	1.994	46.964	37.22	49.81	0.00	12.459	B	2.28	0.53
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	46.833	37.22	40.77	-99.90	12.459	B	0.00	0.00
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	47.211	37.22	41.50	-99.90	12.473	B	0.00	0.00
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	0.000	37.22	40.62	-99.90	12.606	B	0.00	0.00
USACTSTC	0.00	99.00	-99.90	-99.90	-99.900	-99.900	47.078	37.22	36.86	-99.90	12.415	B	0.00	0.00
ATNTSPNT	0.00	99.00	-99.90	-99.90	-99.900	-99.900	45.643	37.22	49.81	-99.90	12.415	B	0.00	0.00
AHORZTST	9.62	29.70	78.31	-54.07	0.000	2.885	47.161	37.22	49.81	0.00	12.459	B	3.28	0.53
AHORZTST	9.62	29.70	78.31	-54.07	0.000	2.885	47.161	37.22	49.81	0.00	12.459	B	3.28	0.53
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	46.454	37.22	40.77	-99.90	12.459	B	0.00	0.00
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	47.079	37.22	41.50	-99.90	12.473	B	0.00	0.00
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	0.000	37.22	40.62	-99.90	12.606	B	0.00	0.00
USACTSTC	0.00	99.00	-99.90	-99.90	-99.900	-99.900	46.817	37.22	36.86	-99.90	12.415	B	0.00	0.00
ATNTSPNT	0.00	99.00	-99.90	-99.90	-99.900	-99.900	46.196	37.22	49.81	-99.90	12.415	B	0.00	0.00
CANPASTD	1.27	45.32	88.73	11.43	0.000	1.544	40.433	37.22	40.77	0.00	12.459	B	2.28	2.69
AHORZTST	1.92	33.12	-76.57	6.31	46.175	6.093	40.983	37.22	49.81	0.00	12.459	B	2.28	0.53
CANPASTD	1.27	45.32	88.73	11.43	0.000	1.544	40.433	37.22	40.77	0.00	12.459	B	2.28	2.69
CANPASTD	1.59	41.60	-5.73	10.64	20.322	2.756	40.516	37.22	41.50	90.00	12.473	B	2.28	1.79
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	0.000	37.22	40.62	-99.90	12.606	B	0.00	0.00
USACTSTC	1.50	44.82	-2.18	11.36	9.906	5.691	40.441	37.22	36.86	90.00	12.415	B	2.28	3.30
ATNTSPNT	0.00	99.00	-99.90	-99.90	-99.900	-99.900	41.935	37.22	49.81	-99.90	12.415	B	0.00	0.00
CANPASTD	1.45	38.65	81.42	9.55	0.000	0.705	40.633	37.22	40.77	0.00	12.459	B	2.28	1.22
AHORZTST	1.38	40.19	-82.90	10.18	46.312	5.260	40.565	37.22	49.81	0.00	12.459	B	2.28	0.53
CANPASTD	1.45	38.65	81.42	9.55	0.000	0.705	40.633	37.22	40.77	0.00	12.459	B	2.28	1.22
CANPASTD	1.51	45.04	1.82	11.39	20.289	1.694	40.437	37.22	41.50	90.00	12.473	B	2.28	1.99
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	0.000	37.22	40.62	-99.90	12.606	B	0.00	0.00
USACTSTC	1.56	41.96	5.38	10.74	9.872	4.743	40.506	37.22	36.86	90.00	12.415	B	2.28	3.55
ATNTSPNT	2.89	29.78	-15.58	4.02	77.138	13.684	41.233	37.22	49.81	90.00	12.415	B	2.28	0.53
CANPASTD	1.28	37.55	76.54	18.83	0.000	0.370	39.670	37.22	40.77	0.00	12.459	B	2.28	1.07
AHORZTST	1.23	39.26	-78.83	19.84	47.526	5.562	39.569	37.22	49.81	0.00	12.459	B	2.28	0.53
CANPASTD	1.28	37.55	76.54	18.83	0.000	0.370	39.670	37.22	40.77	0.00	12.459	B	2.28	1.07
CANPASTD	1.34	46.29	2.88	21.80	20.812	1.437	39.376	37.22	41.50	90.00	12.473	B	2.28	1.68
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	0.000	37.22	40.62	-99.90	12.606	B	0.00	0.00
USACTSTC	1.37	41.42	8.50	20.75	10.119	4.148	39.480	37.22	36.86	90.00	12.415	B	2.28	3.49
ATNTSPNT	2.20	29.38	-23.86	10.18	79.003	14.304	40.565	37.22	49.81	90.00	12.415	B	2.28	0.53
CANPASTD	1.33	34.54	66.19	26.65	0.000	1.715	38.915	37.22	40.77	0.00	12.459	B	2.28	2.70
AHORZTST	1.16	41.32	-78.12	32.18	48.767	5.275	38.419	37.22	49.81	0.00	12.459	B	2.28	0.53
CANPASTD	1.33	34.54	66.19	26.65	0.000	1.715	38.915	37.22	40.77	0.00	12.459	B	2.28	2.70
CANPASTD	1.29	43.08	9.42	32.78	21.282	0.816	38.367	37.22	41.50	90.00	12.473	B	2.28	1.03
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	0.000	37.22	40.62	-99.90	12.606	B	0.00	0.00
USACTSTC	1.35	38.01	17.30	30.26	10.327	2.808	38.587	37.22	36.86	90.00	12.415	B	2.28	3.39
ATNTSPNT	1.75	30.51	-31.13	19.99	81.149	14.531	39.555	37.22	49.81	90.00	12.415	B	2.28	0.53
CANPASTD	0.22	58.47	84.79	10.79	0.000	1.043	40.501	37.22	40.77	0.00	12.459	C	2.28	2.10
AHORZTST	0.22	54.54	-79.69	8.63	46.290	5.682	40.732	37.22	49.81	0.00	12.459	C	2.28	0.53
CANPASTD	0.22	58.47	84.79	10.79	0.000	1.043	40.501	37.22	40.77	0.00	12.459	C	2.28	2.10
CANPASTD	0.22	61.05	-1.82	11.39	20.335	2.201	40.437	37.22	41.50	90.00	12.473	C	2.28	1.87
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	0.000	37.22	40.62	-99.90	12.606	C	0.00	0.00

