Athena Technologies Inc. 3721 Macintosh Drive Warrenton VA 20187

FEDERAL COMMUNICATIONS COMMISSION 1270 Fairfield Road Gettysburg PA 17325-7245

Application Narrative for Proposed Special Equipment Program

## **Proposed Program**

Athena Technologies, Inc. is the Original Equipment Manufacturer (OEM) and leading developer of control and navigation solutions for unmanned aerial vehicles (UAVs), unmanned ground vehicles (UGVs) and military and civilian manned aircraft. Athena's technological expertise in controls design is critical to the success of a wide variety of UAVs including the US Army's Shadow Tactical UAV, the Air Force's Subscale Aerial Target, DARPA's Organic Air Vehicle, NASA's Mars Flyer Demonstrator, Alenia's Sky-X and many others. With the steady increase in GPS requirements in all facets of our business, it is our intent to incorporate GPS technologies into our products to further enhance their benefit and usefulness to our customers. Our proposed set up is already in use and specified in the approved application to re-radiate GPS Signals (WD2XTF). We propose to install the GPS re-radiating equipment at our development and test laboratory to allow reception of GPS signals within this facility.

The proposed equipment is of a design and power output similar to a kit manufactured by GPS Source which has been licensed (WD2XTF) to re-radiate in their test lab.

GPS Repeater Kit P/N: GPSRKL12-P110/5-N

GPS Roof Antenna: 3G1215A-XT-1

## Objectives

We seek to accomplish the following objectives:

- 1. Illumination of our development and test laboratory with re-radiated GPS Signals
- 2. Further design, development and enhancement of existing products and new product testing
- 3. Ability to troubleshoot and repair previously manufactured equipment

## Contribution to Radio Art

Projects are currently under way at Athena Technologies Inc. to provide better and more useful GPS solutions to incorporate GPS-derived information (position, speed, and heading) in a variety of innovative applications to improve state-of-art testing, design and quality control for the development of UAV and UGV projects.