

Global Hawk #872 08/24/16 - 08/25/16

Aircraft: [Global Hawk - AFRC #872](#) (See full schedule)

Flight Number: 872-0170

Payload Configuration: NOAA SHOUT HRR

Nav Data Collected: Yes

Total Flight Time: 23.9 hours

Submitted by: Frank Cutler on 08/25/16

Flight Segments:

From:	KWFF	To:	KWFF
Start:	08/24/16 10:07 Z	Finish:	08/25/16 09:59 Z
Flight Time:	23.9 hours		
Log Number:	16H004	PI:	Gary Wick
Funding Source:	Robbie Hood - NOAA - UAS Program Manager		
Purpose of Flight:	Science		
Comments:	<p>SHOUT 2016 Hurricane Rapid Response Begins with First Science Flight NASA & NOAA Global Hawk 24 Hour Flight Leads to Classification of Hurricane Gaston NOAA UAS Program's Sensing Hazards with Operational Unmanned Technology (SHOUT) is exploring the use of flying High Altitude Long Endurance (HALE) UAS, such as NASA's Global Hawk, to collect weather data from hurricanes. On its third year, the SHOUT team is testing the value of using unmanned aircraft to provide weather data to improve hurricane forecasts and be available as a satellite gap data provider in an operational mode. LCDR Jon Neuhaus, NOAA, safely landed the Global Hawk completing SHOUT Hurricane Rapid Response (HRR) Science Flight #1 at 0559 EDT August 25th after a 24 hour flight. A day earlier, NOAA's CO-Principle Investigators Gary Wick and Jason Dunion, Dave Fratello (Global Hawk Payload Manager), were in the Global Hawk Operations Center for the 0607 EDT August 24th launch from NASA Wallops which began the SHOUT HRR Campaign. During this first event using data from the 75th dropsonde (out of a total of 84 dropped) launched from the Global Hawk's AVAPS, the National Hurricane Center evaluated the real-time data to upgrade GASTON to the third hurricane of the Atlantic Season: HURRICANE GASTON TROPICAL CYCLONE UPDATE NWS NATIONAL HURRICANE CENTER MIAMI FL AL072016 1215 AM AST THU AUG 25 2016 ...GASTON BECOMES THE THIRD HURRICANE OF THE ATLANTIC SEASON... Dropsonde data from a NASA/NOAA Global Hawk mission indicate that Gaston has strengthened to a hurricane. The maximum winds are estimated to be 75 mph (120 km/h) with higher gusts. SUMMARY OF 1215 AM AST...0415 UTC...INFORMATION ----- LOCATION...18.7N 42.2W ABOUT 1215 MI...1955 KM W OF THE CABO VERDE ISLANDS MAXIMUM SUSTAINED WINDS...75 MPH...120 KM/H PRESENT MOVEMENT...NW OR 310 DEGREES AT 17 MPH...28 KM/H MINIMUM CENTRAL PRESSURE...988 MB...29.47 INCHES \$\$ Forecaster Berg</p>		

Flight Hour Summary:

	16H004	17H006
Flight Hours Approved in SOFRS	220	
Flight Hours Previously Approved		54
Total Used	166	73.2
Total Remaining		-19.2

17H006 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
10/05/16 - 10/06/16	872-0177	Science	24.7	24.7	29.3	
10/07/16 - 10/08/16	872-0178	Science	23.7	48.4	5.6	
10/09/16 - 10/10/16	872-0179	Science	24.8	73.2	-19.2	

Source URL: https://airbornescience.nasa.gov/flight_reports/Global_Hawk_872_08_24_16_-_08_25_16#comment-0

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

16H004 Flight Reports						
Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
07/27/16	872-0168	Check	4.9	4.9	215.1	
08/19/16	872-0169	Ferry	10.3	15.2	204.8	
08/24/16 - 08/25/16	872-0170	Science	23.9	39.1	180.9	
08/26/16 - 08/27/16	872-0171	Science	23.8	62.9	157.1	
08/29/16 - 08/30/16	872-0172	Science	23.8	86.7	133.3	
09/01/16 - 09/02/16	872-0173	Science	22.8	109.5	110.5	
09/22/16 - 09/23/16	872-0174	Science	24	133.5	86.5	
09/24/16 - 09/25/16	872-0175	Science	22.8	156.3	63.7	
09/28/16	872-0176	Ferry	9.7	166	54	