* SERVICE AREA * INTFERED INTRFING	RAIN DB	X-POL DISC	CANT ANGLE	ELEV ANGLE	OFF-AXIS E. STA	ANGLE DEC	SAT RANGE	SLNT 10**6 M	*ON-AXIS E. STA	GAIN* DB	REL ANGLE	POL DEG	FREQ GHZ	RN ZN	ANT-BMWDTH E.S.	SM BK
USACTSTC	0.22	60.99	1.82	11.39	9.898	5.186	40.437	37.22	36.86	49.81	90.00	12.415	C	C	2.28	3.44
ATMTPNT	0.22	50.67	-17.50	1.15	76.924	13.872	41.550	37.22	49.81		90.00	12.415	C	C	2.28	0.53
CANPASTD	1.25	36.63	70.18	29.06	0.000	1.211	38.695	37.22	40.77		0.00	12.459	B	B	2.28	2.35
AHORZTST	1.21	38.42	-73.44	30.58	48.825	5.877	38.559	37.22	49.81		0.00	12.459	B	B	2.28	0.53
CANPASTD	1.25	36.63	70.18	29.06	0.000	1.211	38.695	37.22	40.77		0.00	12.459	B	B	2.28	2.35
CANPESTD	1.28	47.33	4.33	33.57	21.369	1.384	38.300	37.22	41.50		90.00	12.473	B	B	2.28	1.15
CANONSTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.22	40.62		-99.90	12.606	B	B	0.00	0.00
USACTSTC	1.30	40.79	12.68	31.95	10.381	3.355	38.439	37.22	36.86		90.00	12.415	B	B	2.28	3.15
ATMTPNT	1.96	28.78	-33.66	16.61	80.988	14.852	39.895	37.22	49.81		90.00	12.415	B	B	2.28	0.53
CANPASTD	0.00	99.00	-99.90	0.30	0.000	1.803	41.645	37.22	40.77		0.00	12.459	D	D	2.28	2.64
AHORZTST	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.22	49.81		-99.90	12.459	D	D	0.00	0.00
CANPASTD	0.00	99.00	-99.90	0.30	0.000	1.803	41.645	37.22	40.77		0.00	12.459	D	D	2.28	2.64
CANPESTD	0.00	99.00	-99.90	-0.25	19.730	2.442	41.705	37.22	41.50		90.00	12.473	D	D	2.28	1.91
CANONSTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.22	40.62		-99.90	12.606	D	D	0.00	0.00
USACTSTC	0.00	99.00	-99.90	0.16	9.617	5.707	41.660	37.22	36.86		90.00	12.415	D	D	2.28	3.38
ATMTPNT	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.22	49.81		-99.90	12.415	D	D	0.00	0.00
CANPASTD	1.32	42.13	84.79	10.79	0.000	1.043	40.501	37.22	40.77		0.00	12.459	B	B	2.28	2.10
AHORZTST	1.56	36.80	-79.69	8.63	46.290	5.682	40.732	37.22	49.81		0.00	12.459	B	B	2.28	0.53
CANPASTD	1.32	42.13	84.79	10.79	0.000	1.043	40.501	37.22	40.77		0.00	12.459	B	B	2.28	2.10
CANPESTD	1.51	45.04	-1.82	11.39	20.325	2.201	40.437	37.22	41.50		90.00	12.473	B	B	2.28	1.87
CANONSTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.22	40.62		-99.90	12.606	B	B	0.00	0.00
USACTSTC	1.50	45.04	1.82	11.39	9.898	5.186	40.437	37.22	36.86		90.00	12.415	B	B	2.28	3.44
ATMTPNT	4.50	25.07	-17.50	1.15	76.924	13.872	41.550	37.22	49.81		90.00	12.415	B	B	2.28	0.53
CANPESTD	1.65	33.40	20.97	17.94	0.227	1.133	39.759	37.23	41.50		0.00	12.473	B	B	2.27	1.57
AHORZTST	1.15	43.24	82.91	24.50	26.515	3.172	39.116	37.23	49.81		90.00	12.459	B	B	2.27	0.53
CANPASTD	2.23	27.36	61.75	9.44	20.195	2.488	40.645	37.23	40.77		90.00	12.459	B	B	2.27	1.98
CANPESTD	1.65	33.40	20.97	17.94	0.227	1.133	39.759	37.23	41.50		0.00	12.473	B	B	2.27	1.57
CANONSTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.23	40.62		-99.90	12.606	B	B	0.00	0.00
USACTSTC	1.94	30.38	25.12	13.85	10.306	2.226	40.179	37.23	36.86		0.00	12.415	B	B	2.27	2.95
ATMTPNT	1.38	39.39	-11.98	23.09	58.820	12.827	39.252	37.23	49.81		0.00	12.415	B	B	2.27	0.53
CANPESTD	1.49	35.01	20.67	23.68	0.227	1.054	39.195	37.23	41.50		0.00	12.473	B	B	2.27	1.97
AHORZTST	1.13	47.08	86.37	29.48	26.878	3.472	38.657	37.23	49.81		90.00	12.459	B	B	2.27	0.53
CANPASTD	1.84	29.12	60.08	14.81	20.490	2.663	40.079	37.23	40.77		90.00	12.459	B	B	2.27	2.27
CANPESTD	1.49	35.01	20.67	23.68	0.227	1.054	39.195	37.23	41.50		0.00	12.473	B	B	2.27	1.97
CANONSTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.23	40.62		-99.90	12.606	B	B	0.00	0.00
USACTSTC	1.68	31.92	25.91	19.48	10.459	1.990	39.605	37.23	36.86		0.00	12.415	B	B	2.27	3.13
ATMTPNT	1.41	36.61	-17.91	25.31	59.468	13.239	39.041	37.23	49.81		0.00	12.415	B	B	2.27	0.53
CANPESTD	1.47	34.81	22.78	26.27	0.227	1.360	38.951	37.23	41.50		0.00	12.473	B	B	2.27	2.01
AHORZTST	1.12	47.39	85.96	32.72	27.065	3.344	38.373	37.23	49.81		90.00	12.459	B	B	2.27	0.53
CANPASTD	1.83	29.00	57.35	16.55	20.594	3.020	39.900	37.23	40.77		90.00	12.459	B	B	2.27	2.47
CANPESTD	1.47	34.81	22.78	26.27	0.227	1.360	38.951	37.23	41.50		0.00	12.473	B	B	2.27	2.01
CANONSTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.23	40.62		-99.90	12.606	B	B	0.00	0.00
USACTSTC	1.65	31.75	28.41	21.65	10.519	1.630	39.392	37.23	36.86		0.00	12.415	B	B	2.27	2.98
ATMTPNT	1.39	36.41	-19.79	28.06	59.890	13.245	38.785	37.23	49.81		0.00	12.415	B	B	2.27	0.53
CANPESTD	2.83	35.77	6.76	10.31	0.227	1.434	40.552	37.23	41.50		0.00	12.473	D	D	2.27	1.99
AHORZTST	2.19	40.04	-87.82	11.36	25.819	4.629	40.441	37.23	49.81		90.00	12.459	D	D	2.27	0.53
CANPASTD	3.13	28.20	77.23	6.89	19.956	0.665	40.920	37.23	40.77		90.00	12.459	D	D	2.27	0.85

