

Antennas and Electromagnetic Systems

Faculty, staff, and students from NMSU's Electrical Engineering Dept. and the Physical Science Laboratory have decades of experience in the successful development of reliable, high performance rocket and missile antenna systems. NMSU/PSL antennas developed over the last several decades have included many different configurations as needed to satisfy a wide variety of requirements for DOD development and NASA research programs.

Flight-proven NMSU/PSL antennas include simple, high reliability antennas needed for critical functions, such as flight termination systems. Other recently developed configurations include sophisticated multi-band micro-strip antenna systems required for the demanding environments associated with instrumentation of target missile systems. Antenna modeling, measurement, characterization, and qualification testing assets are several of the necessary capabilities that NMSU/PSL maintains for support of antenna development capabilities.

NMSU's experienced personnel will apply proven designs and techniques to satisfy flight test requirements whenever possible. New technology, techniques, and resources developed by NMSU staff also are routinely applied to modify these proven designs or develop new systems for satisfaction of new flight test requirements as needed. Modeling and testing are conducted as needed to assure that antenna systems provided for flight test applications will satisfy critical performance and survivability criteria.



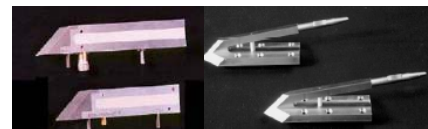
Decades of successful telemetry, flight termination system, and other command up-link antenna performance during hundreds of missions.



Proven, reliable performance in hostile missile launch environments



Wrap-around multi-band microstrip and patch antenna systems



Qualified Flight Termination System (FTS) antennas



Antennas and Electromagnetic Systems Price List

Prices shown valid 1 July 2007

Spike and Quadraloop Antennas

	<i>Price</i>
UHF Spikes (2) - FTS qual	\$6,060
UHF Quadraloop (4)	\$9,368
UHF Quadraloop (4) w/out harness	\$8,361
UHF Quadraloop (2)	\$5,792
UHF Quadraloop (2) w/out harness	\$4,806
UHF Quadraloop (2) - FTS qual	\$10,246
S-Band Quadraloop (2)	\$6,097
S-Band Quad (2) - w/out harness	\$4,574
Quadraloop Frequency Change	\$2,738

Dual Frequency Wrap-around Microstrip Antennas

	<i>Price</i>
14" Arlon (MWSF25p14-xxxx-yyyy)	\$9,802
17" Arlon (MWSF25p17-xxxx-yyyy)	\$11,929
17" Rogers (MWSF62p-xxxx-yyyy)	\$14,563
22" Arlon (MSWF25p22-xxxx-yyyy)	\$12,623
22" Rogers (MWSF62p22-xxxx-yyyy)	\$15,592
22" Rogers Broadband (MWSF62p22-xxxx-yyyy-BB100)	\$15,832
22" Rogers Broadband w/side-entry (MWESM6257RV22-1575-2250-BB100)	\$20,379
50" Rogers Broadband (MWSF6257RV50-1575-2300-BB100)	\$42,230

Single Frequency Wrap-around Microstrip Antennas

	<i>Price</i>
14" Arlon (MWSF25p14-xxxx)	\$7,908
17" Arlon (MWSF25p17-xxxx)	\$9,261
17" Rogers (MWSF62p-xxxx)	\$11,774
22" Arlon (MSWF25p22-xxxx)	\$9,948
22" Rogers (MWSF62p22-xxxx)	\$13,349

Patch Antennas

	<i>Price</i>
Single Freq. Patch w/out harness (Single patch MPSF62p-xxxx-rr.r)	\$6,079
Single Freq. Patch Array w/harness (2 patch array MPSF62p-xxxx-rr.r-2)	\$6,441
Single Frequency Patch Freq. Change	\$9,862
Dual Frequency Patch w/out harness (Single patch MPSF62p-xxxx-yyyy-rr.r)	\$8,201
Dual Frequency Patch w/harness (2 patch array MPSF62p-xxxx-yyyy-rr.r-2)	\$8,782
Dual Frequency Patch Freq. Change	\$14,751

Antenna Testing and Characterization

	<i>Price</i>
Radiation Distribution Pattern (RDP)	\$1,601
Voltage Standing Wave Ratio (VSWR)	\$263
Antenna Calibration	\$263
Connector Pull Test	\$263
Thermal Test	\$1,061
Vacuum Test at Ambient Temperature	\$1,061
Vibration Test	\$742

Contact info: Danny Molina (505) 646-9268
TelemetryProducts&Solutions@psl.nmsu.edu