AGENDA

• NOAA Manned Aircraft and their Projects
• FY17 Aircraft Allocation Plan
• FY18 Aircraft Allocation Plan
• Relocation of the NOAA Aircraft Operations Center
• AOC’s Role in the NOAA UAS Program
Lockheed Orion WP-3D

Crew: 2 pilots, 1 Navigator, 1 Flight Engineer, 1 Flight Director, 3-4 Technicians, and 4-9 Additional Mission Crewmembers.

Powerplant: 4 Allison T56-14 Series 3.5 Turbo Prop engines.

Max Gross Weight: 135,000 lbs.

Operational Airspeed: 180-250 KIAS.

Scientific Power: 4 Generators each at 120 Volts, 3 phase, 400Hz power 90 KVA max power.

Primary Missions: Hurricane Research, and Hurricane Reconnaissance; also tornado res., satellite cal/val, air chemistry and climate studies.

Instruments: C-band nose radar, lower fuselage radar, tail doppler X-band radar, sondes, radiometer, and scatterometers.

U.S. Department of Commerce National Oceanic and Atmospheric Administration
Gulfstream G-IV

Crew: 2 pilots, 1 Flight Director, 2-4 Technicians, and 4-6 Scientists

Powerplant: 2 Rolls Royce Tay 611-8 twin spool turbofan jet engines

Max Gross Weight: 74,600 lbs

Operational Airspeed: Mach 0.77 - 0.80 at 41,000-45,000 ft

Scientific Power: 2 engine driven alternators, two converters, 23 KVA, 400 Hz, 3 phase AC power, 250 amps, and 28 VDC

Endurance: Up to 8.5 hours

Primary Missions: Hurricane Research, Hurricane Surveillance and Atmospheric Research

Instruments: Tail doppler radar, dropwindsondes, and satellite comm system with voice/data transmission

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
Hurricane Awareness Tour
Beechcraft King Air 350C ER

Crew: 2 pilots, 1 Photographer, 1-2 Additional Mission Crewmembers

Rate of Climb: 2,400 fpm at sea level (max takeoff weight, ISA conditions)

Max Gross Weight: 16,500 lbs

Operational Airspeed: 150 – 245 KIAS

Scientific Power: 250 Amps @ 115 VAC 28 VDC

Endurance: Up to 6+ hours

Max Altitude: 35,000 FT

Primary Missions: Coastal Mapping, Emergency Response, and potential Snow Survey

Instruments: LIDAR and photography system
Gulfstream Jet Prop Commander

Crew: 2 pilots, 1 observer (as needed)

Powerplant: 2 Garrett TPE-331-10 Engines – 820 SHP

Max Gross Weight: 11,250 lbs

Operational Airspeed: 120 – 250 KIAS

Scientific Power: 2 starter-generators 30V, 300 amps DC power

Endurance: 5-6 hours

Max Altitude: 35,000 ft

Primary Missions: Snow Survey and GRAV--D

Instruments: Gamma radiation detection system mounted in the cabin of the aircraft; Gravimeter for GRAV-D
Snow & Water Resource Surveys

05/05/2017 04:02:20 PM

1602:26Z 05MAY2017 Lat=68.36422 Lon=-148.49108

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
De Havilland Twin Otter

Crew: 2 pilots, 1-6 Additional Mission Crewmembers

Powerplant: 2 Pratt and Whitney PT6A-27 engines – 620 SHP

Rate of Climb: 2,000 fpm at sea level (max takeoff weight, ISA conditions)

Max Gross Weight: 12,500 lbs (CONUS) or 14,000 lbs (Alaskan Operations)

Operational Airspeed: 95-120 KIAS

Scientific Power: 3KVA of 115 VAC, 60 Hz, and 70 amps of 28 VDC

Endurance: Up to 6.5 hours+

Primary Missions: Coastal Mapping, Snow Survey, Air Chemistry, and Marine Mammal Surveys

Instruments: LIDAR, gamma detector, customizable windows for observers
Marine Mammal Surveys
FY17 and FY18 Aircraft Allocation Plans
### FY17 Aircraft Allocation Plan

**Output As Of 14-Oct-2016**

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<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
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**FY 2017 AIRCRAFT ALLOCATION PLAN**

**FY17 AAP v.2 - Oct 17, 2016**

**Fleet Totals**

|     | 3975 | 944 | 0   |     |     |     |     |     |     |     |     |     |

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U.S. Department of Commerce

National Oceanic and Atmospheric Administration
# FY18 Aircraft Allocation Plan

**Output As of 17-Jul-2017**

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**Total Hours:** 3293 | 915 | 0

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*U.S. Department of Commerce*

*National Oceanic and Atmospheric Administration*
AOC Lakeland Facility

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
NOAA Hangar at Lakeland

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
NOAA UAS Policy Updates

• NOAA UAS Symposium on October, 2016
  • 70 attendees from all Line Offices in NOAA
  • UAS survey conducted
  • Science, aviation policy, and mission/platform requirements topics were highlighted

• NOAA UAS Handbook contains new guidance:
  ▪ Acquisition of UAS and UAS Services (checklist)
  ▪ Line Office Administrative Review of UAS (checklist)
  ▪ UAS Privacy Policy completed (OCIO/OMAO)
UAS Trends in NOAA

- 2016 FAA Regulations for small UAS streamline approval process at FAA and NOAA
- NOAA and FAA trends show demand will increase
- NOAA has approximately 40 sUAS actively flying NOAA missions

UAS Projects Approved and Trends Through 2021

2016 FAA Small UAS Rules Released

Approvals for 2017 as of June 29th