


NOAA

Introductions

NOAA / NOAA Corps



Brief History

Vessel Missions

- Fisheries
- Survey
- Oceanographic

Aircraft Missions


- Twin Otter
- King Air
- Hurricane Hunters

Questions

Extra

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Introductions



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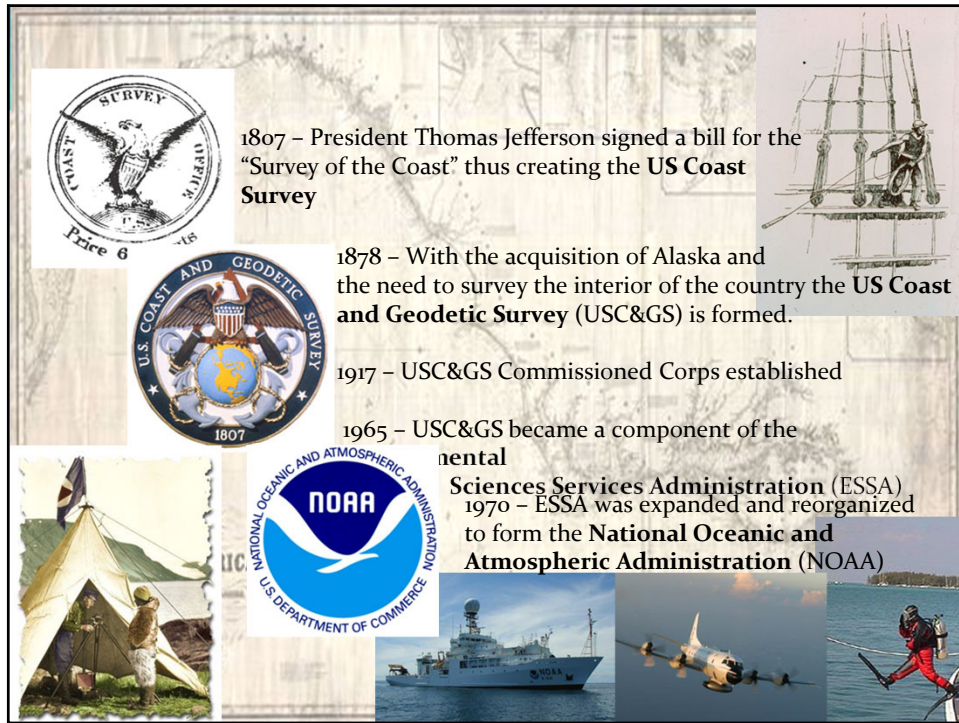
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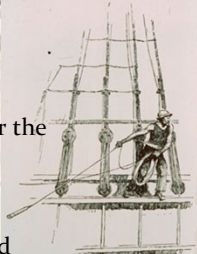

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1807 – President Thomas Jefferson signed a bill for the “Survey of the Coast” thus creating the **US Coast Survey**



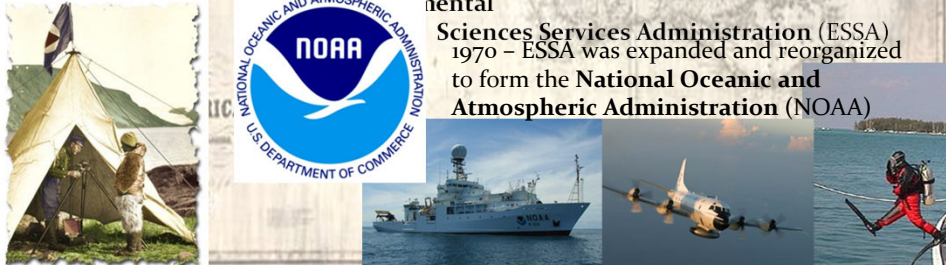

1878 – With the acquisition of Alaska and the need to survey the interior of the country the **US Coast and Geodetic Survey (USC&GS)** is formed.



