AGENDA for Pilot Discussion

- Flight Preparation Timeline
- Airspace Scheduling
- Terminal Arrival into Wallops
- Mission Rules
- Specific Lessons Learned

FLIGHT PREP TIMELINE

- FAA Coordination Package is due to the FAA by 1 **business day** prior to the flight.

What the pilots need to build a flight:

- The pilots require the Mission Waypoints by 1100L, 2 Days Prior to the flight (Monday flight is due Thursday).
- The pilots will build the mission plan, file the FAA flight plan, coordinate airspace, and request a NOTAM for dropsondes.
- The pilots also will create a graphical representation of the route with Contact information, FIRS, etc…

CHANGES TO THE ROUTE

CHANGES ARE EXPECTED

- T-2: Pilots will coordinate a ‘box’ of operations and refine the ‘box’ at T-1 with the FAA.
- Changes enroute: Changes enroute are expected; pilots request changes via the standard format.
- The PI or representative can work directly with the pilots for changes. To initiate the process please coordinate through the Payload Mgr to the Flight Deck.

Overview & Maps
NASA 872 2013-09-13_HS3_872_v5

Mission Objectives:
•HS3 Mission
•CPL/Dropsondes

Mission Coordination Contact:
Jon Neuhaus, NASA/DFRC
727-481-1605 cell
jonathan.b.neuhaus@nasa.gov

During Mission Contact:
13/1100Z-13/1600Z
14/0800Z-14/1100Z
GHOC-E (Wallops, VA)
Mission Director 757-854-3724
Pilot 757-854-4848

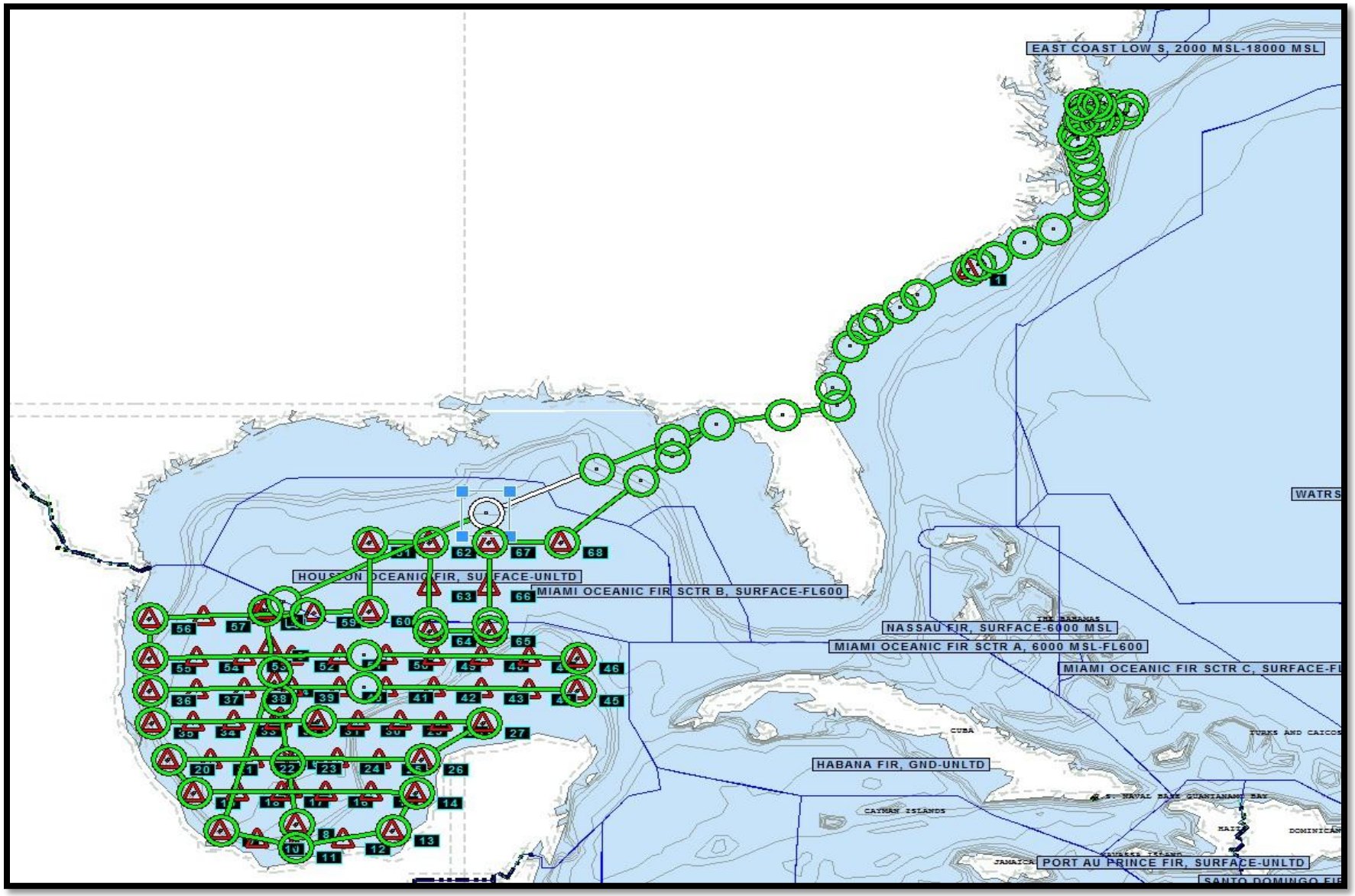
13/1600Z-14/0800Z
GHOC-W (Edwards AFB,CA)
Mission Director 661-276-6256
Pilot 661-276-6701

