## REMOTELY PILOTED AIRCRAFT (RPA)



#### SKYGUARDIAN/SEAGUARDIAN MQ-9B

Wing Span | 79 feet Length | 38 feet

Maximum Air Speed | 242 miles per hour

Maximum Endurance | 40 hours

#### **WORLD-WIDE IMPACT**

- Over 1,000 GA-ASI RPAs have been built
- Have flown for over 7,000,000 hours
- Flights in over 20 countries

#### **SERVICES:**

- Inspect train tracks, power lines, energy pipelines, communications infrastucture, canals, seaports; land surveys
- Monitor wildfires and floods; disaster relief
- Atmospheric and climate research
- Integration of RPAs in U.S. National Airspace System
- National and World Security



#### **SUPPORTING**

- NASA
- Department of Homeland Security
- Federal Aviation Administration
- National Guard
- Department of Defense
- First Responders
- Scientists





## SUPPORTING NASA MISSIONS



### NASA IKHANA REMOTELY PILOTED AIRCRAFT MADE BY GA-ASI

Ikhana (ee-kah-nah) is a Native American word from the Choctaw Nation meaning intelligent, conscious or aware.

- Collects data to enable scientists to:
  - » Better understand and model environmental conditions and climate
  - » Improve capabilities of remotely piloted aircraft to perform advanced missions
  - » Demonstrate technologies enabling new piloted and remotely piloted aircraft capabilities, such as flying in the National Airspace System
- Provided real time imaging of 26 major fires across nine western states, minimizing hazards to firefighters
- Supported NASA Orion Capsule splashdown



















RELIABLE COMMUNICATIONS

GA-ASI MQ-9 remotely piloted aircraft and piloted aircraft are working with NASA, California Air National Guard, and CAL FIRE to provide support for fighting wildfires and other emergencies.



- Uses advanced radar/visible light/infrared sensors and mapping software to determine the fire's location
- Provides video through smoke, fire, clouds and darkness from 27,000 feet
- Allows firefighters to map the perimeter of the fire and predict the future path of the fire
- Assists fire fighters with tactical planning, resource allocation, and decision-making
- Future uses will provide "cell phone tower in the sky" capability to provide reliable communications for all first responders





# PROVIDING DISASTER ASSISTANCE











Customs and Border Protection GA-ASI MQ-9 can fly at 276 miles per hour for 27 hours. The 36-foot-long aircraft, with a 66-foot wing span, also has a color optical and infrared cameras that can stream live video across a satellite hookup to those dealing with disaster response, showing leaks from oil rigs or blown-off roofs.

- Deployed for the 2010 Haitian earthquake and for Hurricanes Gustav, Hanna, and Ike
- Look at marinas and key ports before and after the hurricane moves through so that Federal Emergency Management Agency officials can assess damage and decide what areas are top-priority concerns after the storms, and determine emergency response routes
- Infrared capability can detect warm bodies in cold water for search-and-rescue
- Synthetic aperture radar can create a visual picture through clouds, fog, and rain, day or night



