

L-3 Communications, CS-W  
Special Temporary Authorization  
Date: 07/30/2015  
File No.: EL306391  
STA File No.: 0848-EX-ST-2015  
License: ??????

### **Application Background:**

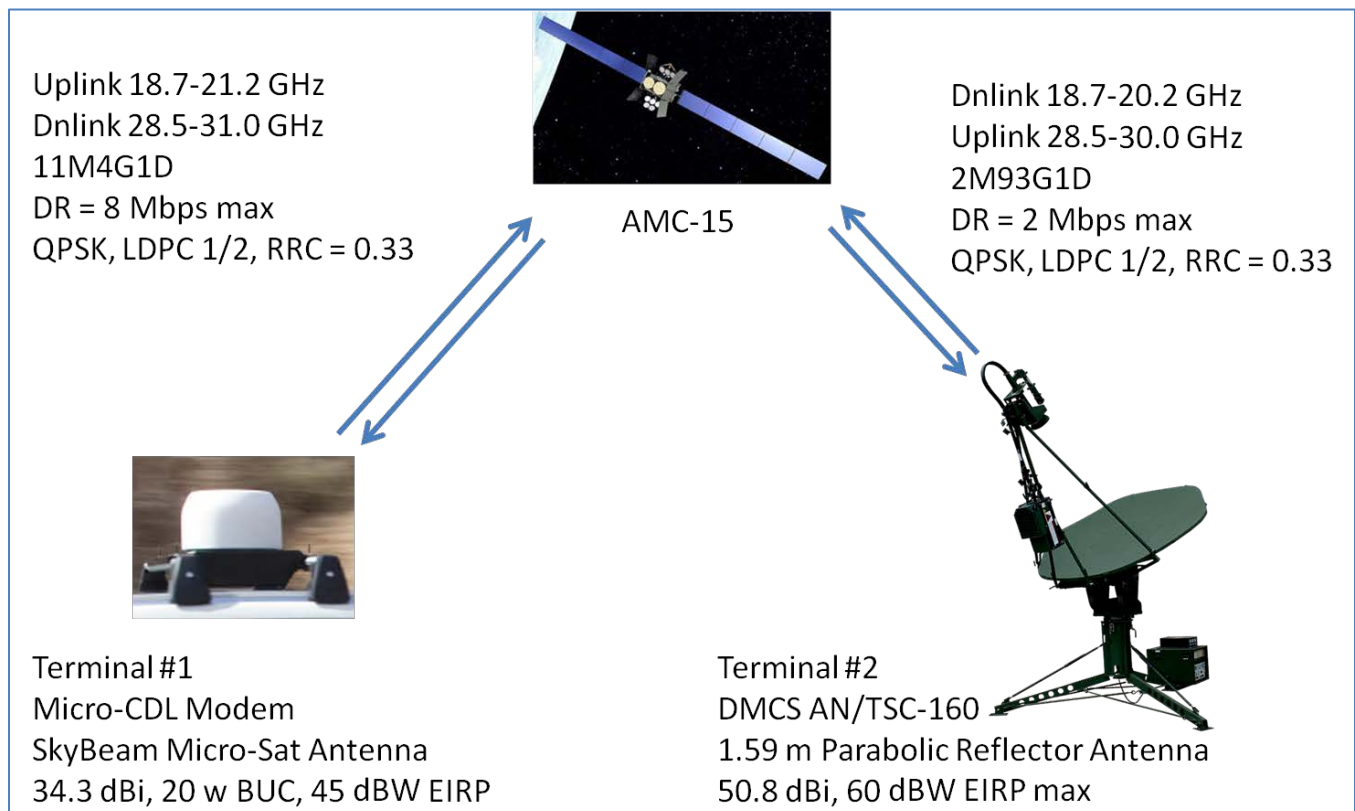
The purpose of this project is to ground mobile test a new antenna and experiment with SATCOM data links for application to ground mobile SATCOM communications for military applications.

### **Concept of Operations:**

The concept of operation is the classic Satcom terminal thru the satellite to another Satcom terminal. Satcom terminal #1 is a ground mobile terminal. Terminal #1 will be mounted to a vehicle that will roam in the 100 km radius area centered at Evanston, WY. Testing will include on-the-move and on-the-halt operation of terminal #1. Terminal #2 is a fixed location ground station located in Salt Lake City, Utah on the L-3 CS-W campus. Satellite services will be through AMC-15. See Figure 1.

