



LONE STAR UAS
CENTER OF EXCELLENCE & INNOVATION



**Lone Star UAS Center of Excellence and
Innovation**

CPIRA

January 17, 2019

The background of the slide is a photograph of an airport. In the foreground, there is a grassy field with some equipment. In the middle ground, there is a large, modern airport terminal building with a curved roof. In the background, there is a control tower and other airport buildings under a clear sky.

LSUASC Tasks To Success

- ❑ Educate Students
 - Support Faculty
 - Student Involvement
 - Interns/Work Study/Graduate Assistants
- ❑ Increase Knowledge
 - FAA Test Center
 - Public Safety (Air Wing 1)
 - R&D Focus Areas Research
 - Commercialization
 - Community Engagement



Technology/R&D

1

Experiential Learning

Real-world application of knowledge in a variety of clients' projects

2

Community Engagement

Engage in community projects with community partners to make a difference in local community

3

Cross-Unit Collaboration

Case studies of selected Capstone projects

4

Research Enhancement

Provide grants to further research development

5

Financial Stability

Offer competitive wages/stipend and/or college credit scholarship to recruit top-notch students to work for TAMU-CC

Research Center



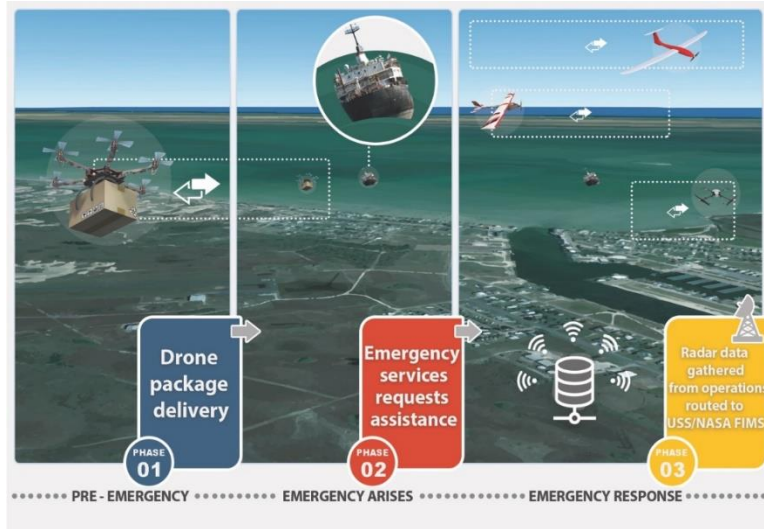
Test Site Purpose

>3,100 Sorties Flown Since FAA Certification

Stand Up And Operate A FAA UAS Test Site Designated To **Safely Integrate Civil and Public (DOD) UAS Operations Into The National Airspace (NAS).**

Guide Industry (US and Foreign) through the FAA safety and maturity process **required** to safely integrate Commercial UAS operations into the NAS.

Provide FAA R&D And Operational Data To Facilitate The **Development Of Procedures, Standards And Regulations** For Safe UAS Operations in the NAS.



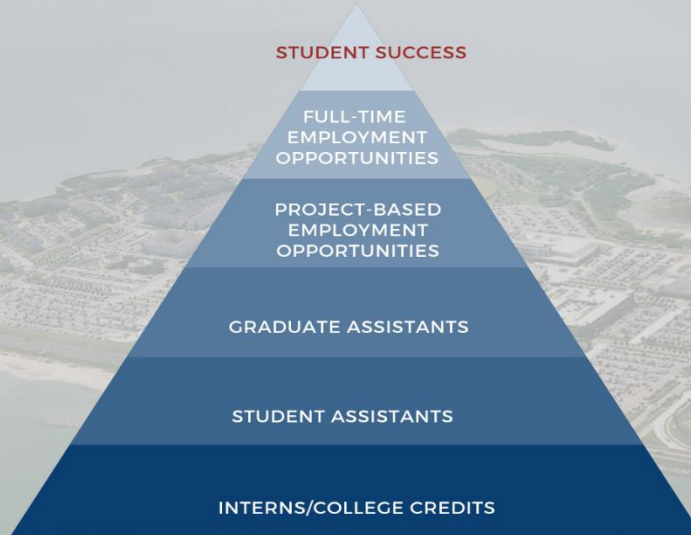
Example of recent NASA mission flown at the LSUASC



Bringing UAS to America's Skies
All Information is LSUASC Proprietary

Student Success Focus

STUDENT PYRAMID PLACEHOLDER



R&D Focus Areas

LSUASC

- **Detect and Avoid**
- **Control and Communications**
- **Human Factors**
- UAS Traffic Management
- Autonomous Behavior
- Cybersecurity
- T&E of UAS standards, processes and procedures

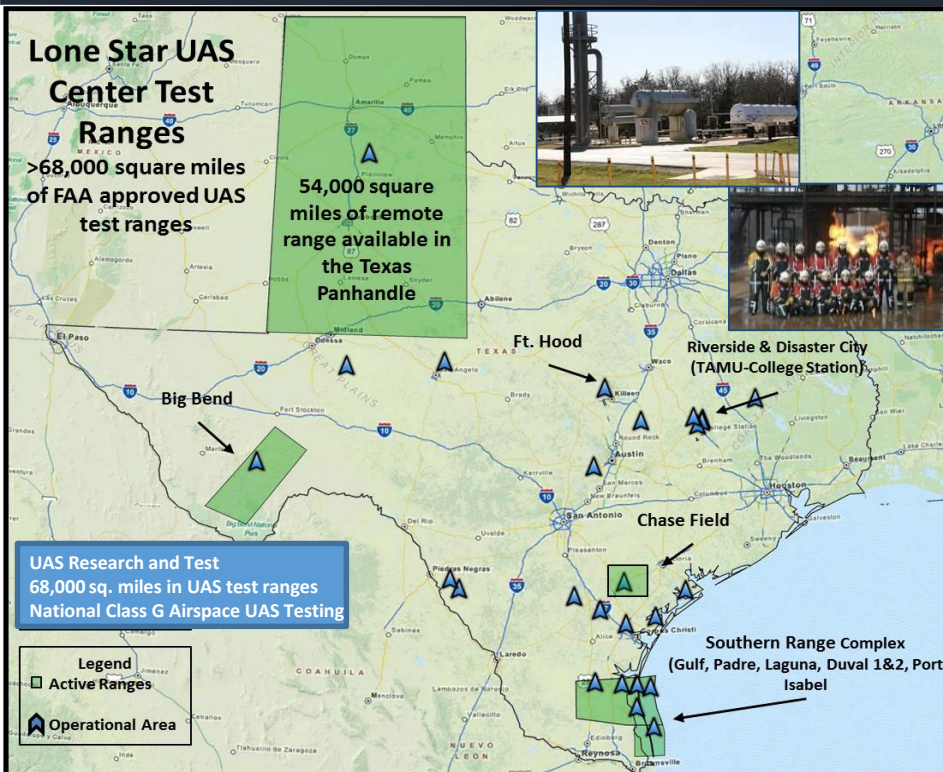
FAA

- **Detect and Avoid**
- **Control and Communications**
- **Human Factors**
- Navigation
- Surveillance
- Forecasting
- Safety, Data and Reliability



Texas Test Ranges and Infrastructure

~68,000 Square Miles, National Class G



Our Mission Control Center



Remote C2 for UAS Night Operations



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