



13900 Lincoln Park Drive
Suite 400
Herndon, VA 20171

Phone: (703) 796-1420

Fax: (703) 464-9381

FEDERAL COMMUNICATIONS COMMISSION
1270 Fairfield Road
Gettysburg, PA 17325-7245
717-338-2694 (Fax)

Application Narrative for Explanation of Use

Per the application of the New Form 442 section 7, below are the narrative statement exhibits in detail:

a. Proposed Use

Blackbird Technologies is the Original Equipment Manufacturer (OEM) of several GPS devices used by the US federal government, military branches and other federal agencies. Within our building we are unable to receive the GPS satellite signals due to shielding from metal walls and window film. We propose to expand and install our GPS re-radiating equipment in our training room, development laboratory, software development, and quality assurance test area to allow reception of the L1 GPS signals.

The GPS re-radiating equipment will be supplied by GPS Networking (710A W. 4th St., Pueblo, CO 81003). The Heliacx cable comes from a supplier of CommScope Inc.

GPS Repeater Equipment Part Numbers:

L1GPSA-N	Roof Antenna, L1 GPS 38dB LNA
NALDCBS1X2	Network Amplified Splitter (2-way)
NALDCBS1X4	Network Amplified Splitter (4-way)
MLA20RDCB	Line Amp 20dB Gain
L1RRKPA-S	Antenna, Passive Retransmit Antenna
AL4RPV-50	Coax Cable, HELIAX 0.500
LMR400	Coax Cable, LMR400
LMR240	Coax Cable, LMR240

b. Objectives

1. Provide indoor GPS re-radiation at our indoor training room;
2. Provide indoor GPS re-radiation at our engineering laboratory for design, test, and troubleshooting new and existing equipment;
3. Provide indoor GPS re-radiation at our software development room;
4. Provide indoor GPS re-radiation at our quality assurance room.

c. Contribution to the Radio Art

Blackbird Technologies is developing improved GPS devices with enhanced accuracy, greater efficiency, and smaller size.