### **Spectrum Requirements:**

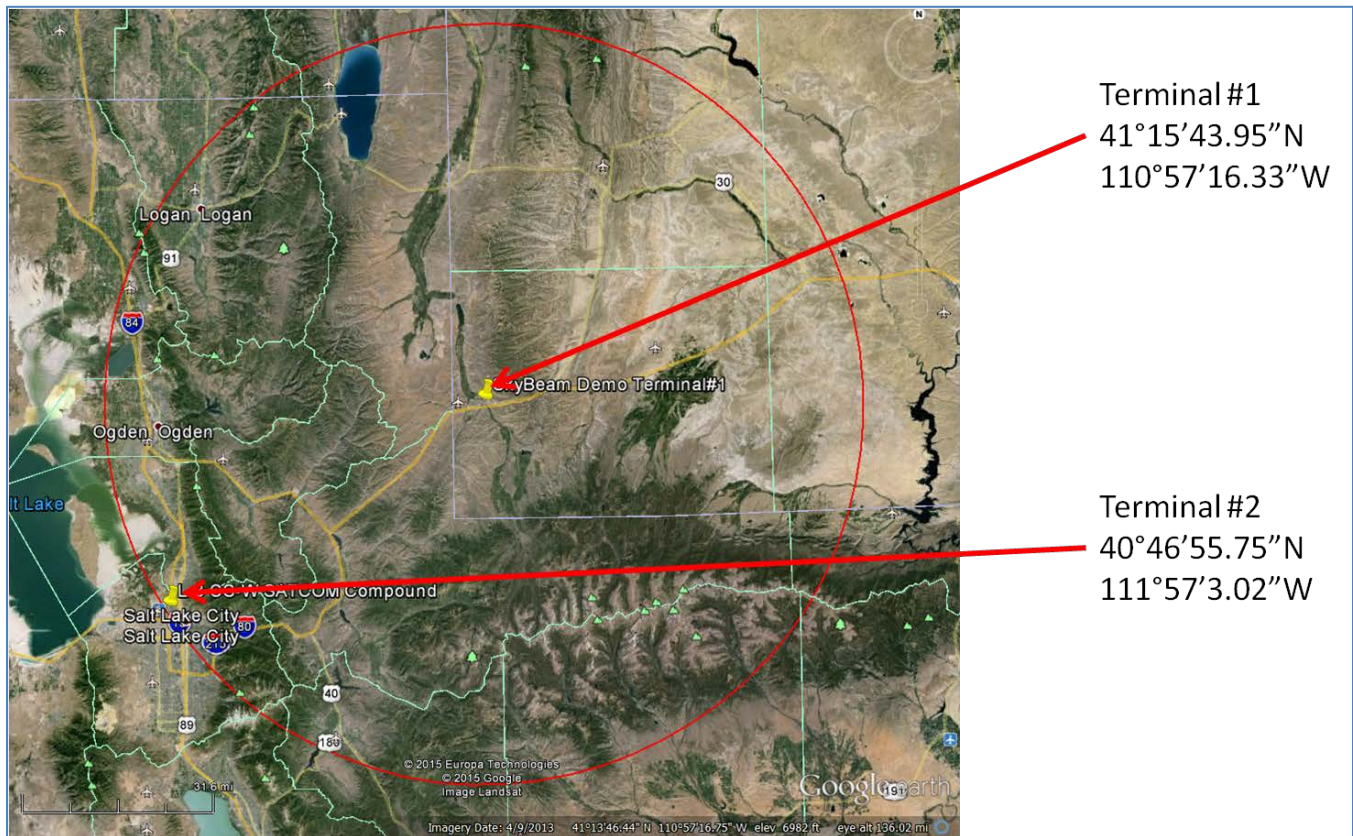
Terminal #1 will transmit to the satellite in the 18.7-21.2 GHz frequency range and receive in the 28.5-31.0 GHz band. Terminal #2 will transmit to the satellite in the 28.5-30.0 GHz band while receiving in the 18.7-20.2 GHz frequency range. The specific operating frequency band(s) will be assigned by the satellite provider.



**Figure 1 Concept of Operations**

## Location of Testing:

Terminal #1 will roam inside the 100 km radius circular area centered in Evanston, WY at the coordinates indicated in Figure 2. Terminal #2 is located at the L-3 CSW campus in Salt Lake City, Utah identified by the coordinates shown in Figure 2.



**Figure 2 Location of Testing**