* SERVICE AREA *	RAIN	X-POL	CANT	ELEV	* OFF-AXIS	ANGLE*	SLNT	* ON-AXIS	GAIN*	REL POL	FREQ	RN	ANT-BMWDTH	SM
INTERFER INTFRING	ATN	DISC	ANGLE	ANGLE	E. STA	SAT	RANGE	E. STA	SAT	ANGLE	GHZ	ZN	E. S.	BK
	DB	DB	DEG	DEG	DEG	DEG	10**6 M	DB	DB	DEG			DEG	DEG
CANPESTD	2.83	35.77	6.76	10.31	0.227	1.434	40.552	37.23	41.50	0.00	12.473	D	2.27	1.99
CANONSTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.23	40.62	-99.90	12.606	D	0.00	0.00
USACTSTC	3.13	32.37	10.01	8.81	10.148	4.181	40.713	37.23	36.86	0.00	12.415	D	2.27	3.63
ATNTPNT	3.51	30.05	-12.08	7.44	56.916	13.318	40.861	37.23	49.81	0.00	12.415	D	2.27	0.53
CANPESTD	0.90	39.02	22.78	26.27	0.227	1.360	38.951	37.23	41.50	0.00	12.473	A	2.27	2.01
AIDRZTST	0.69	51.60	89.96	32.72	27.065	3.344	38.373	37.23	49.81	90.00	12.459	A	2.27	0.53
CANPASTD	1.13	33.21	57.35	16.55	20.596	3.020	39.900	37.23	40.77	90.00	12.459	A	2.27	2.47
CANPESTD	0.90	39.02	22.78	26.27	0.227	1.360	38.951	37.23	41.50	0.00	12.473	A	2.27	2.01
CANONSTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.23	40.62	-99.90	12.606	A	0.00	0.00
USACTSTC	1.01	35.96	28.41	21.65	10.519	1.630	39.392	37.23	36.86	0.00	12.415	A	2.27	2.98
ATNTPNT	0.86	40.63	-19.79	28.06	59.890	13.245	38.785	37.23	49.81	0.00	12.415	A	2.27	0.53
CANPESTD	1.41	36.64	18.27	26.11	0.227	0.766	38.965	37.23	41.50	0.00	12.473	B	2.27	1.88
AIDRZTST	1.12	49.08	-89.99	30.51	26.998	3.894	38.565	37.23	49.81	90.00	12.459	B	2.27	0.53
CANPASTD	1.66	30.51	61.30	17.77	20.637	2.457	39.777	37.23	40.77	90.00	12.459	B	2.27	2.36
CANPESTD	1.41	36.64	18.27	26.11	0.227	0.766	38.965	37.23	41.50	0.00	12.473	B	2.27	1.88
CANONSTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.23	40.62	-99.90	12.606	B	0.00	0.00
USACTSTC	1.56	33.33	24.13	22.24	10.531	2.132	39.334	37.23	36.86	0.00	12.415	B	2.27	3.45
ATNTPNT	1.47	34.91	-21.34	24.29	59.580	13.575	39.137	37.23	49.81	0.00	12.415	B	2.27	0.53
CANONSTD	1.87	36.78	10.31	8.63	0.000	2.161	40.732	37.32	40.62	0.00	12.606	B	2.25	3.45
AIDRZTST	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.32	49.81	-99.90	12.459	B	0.00	0.00
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.32	40.77	-99.90	12.459	B	0.00	0.00
CANPESTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.32	41.50	-99.90	12.473	B	0.00	0.00
CANONSTD	1.87	36.78	10.31	8.63	0.000	2.161	40.732	37.32	40.62	0.00	12.606	B	2.25	3.45
ATNTPNT	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.32	49.81	-99.90	12.415	B	0.00	0.00
CANONSTD	2.54	31.67	14.43	5.33	0.000	1.617	41.089	37.32	40.62	0.00	12.606	B	2.25	2.78
AIDRZTST	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.32	49.81	-99.90	12.459	B	0.00	0.00
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.32	40.77	-99.90	12.459	B	0.00	0.00
CANPESTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.32	41.50	-99.90	12.473	B	0.00	0.00
CANONSTD	2.54	31.67	14.43	5.33	0.000	1.617	41.089	37.32	40.62	0.00	12.606	B	2.25	2.78
ATNTPNT	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.32	49.81	-99.90	12.415	B	0.00	0.00
CANONSTD	7.56	25.59	-13.71	-34.14	0.000	5.100	45.411	37.32	40.62	0.00	12.606	B	2.25	1.13
AIDRZTST	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.32	49.81	-99.90	12.459	B	0.00	0.00
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.32	40.77	-99.90	12.459	B	0.00	0.00
CANPESTD	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.32	41.50	-99.90	12.473	B	0.00	0.00
CANONSTD	7.56	25.59	-13.71	-34.14	0.000	5.100	45.411	37.32	40.62	0.00	12.606	B	2.25	1.13
ATNTPNT	0.00	99.00	-99.90	-99.90	-99.900	0.000	0.000	37.32	49.81	-99.90	12.415	B	0.00	0.00
USACTSTC	1.10	33.77	39.42	22.32	0.000	0.735	39.326	37.19	36.86	0.00	12.415	A	2.29	1.59
AIDRZTST	0.72	46.56	76.60	40.11	36.338	2.147	37.771	37.19	49.81	90.00	12.459	A	2.29	0.53
CANPASTD	1.34	31.06	46.90	15.72	10.057	4.473	39.986	37.19	40.77	90.00	12.459	A	2.29	2.70
CANPESTD	0.95	36.57	34.13	28.75	10.770	2.489	38.723	37.19	41.50	0.00	12.473	A	2.29	2.00
USACTSTC	1.10	33.77	39.42	22.32	0.000	0.735	39.326	37.19	36.86	0.00	12.415	A	2.29	1.59
ATNTPNT	0.80	43.59	-18.78	38.45	71.819	12.491	37.900	37.19	49.81	0.00	12.415	A	2.29	0.53
USACTSTC	1.79	30.05	32.71	19.79	0.000	1.231	39.575	37.19	36.86	0.00	12.415	B	2.29	2.20
AIDRZTST	1.14	43.41	80.68	33.93	37.975	2.672	38.269	37.19	49.81	90.00	12.459	B	2.29	0.53
CANPASTD	2.10	27.27	53.59	14.13	10.016	3.573	40.149	37.19	40.77	90.00	12.459	B	2.29	2.53
CANPESTD	1.55	32.94	27.60	25.14	10.700	1.611	39.057	37.19	41.50	0.00	12.473	B	2.29	2.00
USACTSTC	1.79	30.05	32.71	19.79	0.000	1.231	39.575	37.19	36.86	0.00	12.415	B	2.29	2.20