1917 – USC&GS Commissioned Corps established

1965 – USC&GS became a component of the **National Sciences Services Administration (ESSA)**

1970 – ESSA was expanded and reorganized to form the **National Oceanic and Atmospheric Administration (NOAA)**



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NOAA

National Marine Fisheries Service
National Ocean Service
National Weather Service
Office of Oceanic and Atmospheric Research
Office of Marine and Aviation Operations
National Environmental Satellite, Data and Information Service

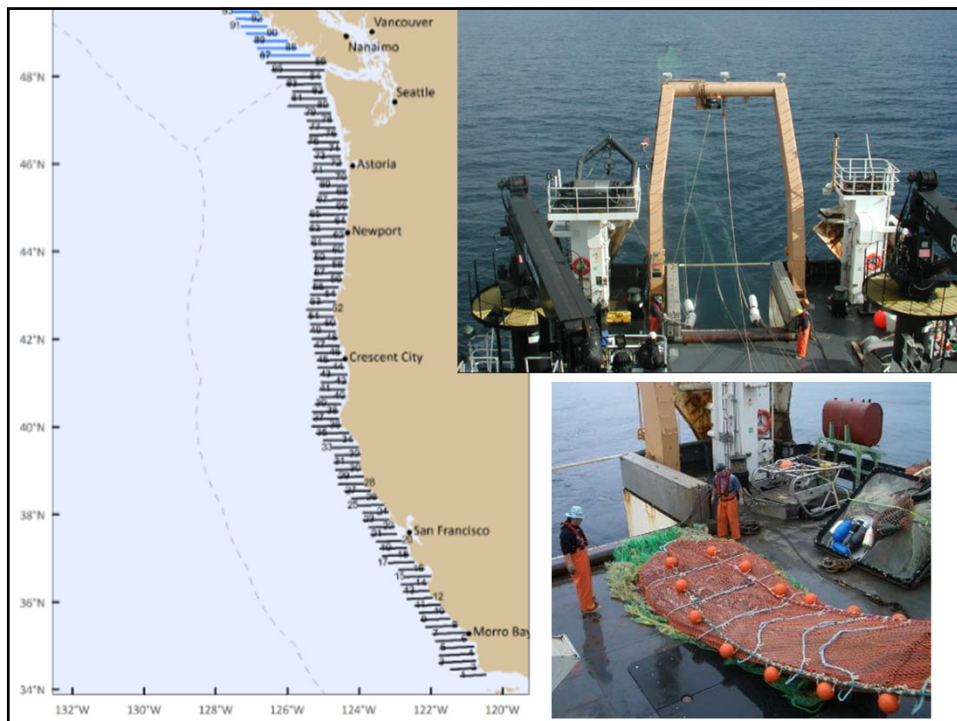
The graphic features a central image of Earth from space, with various NOAA activities overlaid: a satellite, a ship, an aircraft, a diver, and a coral reef.

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Fisheries Ships



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Survey Ships

A collage of five images related to survey ships. The top-left image shows a large white survey ship with a mast and antennas on the water. The top-right image shows a smaller white survey boat on a lake or fjord with a forested hillside in the background. The bottom-left image is a 3D visualization of a ship's sonar scan, showing a colorful, wavy pattern representing the seafloor. The bottom-middle image is a bathymetric map of the Hudson Valley shelf, showing depth contours and a color scale from 0 to 100 meters, with an exaggeration of 400. The bottom-right image shows a ship's track on a bathymetric map, with various depth contours and a color scale.

