

NASA SIO APT70 Vehicle Flight Location in Class G Airspace

Background:

This defines the NASA SIO APT70 vehicle flight area for the Class G operations in Atoka County, Oklahoma.

This request is to increase max operating altitude 400 ft to 1200 ft AGL.

Ref existing FCC license call sign WK2XQO. File Number 0916-EX-CN-2019

Ref existing FAA approved NGT 190968 & 190969

Ref FAA A70-099-002-PL Rev A: Program Letter for the APT70 UAS For SIO

Ref FAA A70-099-002-SC Rev A: Safety Checklist for the APT70 UAS

Flight Area:

The area of operation is a restricted access property with a 63.5 square miles area in Choctaw Nation, Atoka County, Oklahoma, which is inside the current Choctaw Nation IPP flight area, to evaluate C2 over a long distance. The Choctaw nation IPP is a federal initiative by the FAA and US Dept of Transportation study integration of UAS into the National Airspace.

The flight area is defined by the following corner coordinates.

NW corner: 34°38'41.2"N 95°52'57.2"W

NE corner: 34°39'29.0"N 95°44'12.8"W

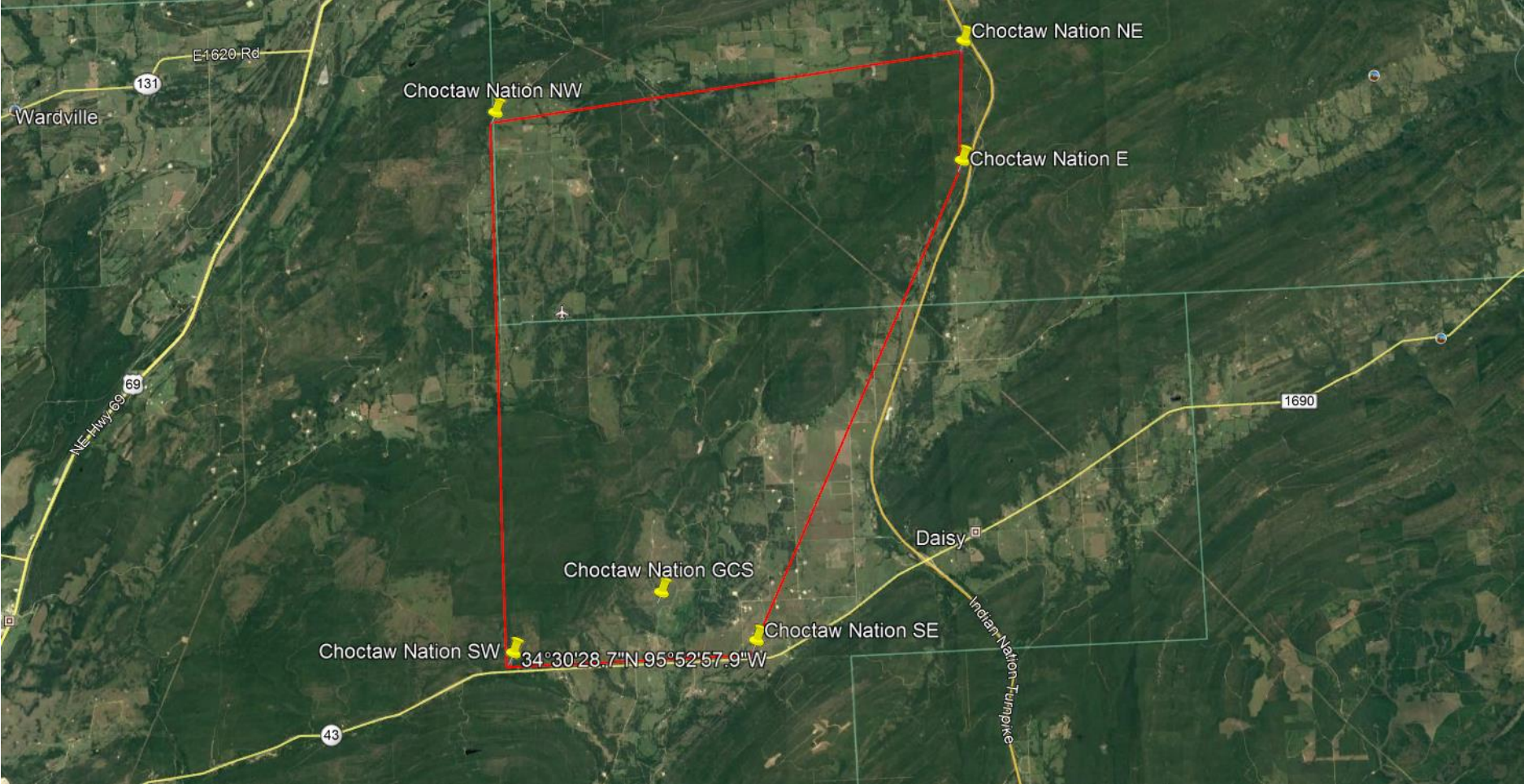
East corner: 34°37'37.5"N 95°44'22.0"W

SE corner: 34°30'30.1"N 95°48'32.7"W

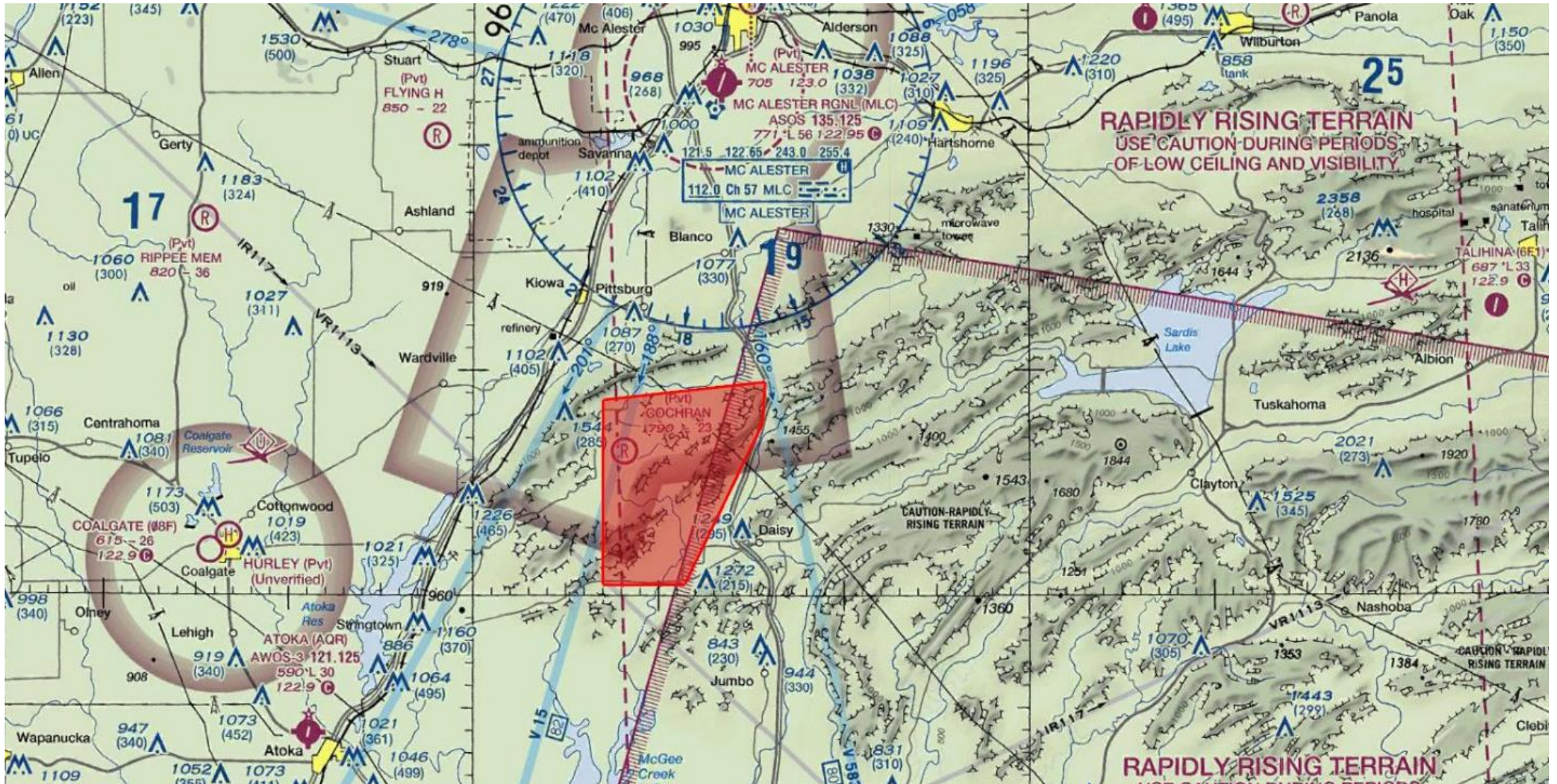
SW corner: 34°30'28.7"N 95°52'57.9"W

The Ground Control Station (GCS) is located at 34°31'17.05"N 95°50'14.25"W.

Atoka County, TX Flight Area



Atoka County, OK Flight Area



Operating Procedure

1. Ground Auto Tracker Antenna setup within radius of operation at indicated base/mobile location as the Ground Data Terminal.
2. Ground Auto Tracker Antenna automatically switched to Omni antennas during close-up operation.
3. Aircraft fly to destination within radius of operation of the mobile station. Max AGL altitude 1200 ft.
4. Ground Auto Tracker Antenna automatically switched to Directional antenna if necessary during flight.
5. Aircraft reached destination and proceed back to home base.
6. Ground Auto Tracker Antenna automatically switched to Omni antennas during close-up operation.
7. Aircraft landed and shutdown.