Unmanned Aircraft Systems Test Site Data Collection and Analysis

Purpose

- The research on Unmanned Aircraft Systems (UAS) Test Site Data Collection and Analysis will collect and analyze UAS Test Site data and make recommendations to improve data quality and consistency.
- The data requires analysis to determine technical and operational trends to derive conclusions that support critical safety decisions required to integrate UAS into the National Airspace System (NAS).

Background

- The FAA Modernization and Reform Act (FMRA) of 2012 mandates the establishment of six test ranges for the integration of UAS into the NAS. These UAS Test Sites will provide operational and technical data to assist in the efforts to integrate UAS safely into the NAS.

Projected Benefit of Research

- Collect relevant information from the Test Sites to facilitate UAS integration into the NAS.
- Validate and analyze the collected information to show trends and clearly communicate them via dashboards.
- Share the collected and analyzed information, and methods with other stakeholders.

Research Approach

- Data collection and analysis will assist in creating safety related metrics, and help draft the final report to congress due in FY17.
- Validation of available data:
  - Evaluate operational flight data recorded in FAA's Certificate of Authorization(COA)-online system
  - UAS monthly operational reports
  - UAS incident reports
  - UAS accident reports
- Store and process data for analysis and reporting.

Research Partners

- Lone Star UAS Center (LSUASC)
- Northern Plains UAS Test Site (NPUASTS)
- Alaska Center for Unmanned Aircraft Systems Integration (ACUASI)
- Nevada Institute for Autonomous Systems (NIAS)
- Northeast UAS Airspace Integration Research Alliance (NUAIR)
- Mid-Atlantic Aviation Partnership (MAAP)

Status

- The FAA visited the test sites to determine how to address the data integrity issues with COA-online monthly reporting, and accident and incident data that is currently required from the FAA.
- Research began September 2012 and is expected to be completed September 2016.