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NOAA Aircraft Operations Center *“Hurricane Hunters”*

Lakeland Linder Regional Airport
Lakeland FL


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NOAA DHC-6 Twin Otter

- *Low altitude surveys
- *Big bubble windows to take pictures
- *Can take off and land in very short distances

<https://www.youtube.com/watch?v=VVllsmCof8Q>



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NOAA King Air 350

- *Very advanced cameras
- *Uses equipment to map the coast and waterways
- *Emergency response



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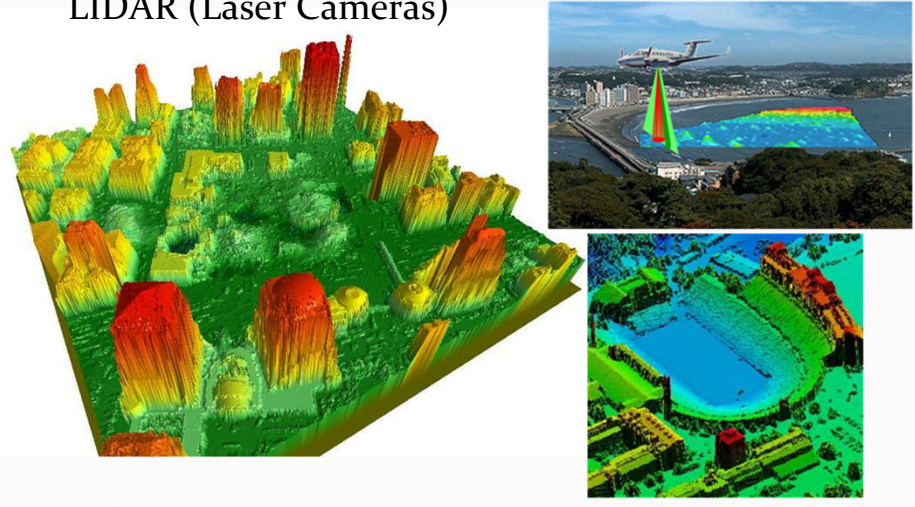
Red River Flooding

- *Very bad flooding in April 2011 due to melting snow
- *Minnesota-North Dakota border
- *Helped rescuers plan a response



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LIDAR (Laser Cameras)



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NOAA G-IV

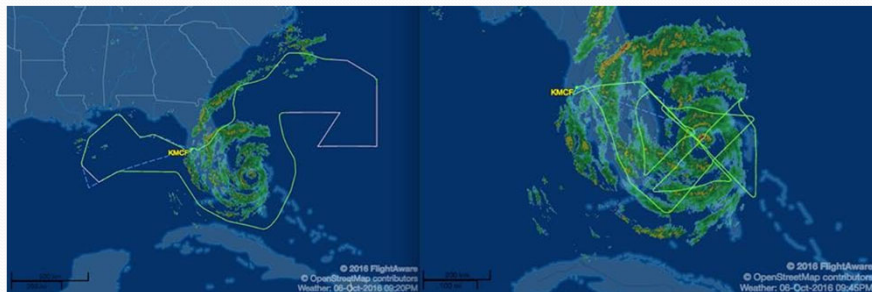
*High Altitude Hurricane Hunter

*Flies above and around the storm at 45,000ft



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G-IV (left) vs WP-3D (right) Flight Patterns Hurricane Matthew – OCT 2016