Flight Summary		
Departure:	7:00 EDT 9/13/13	11:00Z 9/13/13
Arrival:	7:00 EDT 9/14/13	11:00Z 9/14/13
Duration:	23+59hrs	
Dropsondes:	68	
Cruise Altitudes:	Block FL500-650	
Notes:	NOTAMs will be filed	

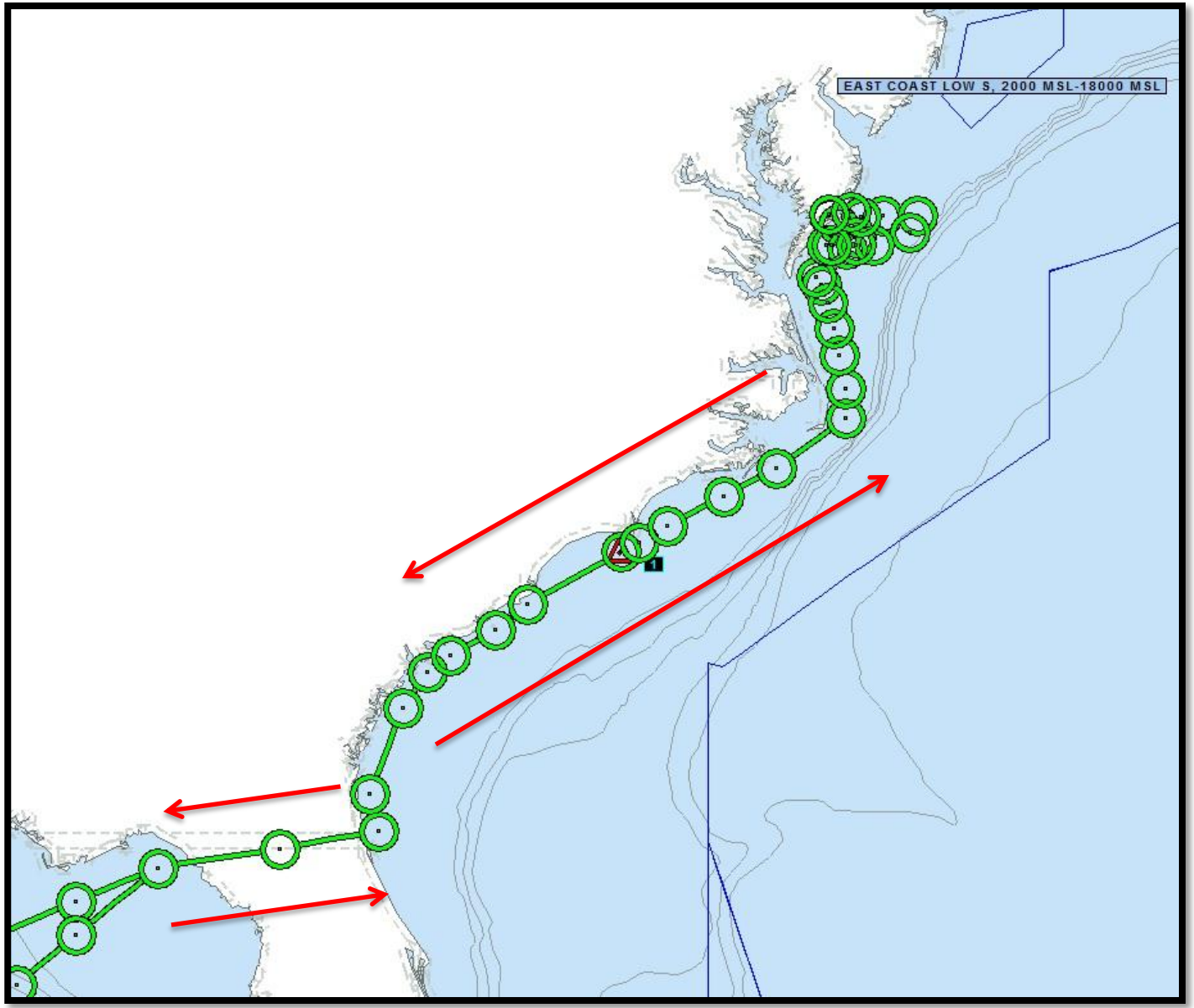
Documents/Files	
Overview & Charts	2013-09-13_HS3_872_Maps_v5.pdf
Nav Data	2013-09-13_HS3_872_nav planner_v5.pdf
Flight Plan	2013-09-13_HS3_872_1801_v5.pdf

