Comments Legend:

A = Common path; check antenna (aiming, height above ground, focus, feed, feedline, T/R switch)

T = Tx Path; Tx perf worse than Rx (check PA, other Tx components)

R = Rx Path; Rx perf worse than Tx (check LNA, other Rx components)

N = Near field; Antenna too large for test range to be far field (reduced antenna gain due to short test range)

10 GHZ	MDS (Rx	rest)						x) to least	"Rx NF" su	
Operator	Call			Dish Size	Calc Ant	IF noise floor	IF S+N/N	MDS 500	Rx NF	antenna, feedline, relay or LNA problem
Operator	Juli			(in)	Gain	dBFS 2500	dB 2500	at rx ant	(incl losses)	
Pete	K6TJ			48	39.4	-91.8	42.3	-183	3.3	pretty good (R?); barely in far field
Oliver	KB6BA			32	35.8	-91.0	41.2	-182	8.0	good
Gary	K6MG			36	36.9	-68.1	38.4	-179	4.7	T,A: dish focus?
Goran	AD6IW			23.6	33.2	-83.5	36.1	-177	3.3	T,A
Oliver #2	KB6BA			18.1	30.9	-93.3	35.9	-177	1.2	good
Brian	WA6QDP			18.1	30.9	-74.5	34.7	-176	2.4	pretty good (R?)
Brian	W6BY			18.1	30.9	-76.8	33.9	-175	3.2	pretty good (R?)
Mike	K6ML			23.6	33.2	-90.2	33.8	-175	5.6	R? A?
Brian	K6OJM			23.6	33.2	-83.8	32.4	-173	7.0	A?
Scott	AF6RT			18.1	30.9	-99.4	31.7	-173	5.4	A?
Paul	AA6PZ			36	36.9	-107.9	25.8	-167	17.3	R? A?
				30	00.0	107.5	20.0	.01	17.0	N. A.
David	KI6CLA			18.1	30.9	-96.4	8.1	-148	29.7	A: dish focus; feedline loss
	KI6CLA ERP (Tx	Test)	Dish	18.1		-96.4	8.1		29.7	A: dish focus; feedline loss
10 GHz	ERP (Tx	Test) PA Out	Dish Size	18.1	30.9	-96.4	8.1	-148	29.7	
			Size	18.1 expe	30.9	-96.4	8.1 sort by <u>Me</u>	-148 asured ERP	29.7	A: dish focus; feedline loss
10 GHz	ERP (Tx	PA Out		expe	30.9 cted ERP Calc	-96.4 SA	8.1 sort by <u>Me</u> dB	-148 asured ERP Meas	29.7 Meas -	A: dish focus; feedline loss
10 GHz	ERP (Tx	PA Out dBm	Size (in)	expe Calc Ant Gain	cted ERP Calc ERP	-96.4 SA dBFS	8.1 sort by <u>Me</u> dB Atten	-148 asured ERP Meas ERP	29.7 Meas - Calc	A: dish focus; feedline loss Meas - Calc is negative if below expectati
10 GHz of the contract of the	ERP (Tx Call K6TJ	PA Out dBm 39.0	Size (in) 48	expe Calc Ant Gain 39.4	cted ERP Calc ERP 78	-96.4 SA dBFS -23.5	8.1 sort by <u>Me</u> dB Atten 0	-148 asured ERP Meas ERP 78	Meas - Calc -1	A: dish focus; feedline loss Meas - Calc is negative if below expectati pretty good; barely in far field
10 GHz Operator Pete Oliver	ERP (Tx Call K6TJ KB6BA	PA Out dBm 39.0 40.2	Size (in) 48 32	expe Calc Ant Gain 39.4 35.8	cted ERP Calc ERP 78 76	-96.4 SA dBFS -23.5 -23.9	8.1 sort by Mea dB Atten 0 0	-148 asured ERP Meas ERP 78 77	29.7 Meas - Calc -1 1	A: dish focus; feedline loss Meas - Calc is negative if below expectati pretty good; barely in far field good
10 GHz of Operator Pete Oliver Goran	Call K6TJ KB6BA AD6IW	PA Out dBm 39.0 40.2 47.0	Size (in) 48 32 23.6	expe Calc Ant Gain 39.4 35.8 33.2	cted ERP Calc ERP 78 76 80	-96.4 SA dBFS -23.5 -23.9 -27.4	sort by Me. dB Atten 0 0 0	Meas ERP 78 77 74	Meas - Calc -1 1 -6	A: dish focus; feedline loss Meas - Calc is negative if below expectati pretty good; barely in far field good T,A: PA power supply
