

# 1Sep2010 Tri-Agency Mission Scientist Report - Rob Rogers

Submitted by pjmeyer on Thu, 09/02/2010 - 07:38

- [Earl](#)

Flight Date:  
Wed, 09/01/2010

Mission synopsis: 01 Sept 2010. Sorry for the manuscript, but we suddenly have an encyclopedia's worth of missions going on.

## NOAA/IFEX

NOAA is now in full operational-tasking mode with its aircraft: the P-3s are flying EMC-tasked Tail Doppler Radar (TDR) missions into Earl and the G-IV is flying NHC-tasked Synoptic Surveillance missions. N42RF took off from Barbados at 08 UTC today and flew a mission into Hurricane Earl en route to MacDill AFB in Tampa. N43RF flew a single rotated figure-4 pattern in Hurricane Earl with a take-off time of 20 UTC and also recovered at MacDill. The G-IV is flying a Synoptic Surveillance mission around Earl with a take-off time of 1730 UTC. This mission will leave from and recover to MacDill AFB.

Tomorrow (Thurs 02 Sep) N42RF will fly a follow-on TDR mission into Earl, taking off at 08 UTC and recovering in Tampa. N43RF will fly a follow-on TDR mission as well, with a 20 UTC take-off and recovery in Charleston, SC. The G-IV is tasked to fly another Synoptic Surveillance mission around Earl with a take-off time of 0530 UTC and recovery back to MacDill. This will likely be the last Synoptic Surveillance mission tasked by NHC.

Friday-Sat: The P-3s will continue with 08 and 20 UTC TDR missions for EMC and will likely continue to forward deploy as Earl tracks up the eastern seaboard. Cyclone Phase Space analyses suggest that Earl will be undergoing ET transition in the late Sat (04 Sep) to early Sunday (05 Sep) timeframe and a fast forward motion is also expected. These factors suggest that the last P-3 TDR mission may be the 08 UTC mission on Sat (04 Sep). Regardless, flights will continue as long as Earl remains a suitable target for EMC modeling interests. The G-IV is not currently being considered for research tasking for Gaston.

## NASA/GRIP

The DC-8 took off today at 16 UTC to fly a ~8 hr mission into Hurricane Earl. The Global Hawk was scheduled for a 21 UTC take-off from Dryden for a ~7 hr transit (and ~24 hr duration mission) to Hurricane Earl. The WB-57 was scheduled to take-off at 20 UTC to fly a ~6 hr mission in Hurricane Earl.

Tomorrow (Thurs 02 Sep) the DC-8 is planning a follow-on mission into Earl. Take-Off will be from FLL at 12 UTC for another 8 hr mission. The Global Hawk is scheduled for an 04 UTC take-off from Dryden for a ~7 hr transit (and ~24 hr duration mission) to Hurricane Earl. The GH is expected to be on station around Earl on Thurs (02 Sep) at ~12 UTC and will depart the Earl at ~21 UTC. An 04 UTC landing (Fri 03 Sep) back at Dryden is planned. The WB-57 will conduct a ~6 hr follow-on flight into Hurricane Earl with a departure time of 20 UTC

Friday-Sat: The DC-8 will have a no-fly day on Friday (03 Sept) and a possible hard down day on Saturday (04 Sept). A possible low altitude dropsonde test flight is planned for the GH on Saturday (04 Sep).

#### NSF/PREDICT

PREDICT flew a combined ferry and mission in Tropical Storm Fiona this afternoon. The G-V take-off time from Barbados was TBD, but was expected to be only 4 hr with a recovery back in St. Croix.

Tomorrow (Thurs 02 Sept) the G-V is planning to fly a mission in PGI38 (now TS Gaston). A 9hr mission is planned, with a 12:30 UTC take-off.

Friday (03 Sept) the G-V is planning to continue missions in PGI38 (Gaston). A hard down day is planned for both the "day" and "night" crews on Saturday (04 Sep).

#### AIR FORCE

The AF is currently tasked for fixes on:

Hurricane Earl:

01 Sep: 18 UTC

02 Sept: 06/12/15/18/21 UTC

03 Sept: 00/06/12/18 UTC

TS Fiona:

01 Sep: 18 UTC

02 Sep: 00 UTC

03 Sep : 18 UTC

Refer to <http://grip.nsstc.nasa.gov/reporting/> for a spreadsheet showing these plans.