* SERVICE AREA *	RAIN	X-POL	CANT	ELEV *	OFF-AXIS	ANGLE*	SLINT	*ON-AXIS	GAIN*	REL POL	FREQ	RN	ANT-BMWDTH	SM
INTERFERED	ATN	DISC	ANGLE	E. STA	SAT	DEG	RANGE	E. STA	SAT	ANGLE	GHZ	ZN	E. S.	BK
	DB	DB	DEG	DEG	DEG	DEG	10**6 M	DB	DB	DEG		B	DEG	DEG
ATNTSPNT	1.33	38.61	-16.73	31.71	70.972	12.778	38.460	37.19	49.81	0.00	12.415	B	2.29	0.53
ATNTSPNT	2.79	38.64	90.00	11.47	0.000	0.000	40.428	37.19	49.81	0.00	12.415	C	2.29	0.53
AHURZTST	0.00	99.00	-99.90	-99.90	-99.900	-99.900	43.724	37.19	49.81	-99.90	12.459	C	0.00	0.00
CANPASTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	47.500	37.19	40.77	-99.90	12.459	C	0.00	0.00
CANPESTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	46.118	37.19	41.50	-99.90	12.473	C	0.00	0.00
CANUMSTD	0.00	99.00	-99.90	-99.90	-99.900	-99.900	0.000	37.19	40.62	-99.90	12.606	C	0.00	0.00
USACTSTC	0.00	99.00	-99.90	-99.90	-99.900	-99.900	46.891	37.19	36.86	-99.90	12.415	C	0.00	0.00
ATNTSPNT	2.79	38.64	90.00	11.47	0.000	0.000	40.428	37.19	49.81	0.00	12.415	C	2.29	0.53

AGGREGATE UPPATH SUMMARY FOR TEST0009

BLOCK CODE	SERVICE AREA	SAT LONG	FLT LAT-LONG	*** WST-INTFR	*** CO-CHANNEL C/I	*** MARGN	UPPER-ADJ C/I	UPPER-ADJ MARGN	LOWER-ADJ C/I	LOWER-ADJ MARGN	NEXT-UPPER C/I	NEXT-UPPER MARGN	NEXT-LOWER C/I	NEXT-LOWER MARGN	TOTAL MARGN
AHORZTST	-100.0	40.0	60.0	USACTSTC	-54.6	-82.6	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	-82.6
AHORZTST	-100.0	40.0	70.0	USACTSTC	-58.7	-86.7	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	-86.7
CANPASTD	-144.5	50.0	-130.0	USACTSTC	64.6	36.6	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	36.6
CANPASTD	-144.5	51.0	-126.0	USACTSTC	64.6	36.6	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	36.6
CANPASTD	-144.5	49.0	-120.0	USACTSTC	64.6	36.6	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	36.6
CANPESTD	-125.0	56.9	-89.0	USACTSTC	60.7	32.7	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	32.7
CANPESTD	-125.0	52.8	-95.2	USACTSTC	60.7	32.7	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	32.7
CANONSTD	-125.0	70.0	-95.0	CANPASTD	73.7	45.7	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	45.7
CANONSTD	-125.0	70.0	-80.0	CANPASTD	73.7	45.7	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	45.7
CANONSTD	-125.0	60.0	80.0	CANPASTD	-69.0	-93.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	-93.0
USACTSTC	-135.0	41.8	-87.7	CANPESTD	58.5	30.5	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	30.5
ATNTSPNT	-70.0	0.0	0.0	CANPASTD	91.0	63.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	63.0

AGGREGATE DOWNPATH SUMMARY FOR TEST0008

BLOCK SERVICE CODE AREA	SAT LONG	TEST POINT LAT-LONG	*** CO-CHANNEL WST-INTFR C/I MARGN	*** MARGN	UPPER-ADJ C/I MARGN	LOWER ADJ C/I MARGN	NEXT UPPER C/I MARGN	NEXT LOWER C/I MARGN	TOTAL MARGN						
AHORZTST	-100.0	40.0	60.0												
	-100.0	40.0	70.0												
EARTH STATION OVER HORIZON FROM ITS OWN SATELLITE															
CANPASTD	-144.5	70.0	-141.0	AHORZTST	194.3	166.3	50.0	36.0	0.0	24.6	***	21.3			
	-144.5	70.0	-120.0	AHORZTST	192.1	164.1	35.0	21.0	35.0	0.0	24.6	***	16.4		
	-144.5	60.0	-120.0	AHORZTST	195.2	167.2	37.4	23.4	37.4	0.0	24.6	***	17.9		
	-144.5	49.0	-114.0	AHORZTST	191.1	163.1	32.0	18.0	32.0	0.0	24.6	***	14.2		
	-144.5	70.0	-130.0	AHORZTST	194.0	166.0	42.8	28.8	42.8	0.0	24.6	***	20.2		
	-144.5	49.0	-120.0	AHORZTST	193.9	165.9	41.2	27.3	41.2	0.0	24.6	***	19.7		
	-144.5	81.0	-145.0		99.0	99.0	42.3	28.4	42.3	0.0	24.6	***	20.0		
	-144.5	70.0	-130.0	AHORZTST	194.2	166.2	43.0	29.0	43.0	0.0	24.6	***	20.2		
EARTH STATION OVER HORIZON FROM ITS OWN SATELLITE															
CANPESTD	-125.0	56.9	-89.0	USACTSTC	32.9	4.9	45.6	31.6	0.0	24.6	***	4.7			
	-125.0	52.8	-95.2	USACTSTC	33.8	5.8	46.3	32.3	0.0	24.6	***	5.7			
	-125.0	49.8	-95.2	USACTSTC	30.5	2.5	45.6	31.6	0.0	24.6	***	2.5			
	-125.0	70.0	-106.0	USACTSTC	41.8	13.8	34.7	20.8	0.0	24.6	***	11.8			
	-125.0	49.8	-95.2	USACTSTC	30.5	2.5	45.5	31.5	0.0	24.6	***	2.4			
	-125.0	52.0	-100.0	USACTSTC	35.0	7.0	44.6	30.7	0.0	24.6	***	6.8			
EARTH STATION OVER HORIZON FROM ITS OWN SATELLITE															
CANDMSTD	-125.0	70.0	-95.0		99.0	99.0	99.0	99.0	99.0	99.0	***	99.0			
	-125.0	70.0	-80.0		99.0	99.0	99.0	99.0	99.0	99.0	***	99.0			
	-125.0	60.0	80.0		99.0	99.0	99.0	99.0	99.0	99.0	***	99.0			
EARTH STATION OVER HORIZON FROM ITS OWN SATELLITE															
USACTSTC	-139.0	41.8	-87.7	CANPESTD	33.8	5.8	44.9	30.9	44.9	30.9	33.8	58.3	99.0	***	5.7
	-139.0	48.0	-89.5	CANPESTD	21.9	-6.1	40.7	26.8	40.7	26.8	21.9	46.4	99.0	***	-6.1
ATNTSPNT	-70.0	0.0	0.0		99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	***	99.0