10 GHz of Operator Pete Oliver Goran Brian	Call K6TJ KB6BA AD6IW WA6QDP	PA Out dBm 39.0 40.2 47.0 42.0	Size (in) 48 32 23.6 18.1	expe Calc Ant Gain 39.4 35.8 33.2 30.9	30.9 cted ERP Calc ERP 78 76 80 73	-96.4 SA dBFS -23.5 -23.9 -27.4 -28.7	sort by Me-	-148 Meas ERP 78 77 74 73	Meas - Calc -1 1 -6 0	A: dish focus; feedline loss Meas - Calc is negative if below expectati pretty good; barely in far field good T,A: PA power supply good
Operator Pete Oliver Goran Brian Mike	Call K6TJ KB6BA AD6IW WA6QDP K6ML	PA Out dBm 39.0 40.2 47.0 42.0 40.8	Size (in) 48 32 23.6 18.1 23.6	expe Calc Ant Gain 39.4 35.8 33.2 30.9 33.2	30.9 Cted ERP Calc ERP 78 76 80 73 74	-96.4 SA dBFS -23.5 -23.9 -27.4 -28.7 -30.5	sort by Me-	-148 Meas ERP 78 77 74 73 71	Meas - Calc -1 1 -6 0	A: dish focus; feedline loss Meas - Calc is negative if below expectati pretty good; barely in far field good T,A: PA power supply good A?
Operator Pete Oliver Goran Brian Mike Oliver #2	Call K6TJ KB6BA AD6IW WA6QDP K6ML KB6BA	PA Out dBm 39.0 40.2 47.0 42.0 40.8 39.0	Size (in) 48 32 23.6 18.1 23.6 18.1	expe Calc Ant Gain 39.4 35.8 33.2 30.9 33.2 30.9	30.9 cted ERP Calc ERP 78 76 80 73 74 70	-96.4 SA dBFS -23.5 -23.9 -27.4 -28.7 -30.5 -31.3	sort by Me dB Atten 0 0 0 0 0 0	-148 Meas ERP 78 77 74 73 71 70	Meas - Calc -1 1 -6 0 -3	A: dish focus; feedline loss Meas - Calc is negative if below expectation pretty good; barely in far field good T,A: PA power supply good A? good pretty good A?
Operator Pete Oliver Goran Brian Mike Oliver #2 Brian	Call K6TJ K86BA AD6IW WA6QDP K6ML KB6BA W6BY	PA Out dBm 39.0 40.2 47.0 42.0 40.8 39.0 35.0	Size (in) 48 32 23.6 18.1 23.6 18.1 18.1	expe Calc Ant Gain 39.4 35.8 33.2 30.9 33.2 30.9 30.9	30.9 Cted ERP Calc ERP 78 76 80 73 74 70 66	-96.4 SA dBFS -23.5 -23.9 -27.4 -28.7 -30.5 -31.3 -36.6	sort by Me- dB Atten 0 0 0 0 0 0 0	-148 Meas ERP 78 77 74 73 71 70 65	Meas - Calc -1 1 -6 0 -3 0 -1	A: dish focus; feedline loss Meas - Calc is negative if below expectation pretty good; barely in far field good T,A: PA power supply good A? good pretty good A? A? A?
Operator Pete Oliver Goran Brian Mike Oliver #2 Brian Paul	Call K6TJ K86BA AD6IW WA6QDP K6ML KB6BA W6BY AA6PZ	PA Out dBm 39.0 40.2 47.0 42.0 40.8 39.0 35.0 36.0	Size (in) 48 32 23.6 18.1 23.6 18.1 18.1 36	expe Calc Ant Gain 39.4 35.8 33.2 30.9 33.2 30.9 30.9 36.9	30.9 Cted ERP Calc ERP 78 76 80 73 74 70 66 73	-96.4 SA dBFS -23.5 -23.9 -27.4 -28.7 -30.5 -31.3 -36.6 -37.6	sort by Me- dB Atten 0 0 0 0 0 0 0	-148 Meas ERP 78 77 74 73 71 70 65 64	Meas - Calc -1 1 -6 0 -3 0 -1 -9	A: dish focus; feedline loss Meas - Calc is negative if below expectation pretty good; barely in far field good T,A: PA power supply good A? good pretty good A?
Operator Pete Oliver Goran Brian Mike Oliver #2 Brian Paul Brian	Call K6TJ KB6BA AD6IW WA6QDP K6ML KB6BA W6BY AA6PZ K6OJM	PA Out dBm 39.0 40.2 47.0 42.0 40.8 39.0 35.0 36.0	Size (in) 48 32 23.6 18.1 23.6 18.1 18.1 36 23.6	expe Calc Ant Gain 39.4 35.8 33.2 30.9 33.2 30.9 30.9 36.9 33.2	30.9 Cted ERP Calc ERP 78 76 80 73 74 70 66 73 68	-96.4 SA dBFS -23.5 -23.9 -27.4 -28.7 -30.5 -31.3 -36.6 -37.6 -38	sort by Me- dB Atten 0 0 0 0 0 0 0 0 0	-148 Meas ERP 78 77 74 73 71 70 65 64 63	Meas - Calc -1 1 -6 0 -3 0 -1 -9 -5	A: dish focus; feedline loss Meas - Calc is negative if below expectation pretty good; barely in far field good T,A: PA power supply good A? good pretty good A? A? A?

