

# HU-25C Guardian 09/15/15

Aircraft: [HU-25A Guardian - LaRC #525](#) (See full schedule)

Flight Number: OIB #1

Payload Configuration: ATM & DMS

Nav Data Collected: Yes

Total Flight Time: 2.7 hours

Submitted by: Gregory L. Slover on 09/15/15

**Flight Segments:**

<b>From:</b>	KLFI	<b>To:</b>	KLFI
<b>Start:</b>	09/15/15 15:05 Z	<b>Finish:</b>	09/15/15 17:50 Z
<b>Flight Time:</b>	2.7 hours		
<b>Log Number:</b>	<a href="#">15F005</a>	<b>PI:</b>	John Woods
<b>Funding Source:</b>	Thomas Wagner - NASA - SMD - ESD Cryospheric Science		
<b>Purpose of Flight:</b>	Check		
<b>Comments:</b>	<p>The ICF consisted of VFR flight up the VA eastern shore while ATM tuned their laser, followed by multiple passes from West-to-East at a variety of altitudes (1500, 2500, 4500, 7500, 11500, 14500, 17500) with one pass along Chincoteague Bay at each altitude. At the final altitude of 17,500' MSL, DMS lines were flown from West-to-East and then North-to-South as orthogonal passes. All science profile requirements were met with only one repeat pass required. Data review is in progress as to its validity prior to operational deployment to Greenland. Power up sequence was accomplished by having ground DC power connected prior to aircrew show at aircraft, when APU was brought on line the batteries needed to be on to carry the load until the APU was up and running – a feature of the HU-25 is that the APU won't start when GPU power is connected. Engine start power down of instruments was not required and power appeared to be provided seamlessly to the research system using this technique (note: AUX bus in override, research power ON, and cockpit UPS interrupt in OVERRIDE provided this capability). Upon engine shut down, the reverse was used where APU picked up the load upon engine shutdown and batteries were kept on until GPU power was connected available and switched on. The EMI/EMC consisted of operating all systems and radios to verify any interference. ADF was not able to lock on, but this is expected as part of its normal poor performance. The hand-held Iridium was tested both using its own internal antenna and the ships antenna, and ATM/DMS will review GPS accuracy data for any interference (from past experience, a filter will be brought to Greenland just in case). The HF radio transmitted on multiple frequencies, but only one received any response, which can be somewhat expected in the finicky HF environment.</p>		

**Flight Hour Summary:**

	15F005	16F002
<b>Flight Hours Approved in SOFRS</b>	100	
<b>Flight Hours Previously Approved</b>		67.4
<b>Total Used</b>	32.6	65.3
<b>Total Remaining</b>		2.1

16F002 Flight Reports						
Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
<a href="#">10/05/15</a>	OIB2015 Arctic Sea Ice Central	Science	3.6	3.6	63.8	
<a href="#">10/05/15</a>	OIB2015 Arctic Sea Ice East	Science	3.8	7.4	60	
<a href="#">10/06/15</a>	OIB2015 Arctic Ice-Sat2 North	Science	4	11.4	56	
<a href="#">10/07/15</a>	OIB2015 Arctic Transit Thule to Kangerlussuaq	Transit	2	13.4	54	
<a href="#">10/08/15</a>	OIB2015 Arctic Southwest Coastal A	Science	3.8	17.2	50.2	
<a href="#">10/08/15</a>	OIB2015 Arctic Thomas-Jakobshavn 01	Science	3.7	20.9	46.5	
<a href="#">10/09/15</a>	OIB2015 Arctic Umanaq B	Science	3.9	24.8	42.6	

<a href="#">10/13/15</a>	OIB2015 Arctic Jakobshavn Eqip Store	Science	2.9	27.7	39.7
<a href="#">10/13/15</a>	OIB2015 Arctic Southeast Coastal A	Science	3.6	31.3	36.1
<a href="#">10/18/15</a>	OIB2015 Arctic Southeast Coastal B	Science	4.1	35.4	32
<a href="#">10/19/15</a>	OIB2015 Arctic Helheim- Kangerdlugussuaq	Science	3.7	39.1	28.3
<a href="#">10/19/15</a>	OIB2015 Arctic Helheim- Kangerdlugussuaq Gap B	Science	3.9	43	24.4
<a href="#">10/20/15</a>	OIB2015 Arctic Jakobshavn Mop-Up	Science	3.7	46.7	20.7
<a href="#">10/20/15</a>	OIB2015 Arctic Southwest Coastal B	Science	3.7	50.4	17
<a href="#">10/21/15</a>	OIB2015 Arctic Southwest Coastal C	Science	3.4	53.8	13.6
<a href="#">10/21/15</a>	OIB2015 Arctic K-EGIG- Summit	Science	3.7	57.5	9.9
<a href="#">10/22/15</a>	OIB2015 Arctic Mopup South	Science	2	59.5	7.9
<a href="#">10/22/15</a>	OIB2015 Arctic Ferry BGSF- CYR	Ferry	2.2	61.7	5.7
<a href="#">10/23/15</a>	OIB2015 Arctic Ferry CYR- KRIC	Ferry	3.3	65	2.4
<a href="#">10/23/15</a>	OIB2015 Arctic Ferry CYR- KRIC	Ferry	0.3	65.3	2.1

**Source URL:** [https://airbornescience.nasa.gov/flight\\_reports/HU-25C\\_Guardian\\_09\\_15\\_15#comment-0](https://airbornescience.nasa.gov/flight_reports/HU-25C_Guardian_09_15_15#comment-0)

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*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.*

#### 15F005 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
<a href="#">09/15/15</a>	OIB #1	Check	2.7	2.7	97.3	
<a href="#">09/20/15</a>	OIB #2, 3, 4	Ferry	2.7	5.4	94.6	
<a href="#">09/21/15</a>	OIB #2, 3, 4	Ferry	2.3	7.7	92.3	
<a href="#">09/21/15</a>	OIB #2, 3, 4	Ferry	2	9.7	90.3	
<a href="#">09/23/15</a>	OIB2015 Arctic North Central Gap 02	Science	3.9	13.6	86.4	
<a href="#">09/24/15</a>	OIB2015 Arctic Northwest Coastal A	Science	3.7	17.3	82.7	
<a href="#">09/25/15</a>	OIB2015 Arctic Northwest Coastal B	Science	3.8	21.1	78.9	
<a href="#">09/28/15</a>	OIB2015 Arctic Sea Ice West	Science	3.7	24.8	75.2	
<a href="#">09/30/15</a>	OIB2015 Arctic North Central Gap 01	Science	3.9	28.7	71.3	
<a href="#">09/30/15</a>	OIB2015 Arctic Zachariae-79N	Science	3.9	32.6	67.4	