ORIGINAL PAGE IS
OF POOR QUALITY

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*  
* SCENARIO DESCRIPTION  
*  
* THIS SET HAS FOLLOWING CHARACTERISTICS. NO BLOCKING, RAIN ATTN,  
* ALL POINTS SELECTED, 1 CHANNELIZATION, PROT RATIO  
* CALCULATED. POINTING ERRORS, C/N WITH G/T AND TEMP, BEAM CALL  
* BY ID, NOM FREQ=1, SOME CARRIERS OVER HORIZON  
* DB. RAIN MARGIN. CANONSTD HAS C/N WITH MANY FEEDERLINKS  
* USES FAST ROLL-OFF SATELLITE ANTENNA AND CPM FEEDERLINK ANTENNA.  
* -- SAME AS TEST0005 EXCEPT NO BLOCKING --  
* ---- TEST FOR OVER THE HORIZON CARRIER ----  
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AGGREGATE TOTAL SUMMARY FOR TEST0008

BLOCK SERVICE AREA	SAT LONG	TEST POINT LAT-LONG	CO-CHANNEL C/I MARGN	UPPER-ADJ C/I MARGN	LOWER ADJ C/I MARGN	NEXT-UPPER C/I MARGN	LOWER ADJ C/I MARGN	TOTAL MARGIN
AHORZTST	-100.0	40.0 60.0						
	-100.0	40.0 70.0						
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER								
CANPASTD	-144.5	70.0 -141.0	64.6	33.6	50.0	33.0	33.0	18.1
	-144.5	70.0 -120.0	64.6	33.6	35.0	18.0	18.0	13.4
	-144.5	60.0 -120.0	64.6	33.6	37.4	20.4	20.4	14.9
	-144.5	49.0 -114.0	64.6	33.6	32.0	15.0	15.0	11.1
	-144.5	70.0 -130.0	64.6	33.6	42.8	25.8	25.8	17.1
	-144.5	49.0 -120.0	64.6	33.6	41.2	24.3	24.3	16.6
	-144.5	81.0 -145.0	64.6	33.6	42.3	25.4	25.4	16.9
	-144.5	70.0 -130.0	64.6	33.6	43.0	26.0	26.0	17.1
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER								
CANPESTD	-125.0	56.9 -89.0	32.9	1.9	45.6	28.6	28.6	1.7
	-125.0	52.8 -95.2	33.8	2.8	46.3	29.3	29.3	2.7
	-125.0	49.8 -95.2	30.5	-0.5	45.6	28.6	28.6	-0.5
	-125.0	70.0 -106.0	41.7	10.7	34.7	17.8	17.8	8.8
	-125.0	49.8 -95.2	30.5	-0.5	45.5	28.5	28.5	-0.6
	-125.0	52.0 -100.0	35.0	4.0	44.6	27.7	27.7	3.8
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER								
CANDNSTD	-125.0	70.0 -95.0	-65.0	-96.0	99.0	99.0	99.0	-96.0
	-125.0	70.0 -80.0	-65.0	-96.0	99.0	99.0	99.0	-96.0
	-125.0	60.0 80.0						
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER								
USACTSTC	-135.0	41.8 -87.7	33.8	2.8	44.9	27.9	44.9	2.7
	-135.0	48.0 -89.5	21.9	-9.1	40.7	23.8	40.7	-9.1
RECEIVER OVER HORIZON FROM ITS OWN TRANSMITTER								
ATNTSPNT	-70.0	0.0 0.0	91.0	60.0	99.0	99.0	99.0	60.0

APPENDIX D
NUMERICAL LIMITS ON SCENARIO DATA REQUESTS ARE LISTED,

The SOUP5 system has some limits on the maximum number of tables which can be included in each scenario. These numbers were chosen to be large enough to accommodate almost every conceivable scenario. The limits below are incorporated in SOUP5 Version 3 Mod 8 (SOUP5V3.8). They can be changed at each installation if desired. See Appendix B of the Programmer's Manual. The current values at each installation can be found on lines 5-25 of DATA.P1.

LIMIT	VALUE
Number of Service Areas	300
Number of feederlink transmitters	2400
Number of earth station receivers	2400
Number of point overrides	500
Number of points in one point set	50
Number of scenario description lines	10
Number of channelizations for up	15
Number of channelizations for down	15
Number of channel families for up	40
Number of channel families for down	40
Number of protection ratio templates up, down, and total	3

LIMIT	VALUE
Number of ellipses, up and down	360
Number of antennas up and down	160
Number of Gain tables up and down	60
Number of Gain entries up and down	1500

APPENDIX E
ERROR HANDLING, ERROR MESSAGES AND EDITING PROCEDURES *ALSO LISTED*

An important function of SOUP5 is editing the data for errors and inconsistencies.

When Program 1 detects an error, it takes the following steps:

- Prints an error message describing the error in the input echo report (Unit IURPT)
- Assigns an error severity code; the codes are described below:
 - 20 Minor error, no effect
 - 21 Minor error, no probable effect
 - 22 Results may be affected but calculations can continue
 - 97 Part 1 and Part 2 may continue, but Part 3 cannot process
 - 98 Part 1 may continue, but Part 2 cannot process
 - 99 Part 1 cannot continue.
- Stores the value of the highest error code encountered.
- If the highest error code is greater than or equal to the stop code, (Columns 1-2 of 1st control record), the program stops with a stop code of 99.