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NOAA WP-3 Orion

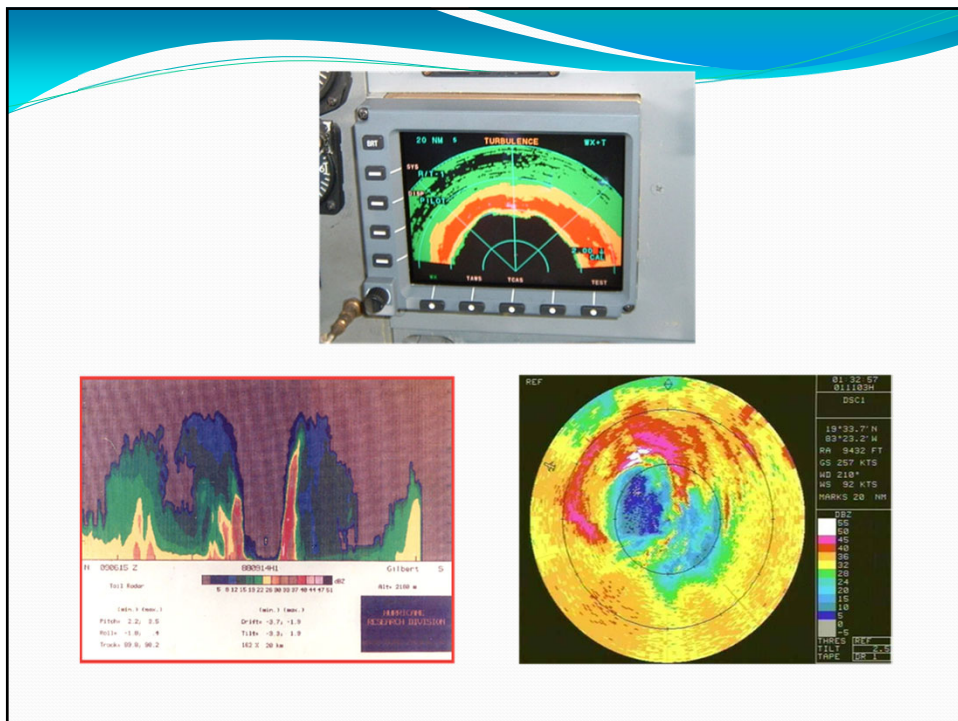
- *Hurricane Hunters
- *Flies inside of the storm
- *Crew of 18-22 includes pilots, engineers, navigators, and scientists
- *Uses dropsondes to gather data