NASA Dryden Flight Research Center
Edwards Air Force Base California

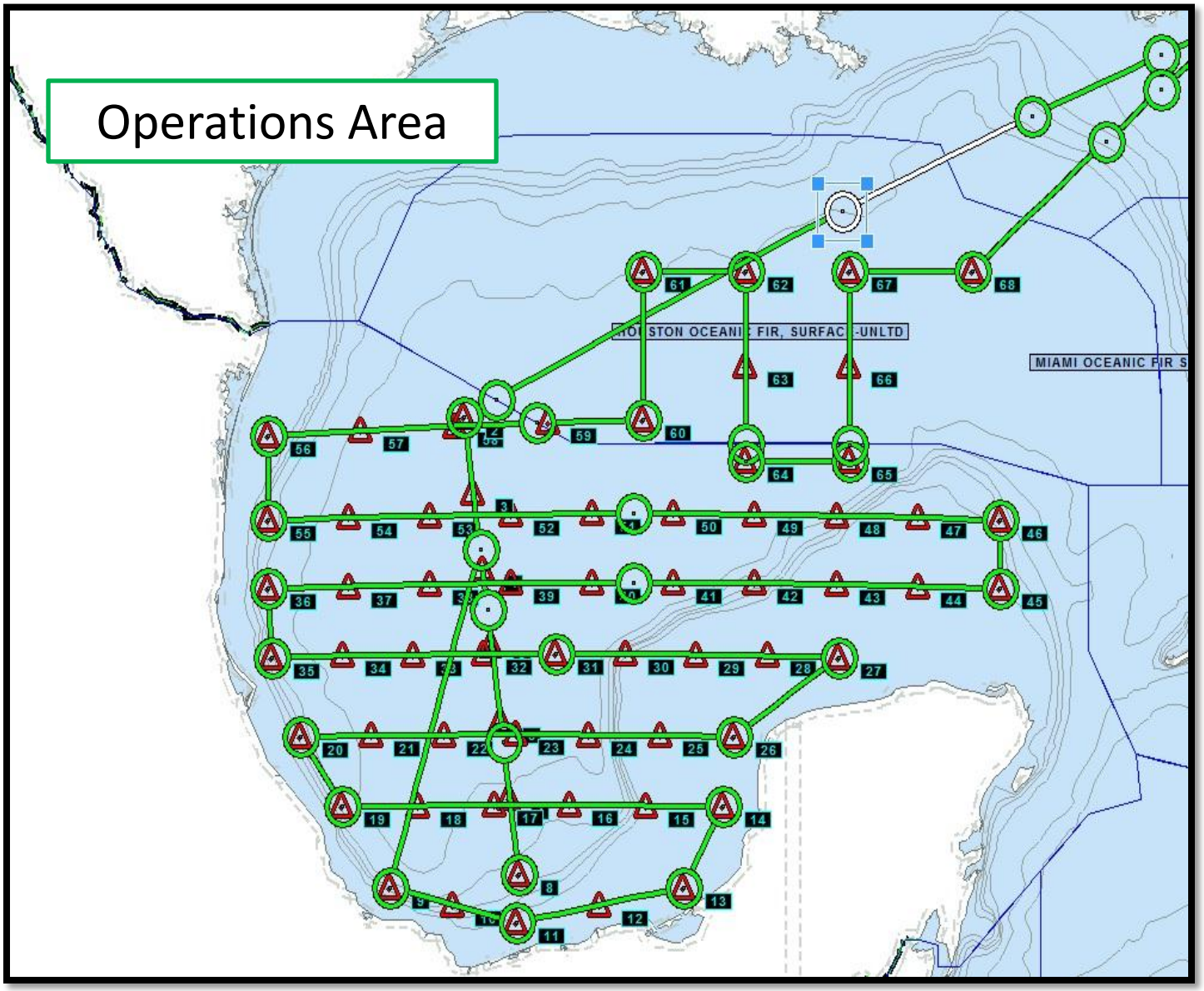
Route Overview



Route Overview (Transit to/from Florida)



