



Antenna Development Corporation - AntDevCo

Introduction:

Antenna Development Corporation, Inc. (*AntDevCo*) is a New Mexico sub-chapter S corporation formed in June of 2005 by Dr. Bruce Blevins and Thomas Greenling. We have spun off from the Physical Science Laboratory at New Mexico State University.

The company's charter is to develop and manufacture high technology antennas and antenna hats for rockets, missiles, and spacecraft. We concentrate on custom solutions for broad beamwidth, low gain antennas for the space and near-space environment. We also provide contract design and analysis services for space communications with concentration on the TDRSS project, both at the ground station and for TDRSS customer spacecraft antennas.

The company has embraced the ISO philosophy from its inception and is ISO 9001 registered. Quality is our primary concern and we strive to make continuous improvements in all of our processes and products.

Facilities:

AntDevCo operates out of an 1100 square foot office/high bay facility and 600 square foot warehouse in Las Cruces, New Mexico. We subcontract certain activities to qualified suppliers including New Mexico State University with its Physical Science Laboratory antenna test facilities, machine shops, and highly qualified professors and scientists, RF test labs, circuit board manufacturers and local machine shops. We have developed close relationships with these external sources and have had very good success with the production of quality devices.

Equipment/Resources:

Network Analyzers: HP8510/8514 (two systems), HP8754A, HP8752C.

Synthesizers: Gigatronics 2408AL (three)

Sweep Generators: HP8350 (two)

Frequency Counters: HP5340 (two)

RF Matrix Switch: AntDevCo designed unit.

Antenna Range Receiver: Scientific Atlanta 1783

Anechoic Chamber: In construction, 1 – 20 GHz

Thermal Test Chamber: Thermotron EL1200, -70 to +200 C

Power Meters: HP432

Electromagnetic Software: Designer (Ansoft), NEC, NEC-BSC, In-house antenna analysis software.

NC Router: (sheet metal processing) – ShopBot 4' X 8'

Temperature monitoring: National Inst. USB-TC

Mechanical Shock: Pneumatic cannon

Assembly tools: Laboratory ovens, binocular microscope, calipers, weight scale, 12-ton press, clean bench, eyelet press, etc.

History:

The two principals of *AntDevCo* have an aggregate experience of more than 40 years of antenna design, test, and manufacture. Dr. Blevins has designed antennas for experimental astrophysics receivers, radars, and many small spacecraft and missiles. Thomas Greenling began his antenna career with the repair of submarine antennas while in the Navy and has also designed numerous antennas for spacecraft and missiles. Dr. Blevins owned and operated his own company, (Tesota Products Antenna Division - TPAD) in the 90's and started his production of antennas for small spacecraft at that time. Blevins and Greenling then worked together at the Electromagnetics group at PSL from 1997 through 2005 on many antenna programs for manufacturing and test. We have personally been the leaders in the development of the low gain antennas for the TERRIERS, HETE, THEMIS, MIGHTYSAT, ALEXIS (Blackbeard), GENESIS, STARDUST, ROADRUNNER, ST-5, and HESSI spacecrafts – to name just a few. AntDevCo also designed and delivered several antennas for a DOD spacecraft GPS receiver system. Further, we were the design engineers for a number of sounding rocket, ballistic missiles, and ballistic missile target vehicle antennas as subcontractors for BMD and other programs. For example, Dr. Blevins led the PSL effort to develop and manufacture dual GPS antennas for the MOD-7 wafer used in the sustaining flight tests of the Minuteman III missile. We have also designed and developed a number of antenna hats (couplers) for spacecraft and missile antenna systems. Finally, both of the principals of AntDevCo have significant experience at the TDRSS program in systems design and analysis.

ISO 9001:2000 Registration No. 41211811



Antenna Development Corporation

CAGE Code: 46ER1

NAICS Code: 334220

Address: 151 South Walnut Street, #B6
Las Cruces, NM 88001-2614

www.AntDevCo.com (575) 541-9319

BBlevins@AntDevCo.com (575) 635-3528

TGreenling@AntDevCo.com (575) 644-1527

AntDevCo Copyright © 2009 All Rights Reserved Corporate Data
Precision Antennas for Spacecraft, Rockets, and Missiles

ADC-0512012131 R1 – Approved for release – No ITAR restrictions – updated 10/13/2009