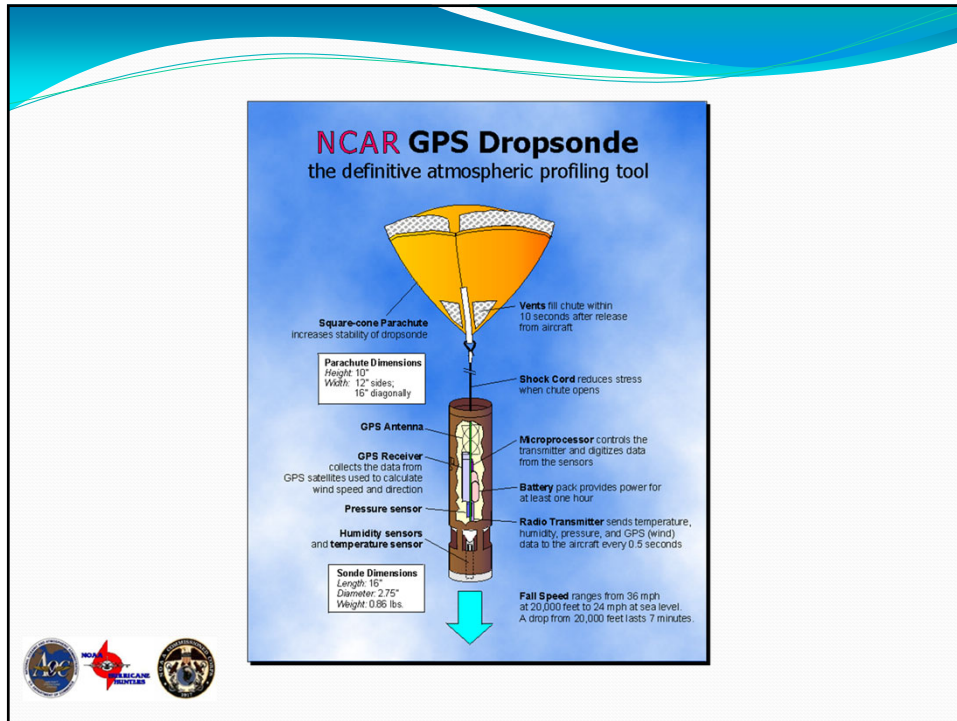
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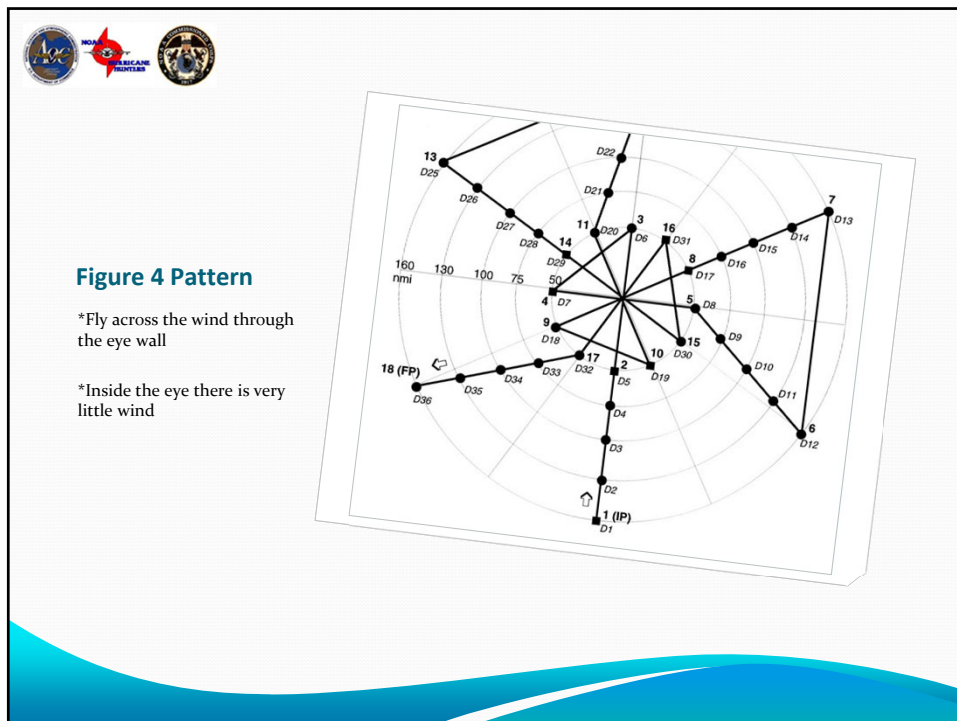
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Hurricane Patricia - 2015 (video not for distribution)

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QUESTIONS?



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Marine Operations Center – Pacific

