

SJV Description of Research Project

American Aerospace has been working with energy companies on new technologies to improve infrastructure inspection. The purpose of this research project is to continue the testing of Unmanned Aerial Systems (UAS) carrying airborne sensors to inspect pipelines and facilities in the San Joaquin Valley area. The UAS being used for this project are larger and more complex than smaller drones that fall under FAA Part 107.

American Aerospace is in the process of obtaining airspace access for UAS through a Certificate of Authorization (COA) covering the area depicted in Figure 1. The approvals will allow the UAS to fly within the boundary (shown in green), at an altitude up to 5,000' AGL. Figure 2 shows the same boundary (shown in blue) with the addition of the center point and radius identified in Form 442. The ground station will also be placed within the boundary, at positions best suited for ground operations while providing adequate radio link connectivity between the UAS and the ground station.

American Aerospace has been collaborating with the FAA on the use of RF spectrum for the purpose of UAS Command and Control (C2) links. For this project we are seeking FCC approval to use S Band (2360MHz – 2390MHz) and C Band (5350MHz – 5470MHz), similar to the C2 links recently approved under Call Sign WL2XBH at the UAS Range in Pendleton, OR.

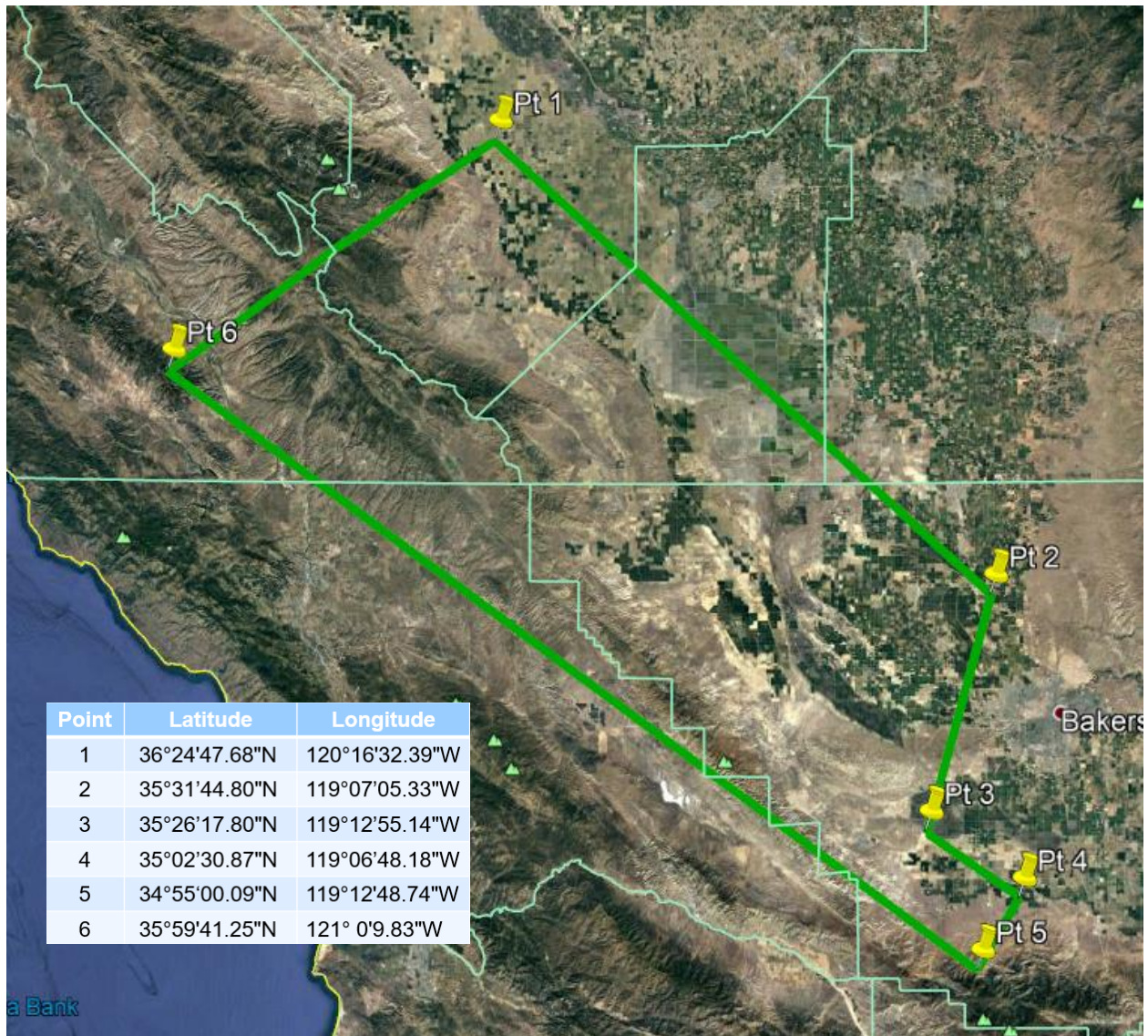


Figure 1



Figure 2