Science Mission Area

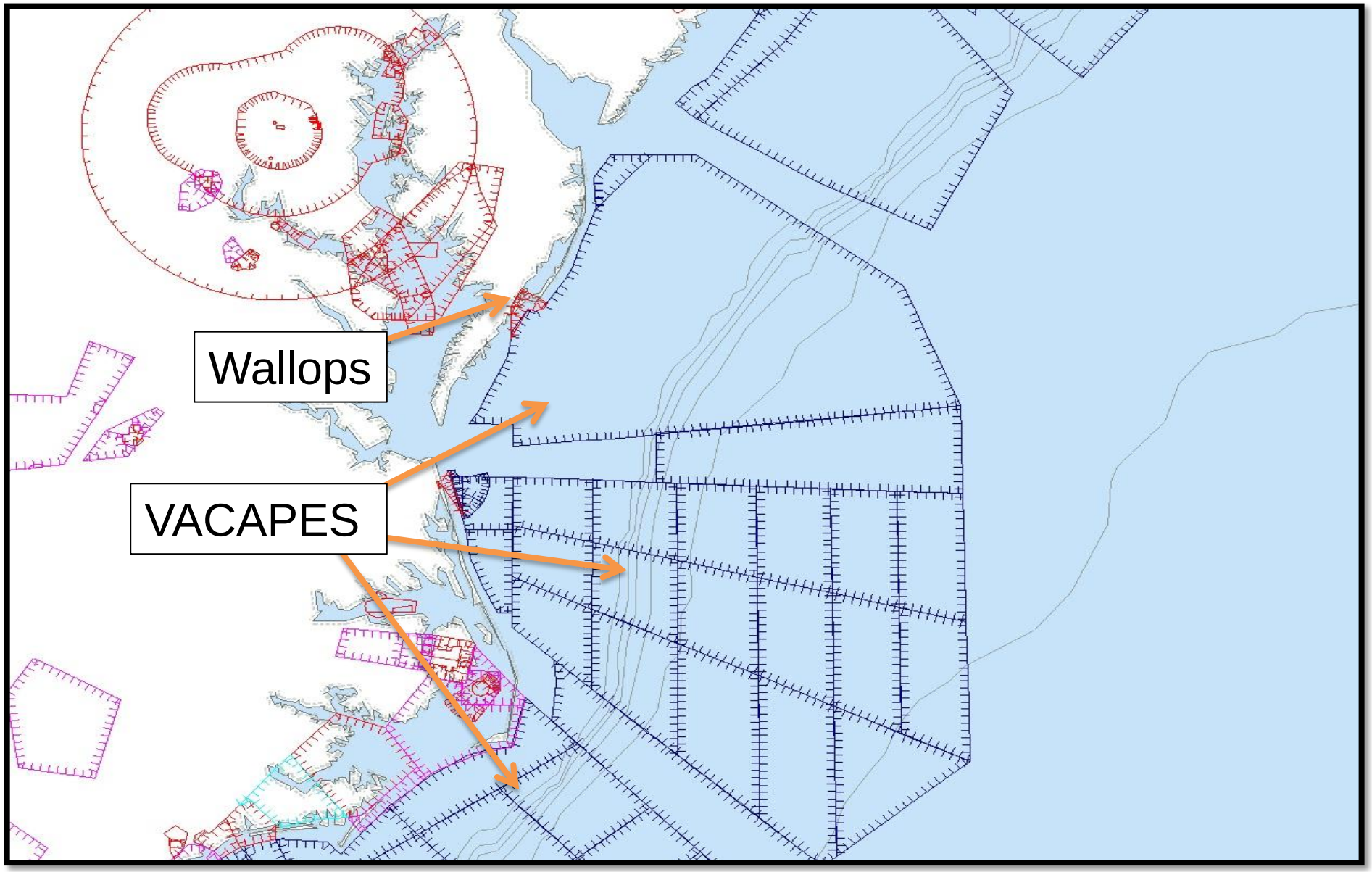