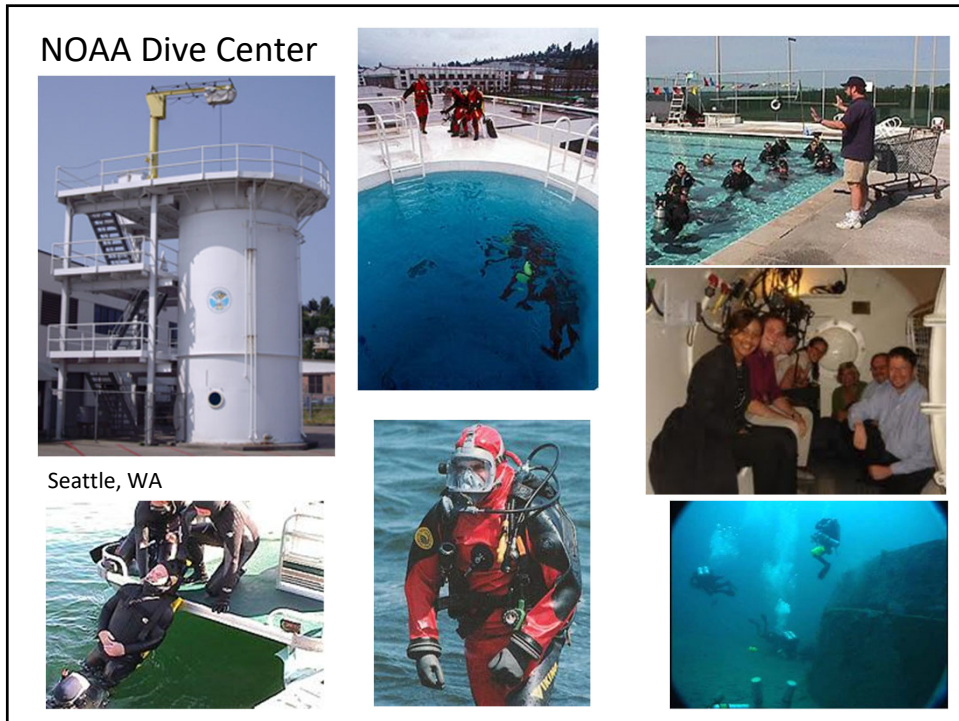
MIC₃ – Technical Point of Contact

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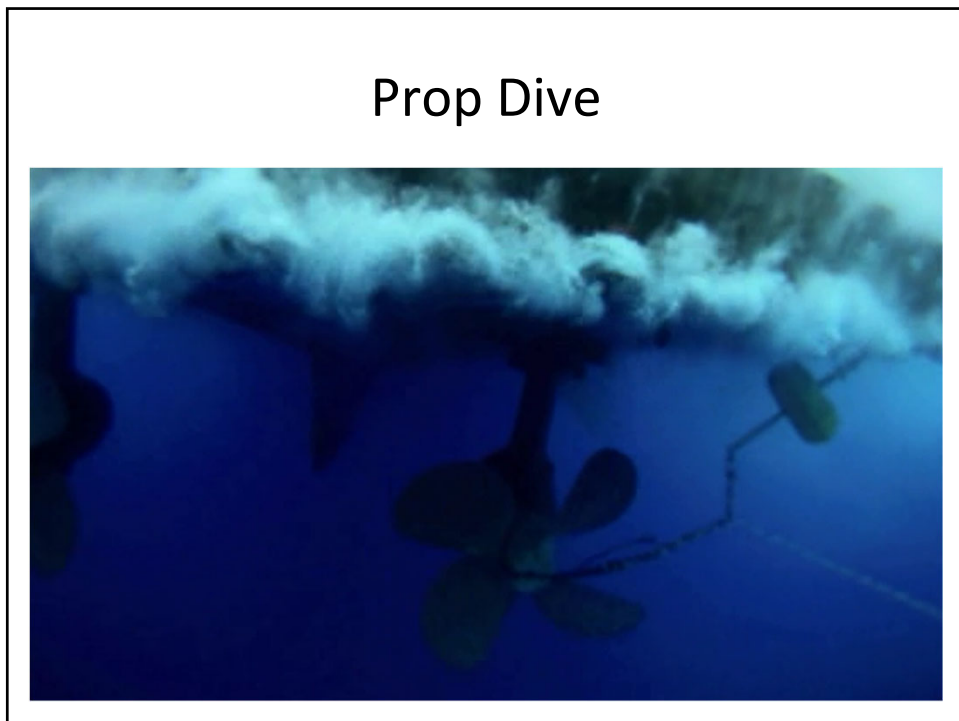
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EXTRA

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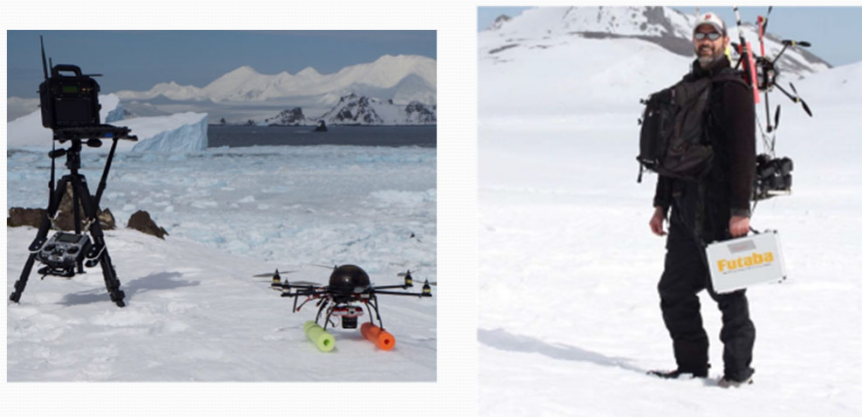
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Unmanned Aircraft Systems (UAS)