ERROR NUMBER	ERROR MESSAGE	ERROR LEVEL
3	Premature end of file in control data	99
4	Error reading control data for P2-P5 - one of the records does not match FORTRAN format	99
5	Requested scenario not found in scenario file - check for misspelled scenario in control file	99
6	Error reading scenario file - a record in the scenario file does not match its FORTRAN format	99
7	Scenario file is out of sort - The numbers in the card type field or subcard field are not the correct sequence	21
8	Premature end of scenario file - Check that number of service areas (cols 65-67 of Record 3 in Data.Scenario) is not greater than number of service areas in scenario.	99
9	Out of space in array LKEY - the array designed to hold all the unique requested keys for antennas, point sets, beams, protection ratios, service areas, channel families, and gain tables is filled	99
10	Out of space in tree arrays - the arrays designed to hold all tree data (see error 9 above) is filled	99

ERROR NUMBER	ERROR MESSAGE	ERROR LEVEL
11	Too many description lines truncating to max See Appendix D	20
12	To many service areas truncating to max. See Appendix D	98
13	Too many channelizations - number of channelizations exceeds maximum. See Appendix D	99
14	Channelization file is out of sort - Channelization should be sorted of 1st 4 bytes, character ascending	21
15	End of Chzth data while searching for key - a non-existent channelization was requested - possible misspelling	97
16	Channelization key not in Chztn data - check for misspelling (note: channelization key is character, not numeric. "01" is not the same as " 1").	97
17	Premature end of parameter file	99
18	Error reading parameter file - record does not match FORTRAN format	99
19	Too many channel families - number of requested channel families exceeds maximum. See Appendix A	99

ERROR NUMBER	ERROR MESSAGE	ERROR LEVEL
20	Channel family key not in Chztn data - check for misspelling (note: channelization key is character, not numeric. "01" is not the same as " 1"	98
21	Too many channels in channel table - number of channel exceed maximum. See Appendix D	99
22	Using Down/Up Chztn for up/down paths - a channelization flagged as UP is being used for down path or vice versa	22
23	End of RARC Param data while searching for key - cannot find key, check for misspelling	97
24	Protection ratio set key not in data - cannot find key, check for misspelling	97
25	Too many protection ratio template sets - number of protection ratio templates exceeds maximum allowed. See Appendix D	99
26	End of Prot Ratio data while searching for key - cannot find protection ratio key, check for misspelling	97
27	RARC param data out of sort - See Note C	21
28	Not all beams found - A non-existent beam requested. Check for misspelling	97

ERROR NUMBER	ERROR MESSAGE	ERROR LEVEL
29	End of beam data while searching for key - A non-existent beam requested, check for misspelling	97
30	Point set file out of sort - See Point set section of 3.3.2 for sorting sequence	21
31	Point set key not in point set data - check for misspelling	97
32	Too many points in point table - number of points in table exceeds maximum. See Appendix D	99
33	End of point set data while searching for key - cannot find requested key. Check for misspelling	97
34		98
35	Too many points in a point set - number of points in set exceeds maximum. See Appendix D	99
36	Gain table file out of sort - Gain tables should be sorted on first 4 bytes, character ascending	21/99
37	Gain table key not in gain table data - request for a non-existent key check for misspellings	97
38	Illegal gain pattern type Pattern must be 1 to 15	97

ERROR NUMBER	ERROR MESSAGE	ERROR LEVEL
39	Too many gain tables - number of requested gain tables exceeds maximum. See Appendix D	99
40	End of gain table data while searching for key - request for a non-existent gain table	97
41	Too many beams - number of requested beams exceeds maximum. See Appendix D	99
42	End of antenna data while searching for key - request for a non-existent antenna, check misspellings	97
43	Too many antennas - number of requested antennas exceeds maximum See Appendix D	99
44	Not all antennas found - request for a non-existent antenna, check for misspellings	98
45	Too many gain table entries - gain table entry table exceeds maximum size. See Appendix D	99
46	Not all gain tables found - request for a non-existent gain table	22
47	Not all channel families found - request for a non-existent channel family (see error 20)	98

ERROR NUMBER	ERROR MESSAGE	ERROR LEVEL
48	Not all protection ratios found - request for a non-existent protection ratio set. Check for misspellings	21
49	Too many point overrides - number of point overrides exceeds maximum. See Appendix D	99
50	No diameter or cov ang specified for E-ant. Earth antenna has a diameter/coverage angle ≤ 0 .	97
51	Diameter or Cov. Ang specified for S-ant - satellite antenna coverage angle is set by beam data, not antenna data. Number on antenna record will be ignored	22
52	Channels are out of order - channels must be listed in ascending order	22
53	Protection ratio data out of sort	21
54	Too many protection ratio sets - number of requested protection ratio sets exceeds maximum	99
55	Circular antenna has unequal axes	22
56	LAT. of PNT. > 70 Deg. rain attenu = 0 dB - the rain attenuation model is not valid within 20 degrees of pole. Rain attenuation for this point will be set at 0 dB	20

ERROR NUMBER	ERROR MESSAGE	ERROR LEVEL
57		97
58	Up/down data not present for requested calcs. A up or down calculation was requested and the up or down scenario cards are not present	98
59	Delta-G zero or negative	98
60	No satellite power type flag. - The satellite power flag was not set either as a default or in the service area	98
61	Satellite power set to zero - Satellite transmitter power is specified as 0 Watts	98
62	No FLT power flag - The FLT power flag was not set either as a default, or in the service area	98
63	FLT power set to zero - FLT transmitter power is set to 0 Watts	98
64		
65	No Earth Antenna specified - The Earth antenna key fields, both in the Scenario header and service area cards are blank	98
66	No satellite antenna specified - Similar to Note 65 above	98
67		

ERROR NUMBER	ERROR MESSAGE	ERROR LEVEL
68	dB value too large (small), possible problem - A dB value has an absolute value so large that an underflow or overflow problem may exist.	97
69	No rain zone specified - The rain zone fields in both the point set header and the point itself are both blank	98
70	No protection ratio specified - A needed protection ratio key field has been left blank	98
71	Transmit antenna used as a receiver	98
72	Receive antenna used as a transmitter	21
73	Receive antenna has no noise temperature specified	97
74	Receive antenna has no noise/figure-of-merit flag	97
75	Min. FLT antenna diameter must be > 0 This field (cols 16-19 of RARC record 1 in Data.Parameters) must be > 0, even if antenna gain type 4 is not used.	
76	P2 Graphs phi-zero must be > 0	98
77	Channel Bandwidth must be > 0	22
78	Channel separation should be > 0	22
79	Channel noise bandwidth should be > 0	98