Z4 GHZ	MDS (Rx	Test)		sorted by	MDS 500	: most sensit	ive (ant + R	x) to least	"Rx NF" su	ıbtracts antenna gain; poor NF may indicate
Operator	Call			Dish Size	Calc Ant	IF noise floor	IF S+N/N	MDS 500	Rx NF	antenna, feedline, relay or LNA problem
Operator	Call			(in)	Gain	dBFS 2500	dB 2500	at rx ant	(incl losses)	
Mike	K6ML			23.6	40.5	-108.9	22.4	-182	5.8	good rx
Oliver	KB6BA			32	43.2	-81.1	8.4	-167	23.1	R?; dish not in far field
Pete	K6TJ			48	46.7	-101.0	1.5	-156	38.2	R? in the weeds; dish NOT in far field
Paul	AA6PZ			24	40.7	-95.7	1.2	-154	33.3	R? A? in the weeds
24 GHz	FRP (Tv	Tost)							Tost Pana	SNP was poor: low quality measurement
24 GHz	ERP (Tx	Test)	Dish							e SNR was poor; low quality measurement
24 GHz	ERP (Tx	Test) PA Out	Dish Size	Calc Ant	Calc	SA	dB	Meas		e SNR was poor; low quality measurement Meas - Calc is negative if below expectation
		,		Calc Ant Gain	Calc ERP	SA dBFS	dB Atten	Meas ERP		
		PA Out	Size						Meas -	
Operatoı	Call	PA Out dBm	Size (in)	Gain	ERP	dBFS	Atten		Meas - Calc	Meas - Calc is negative if below expectation
Operatoi Oliver	Call KB6BA	PA Out dBm 35.6	Size (in) 32	Gain 43.2	ERP 79	dBFS -96.5	Atten	ERP 1	Meas - Calc -77	Meas - Calc is negative if below expectation good, even tho dish not in far field