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APH-22 Hexacopter



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APH-22 Hexacopter



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APH-17 Hexacopter



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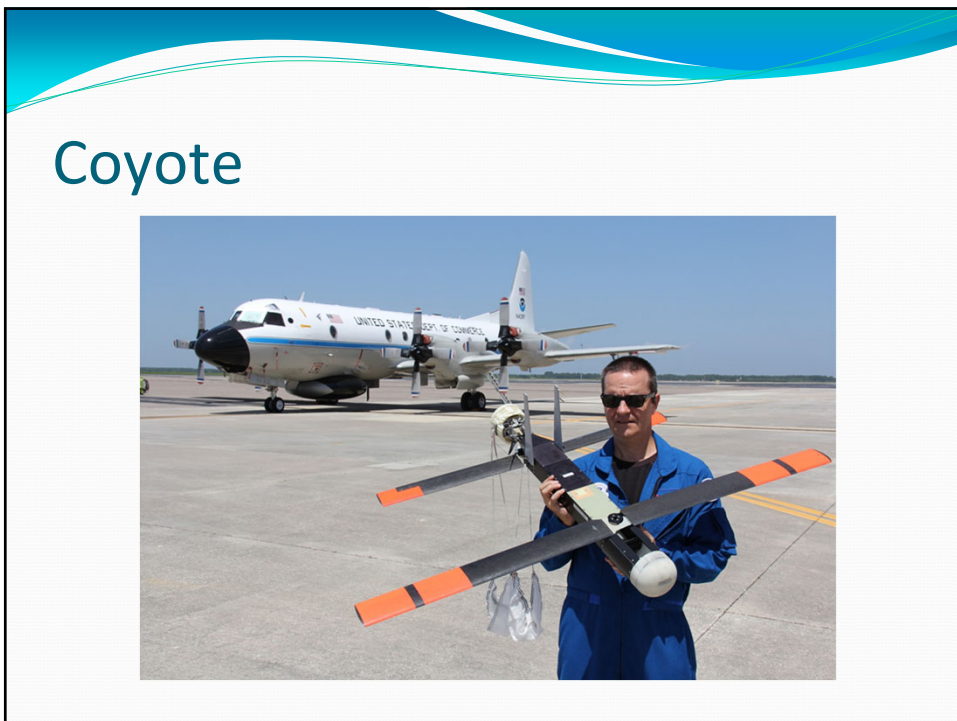
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Coyote



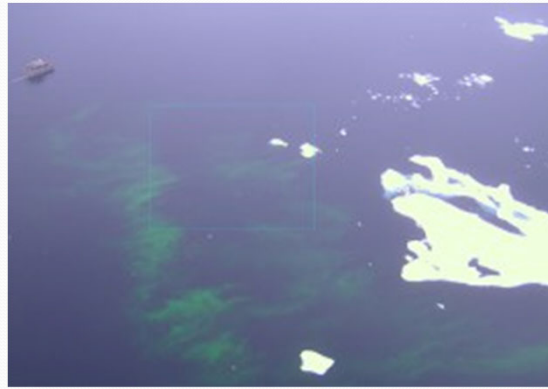
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Puma AE



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Puma AE



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Puma AE



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Basic Officer Training Class "BOTC"



United States Coast Guard Academy
New London, Connecticut

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