AIRSPACE SCHEDULING

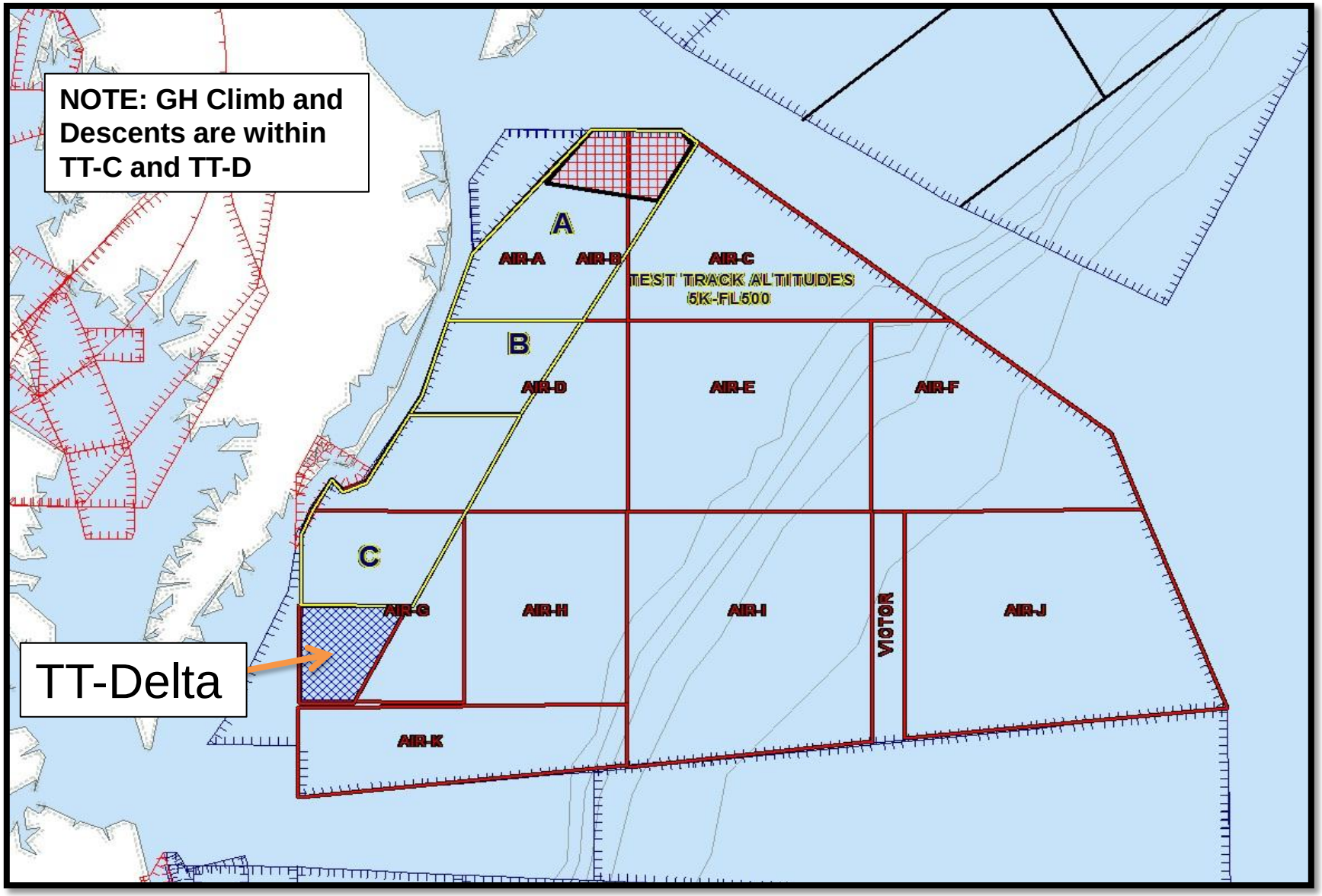
CHALLENGES:

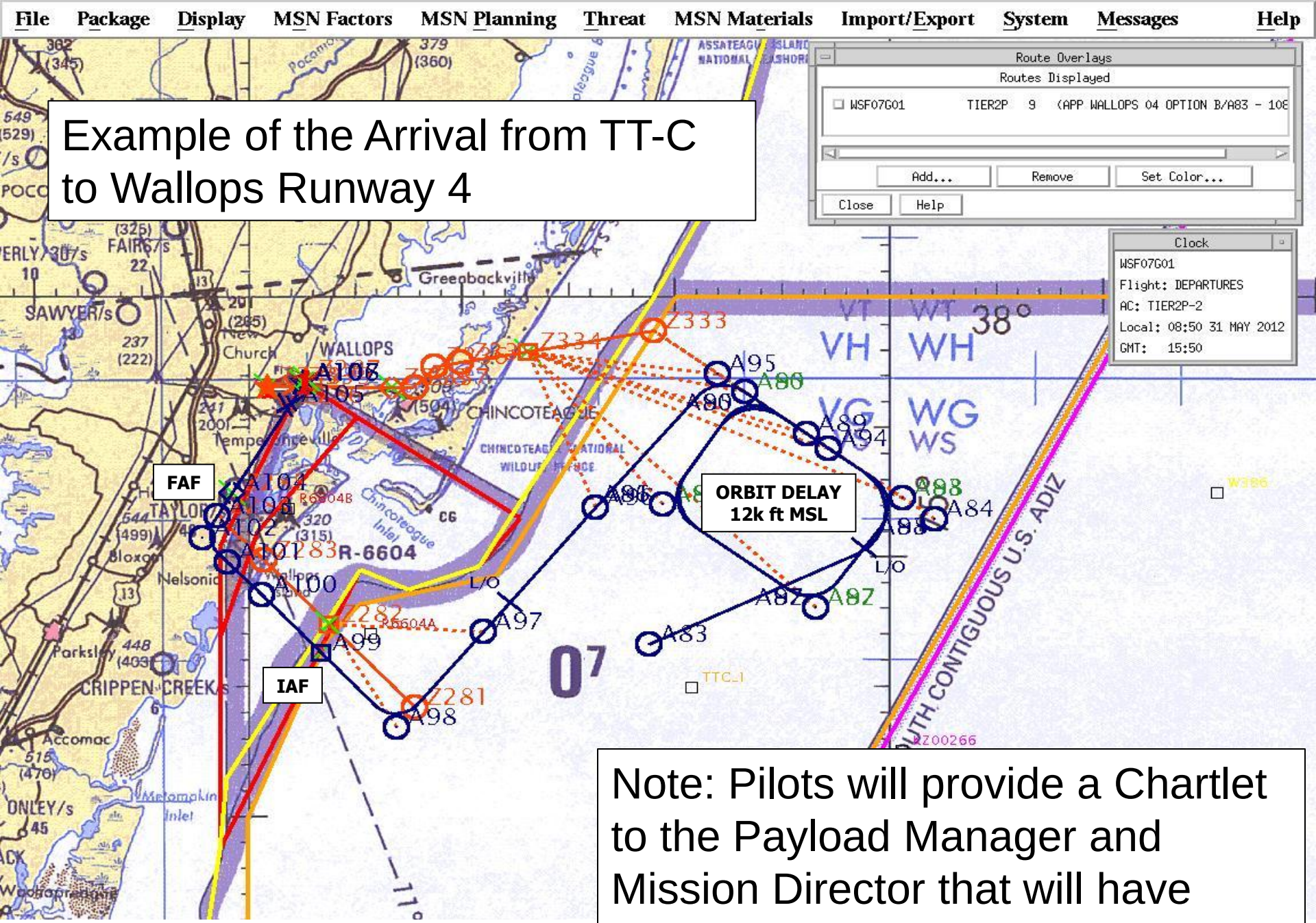
- VACAPES
  - W-386
    - Airspace is not ‘Co-use’, which means Global Hawk shall have ‘sterile’ airspace during the approach and descent into Wallops.
  - PAX RIVER TEST TRACKS
    - By Letter of Agreement, NASA shall schedule ‘blocked’ airspace 2-3 days in advance
  - Pilots are actively coordinating for 2014