ERROR NUMBER	ERROR MESSAGE	ERROR LEVEL
80	Channel separation should be > 0	98
81	Peak-to-peak deviation should be > 0	98
82	Channel number exceeds no. of channels	20
83	Percent-worst-month must be non-negative	98
84	Read error in Requirement file	99
85	Read error in Ellipse file	99
86	Read error on reading a point override card.	99
87	Single Vtm chnl incompatible with group flag - either turn group flag (col 75 scenario Record 3) to "N" or single victim channel (col 62-63 of same record) to zero	22
88	No points selected from set. - No points of the point types requested in the point selection code exist in the point set	98
89	Report option unspecified, set to "NO"	20
90	Scenario field protected - cannot override - The installation has designated a scenario field (marked by astericks in the control override output reports) as protected from control overrides.	22

ERROR NUMBER	ERROR MESSAGE	ERROR LEVEL
91	All interference calculations inhibited - The existence of optional Control Records 9, 10 or 11 indicate that the user wants to calculate interference only into selected service areas, but none of the requested area names match service areas in scenario	97
92	Max Phi/Phi0 cannot be negative - Put 0 or positive number in col. 59-61 of Scenario Record 3	98

INSTRUCTIONS AS TO

APPENDIX F

HOW TO ENTER A PROTECTION RATIO TEMPLATE ARE GIVEN.

The template in Figure 2 has five segments, as noted in the caption. Now we shall find the necessary parameters for the segments.

- Segment 1
 - Upper limit
The upper normalized frequency of this segment is $-.982$
 - Offset
The offset is the normalized frequency coordinate of some point on the segment whose value we know. The labeled end point is the obvious choice, $-.982$
 - Slope
 86 from the figure
 - Segment value at offset
We have chosen the end point as the offset point. At this point the value is -22 dB.

- Segment 2
 - Upper limit
 $-.248$

- Offset
We can choose either end point for the offset. Arbitrarily we choose the upper end point, $-.248$
- Slope
Slope is equal to $(\Delta PR / \Delta \text{ frequency})$ where Δ means difference

$$((22) - 0) / ((-.982) - (-.248)) = 29.97$$

- Segment Value at Offset
The value at the upper end point, chosen as offset, = 0.

- Segment 3

- Upper limit
.248
- Offset
We choose .248 (because the slope is zero, we could use any number as an offset - the segment-value at-offset will always be zero)
- Slope.
0
- Segment-value-at-offset
0

- Segment 4

- Upper limit
.82
- Offset
We choose .82
- Slope
As in Segment 2, we calculate 29.97

- Segment-value-at-offset
-22
- Segment 5
 - Upper limit
As this last segment extends indefinitely the upper limit has no meaning, we leave it blank
 - Offset
We know the value at only one point, .92, so we choose it as an offset
 - Slope
-86
 - Segment value at offset
-22.0

FIGURE 2
SAMPLE PROTECTION RATIO TEMPLATE

The following template is composed of 5 segments (each segment is labeled with a circled number). The two end segments 1 and 5, extend indefinitely. The segments are also designated.

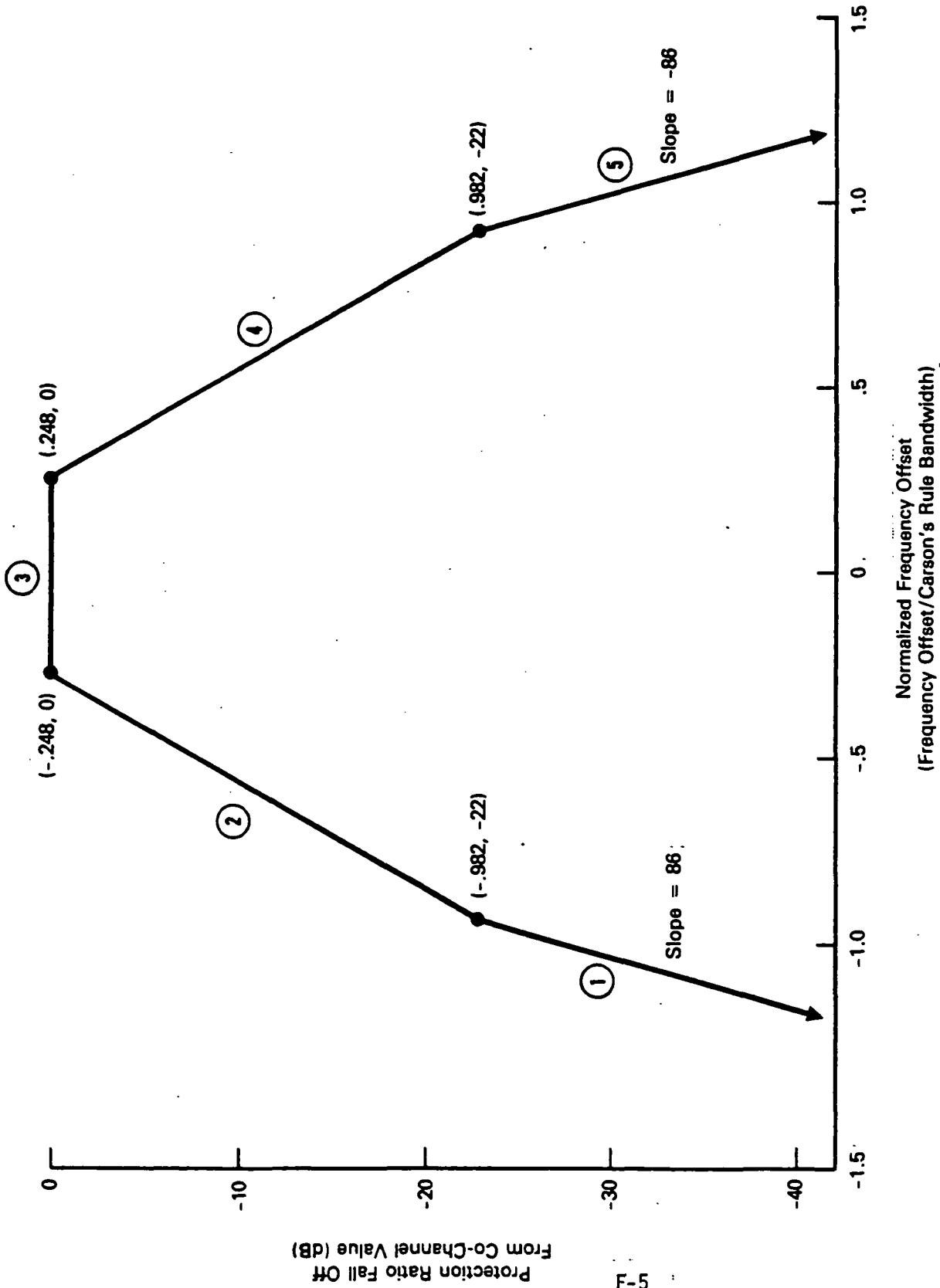


FIGURE 2

APPENDIX G
RELATION BETWEEN RARC PARAMETER, CHANNELIZATION, CHANNEL
FAMILIES, AND INTERFERENCE CATEGORIES *see list*

The channelization data contains the following information:

- Lowest Center Frequency. The center frequency of channel 1
- Number of channels. Used only to determine whether the RARC parameters are violated
- Channel Bandwidth. Also used only to determine the whether the RARC parameters are violated
- Channel Separation. Used to determine the center frequency of all channels except channel 1
- Channel Noise Bandwidth. Used only to determine carrier to noise ratio
- Top Baseband Frequency and Peak-to-Peak Deviation. Used to determine Carson's Rule Bandwidth for protection ratio calculations.

Figure 3 gives a sample of a set of RARC parameters, channelization and a set of channel families.

A violation of the RARC parameters would occur only if a channel in the family overlaps one of the two guard bands. Channel one does not overlap the guard band, but if the number of channels in the channelization is greater than 36, the upper channels will overlap the upper guard band and the user will be warned. The L, M, and H on each channel family illustrate the nominal frequency the user will get for each channel family by specifying the low, median, or high nominal frequency option. As mentioned above, this frequency is used for all gain and attenuation calculations.

The interference categories between the four families are calculated using the channel numbers only (the effect of the bandwidth is taken into account during the calculation of protection ratio from the template (Section VIII.D above)).

We discuss some of the interference categories between the four families below, using the notation $X \succ Y$ to designate channel family X interfering into channel family Y.

- $AA \succ AA$, $BB \succ BB$, $CC \succ CC$, and $DD \succ DD$ all co-channel (obviously!)
- $AA \succ BB$
All channels receive lower adjacent interference
- $AA \succ CC$
Most channels in CC receive both next-upper-adjacent and next-lower-adjacent interference simultaneously.
- $AA \succ DD$
Here we have both co-channel, next-upper-adjacent and next-lower-adjacent interference categories simultaneously.

- BB > AA
All channels are upper adjacent
- BB > CC
Lower adjacent

Other family pairs are done in an analogous fashion.

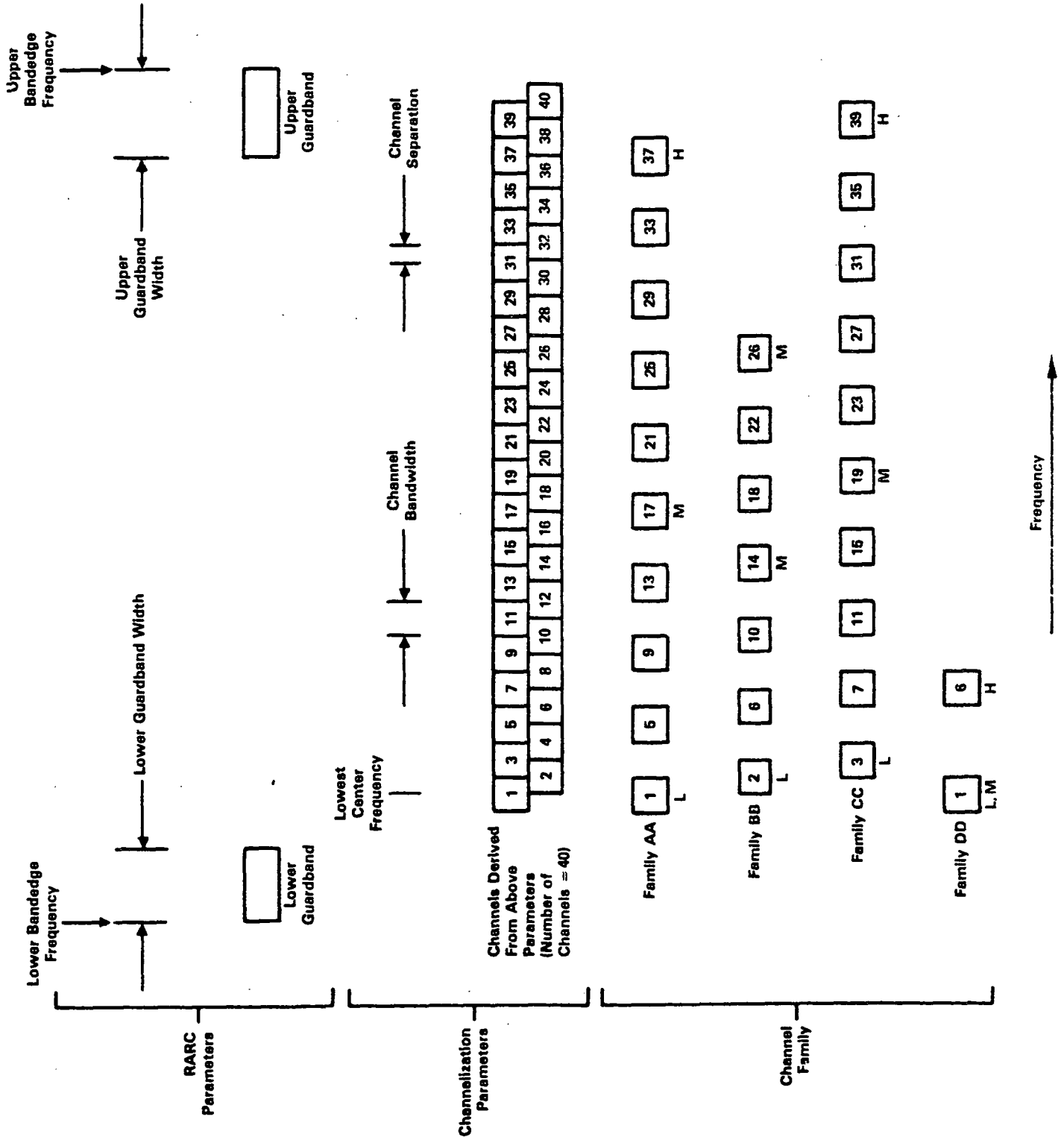


FIGURE 33

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