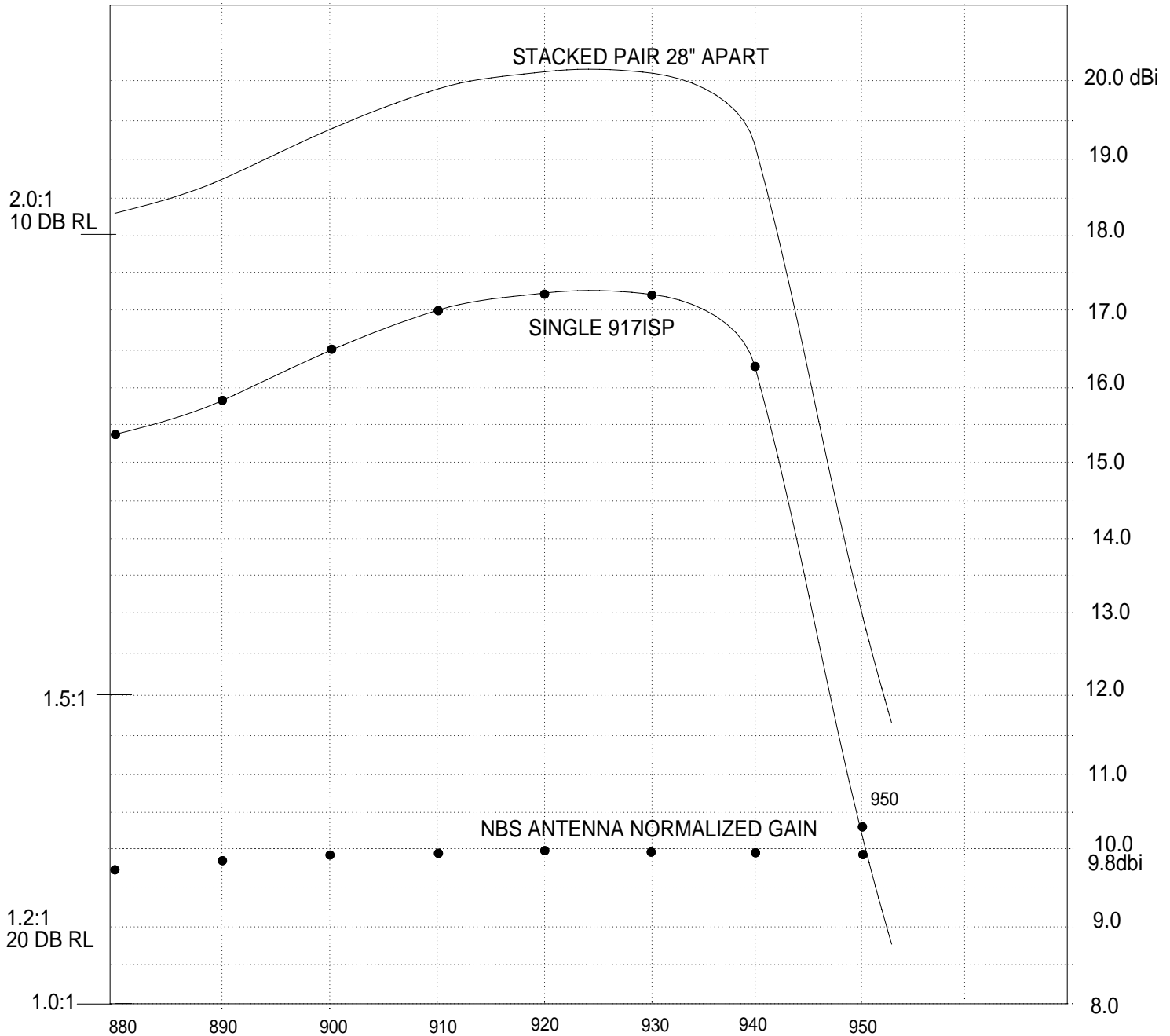


# ANTENNA RANGE VSWR / GAIN PLOT

DATE: MAR. 13-2004  
 ANTENNA UNDER TEST: 917ISP  
 EQUIPMENT USED:  
 WAVETEK SWEEPER, MODEL #2001  
 WAVETEK 15" OSCILLOSCOPE  
 HP 415E SWR METER.  
 TELONIC RHOTECTOR AND TELONIC CALIBRATED MISMATCHES  
 WEINCHEL AND HP 50 OHM TERMINATIONS AND PADS.  
 REFERENCE ANTENNAS NBS REFERENCE STANDARD GAIN DUAL DIPOLES OVER A  
 1 LAMBDA REFLECTOR ( NOMINAL 7.7 DBD\* ) DBI = DBD + 2.14 DB.



These are the actual gain curves taken using a pair of identical NBS reference standard antennas which were built to to NBS dimensions for use at 840-950 MHz.

The curve above shows the normalized curve of one NBS as the source and one as the AUT( Antenna Under Test). Normalized means the gain curve is just 1/2 of the actual difference between the two standars as measured on the range.

The nominal gain of the NBS reference standard is 9.84 dBi but actually peaks above 9.84 dBi by afew tenths of a dB.