GRAPHIC OF W-386



GRAPHIC OF W-386 TEST TRACKS




File Package Display MSN Factors MSN Planning Threat MSN Materials Import/Export System Messages Help
Example of the Arrival from TT-C to Wallops Runway 4
Route Overlays
Routes Displayed
WSF07G01 TIER2P 9 (APP WALLOPS 04 OPTION B/A83 - 10E
Add... Remove Set Color...
Close Help
Clock
WSF07G01
Flight: DEPARTURES
AC: TIER2P-2
Local: 08:50 31 MAY 2012
GMT: 15:50
FAF
IAF
ORBIT DELAY
12k ft MSL
R-6604
07
WALLOPS
CHINCOTEAGUE
Greenbackville
SOUTH CONTIGUOUS U.S. ADIZ
Note: Pilots will provide a Chartlet to the Payload Manager and Mission Director that will have Estimated Times to Go

MISSION RULES

Weather:

- Winds (incl gusts) ≤ 15 kts cross, 20 kts tail, 30 kts head-wind
- No lightning w/in 5 Nm (Ground)
- No standing water on Rwy
- Do not approach thunderstorms within 25 nm during flight at FL500 or below.
- Aircraft should maintain at least 5000 ft vertical separation from significant convective cloud tops except:
  - When cloud tops are above FL500: Do not approach reported significant lightning activity or indicators of significant overshooting tops within 25 nm.
  - When cloud tops are below FL500, maintain 10,000 ft separation from reported significant lightning or indicators of significant overshooting tops.
- No flight into forecast or reported icing conditions
- No flight into forecast or reported moderate or severe turbulence

SPECIFIC LESSONS LEARNED

- HEATLOAD vs WAYPOINTS
- Coordination of Flight Operations with Wallops, CARCAH, and Airspace Managers
- Dedicated Planner for 2014
- Pilot training specific to HS3 prior to deployment