

# TW13 Transit Deploy Leg

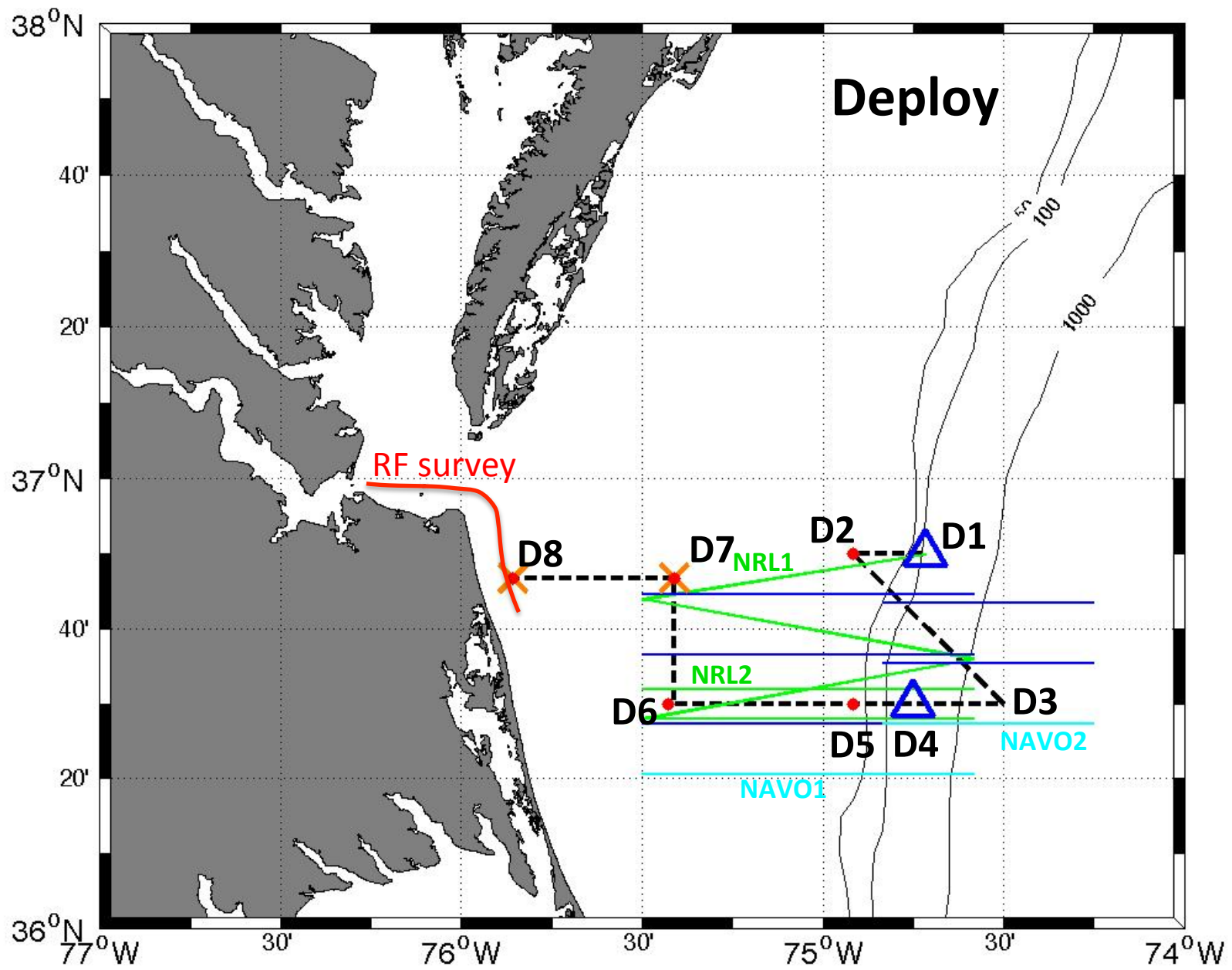
## WHOI-Norfolk, 08-10 Jul

- **People**

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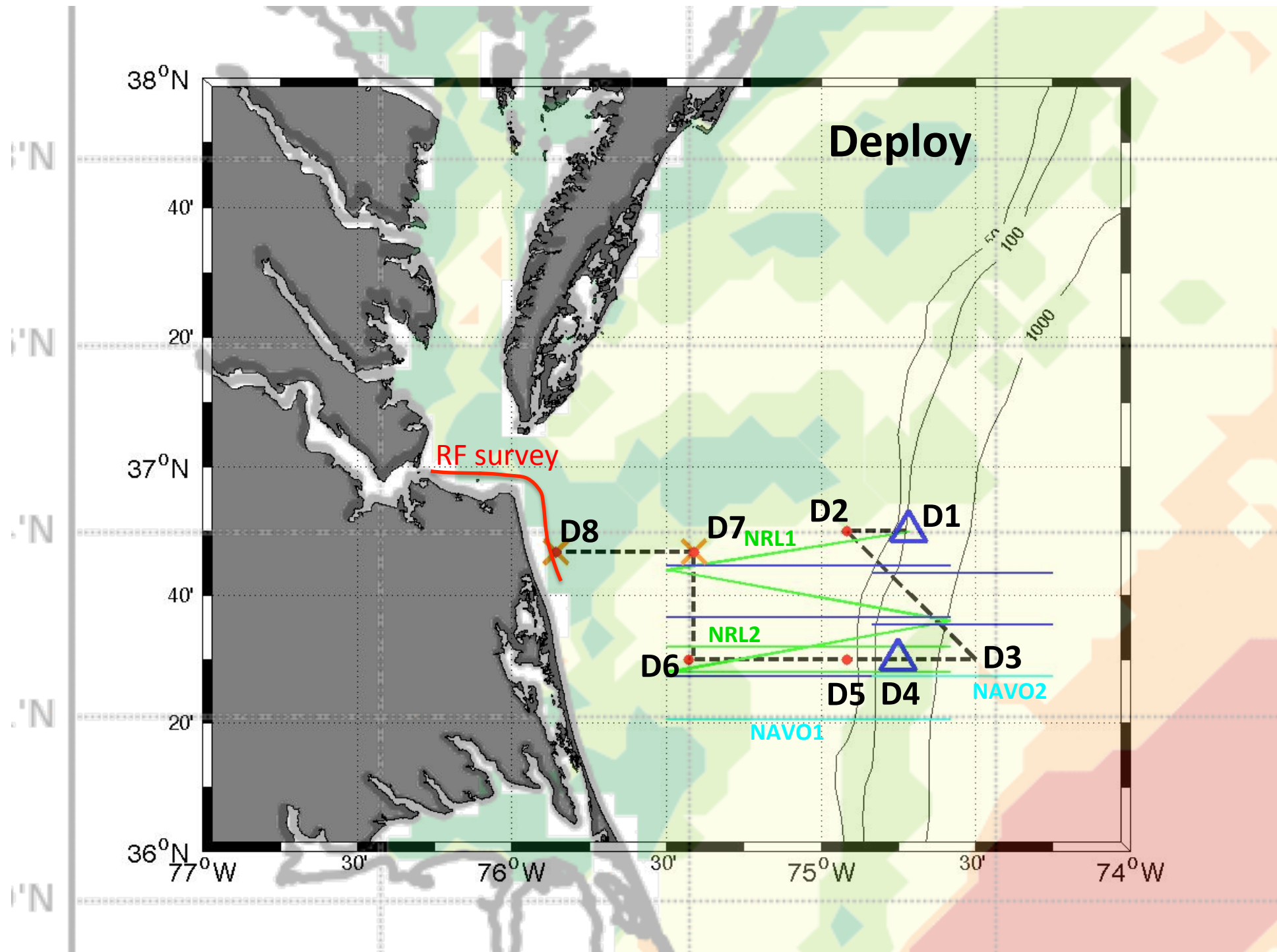
- **Objectives**

Deploy 9 gliders, 5 wave buoys, 4 wavegliders and perform RF survey prior to main TW13 field experiment



# Important Coordinates

- NAVO1
  - Deploy 74 45.0, 36 30.0
  - Line 75 30.0, 36 20.0 to 74 35.0, 36 20.0
  - Recover 74 45.0, 36 30.0
- NAVO2
  - Deploy 74 45.0, 36 30.0
  - Line 74 50.0, 36 28.0 to 74 15.0, 36 28.0
  - Recover 74 45.0, 36 30.0
- NRL1
  - Deploy 74 43.0, 36 50.0
  - Line 74 43.0, 36 50.0 to 75 30.0, 36 44.0 to 74 35.0, 36 36.0 to 75 30.0, 36 28.0 to 74 35.0, 36 28.0
  - Recover 74 45.0, 36 30.0
- NRL2
  - Deploy 74 45.0, 36 30.0
  - Line 75 30.0, 36 32.0 to 74 35.0, 36 32.0
  - Recover 74 45.0, 36 30.0
- OSU1 (doug)
  - Deploy 74 43.0, 36 50.0
  - Line 75 30.0, 36 44.0 to 74 35.0, 36 44.0
  - Recover 74 43.0, 36 50.0
- OSU2 (bob)
  - Deploy 74 45.0, 36 30.0
  - Line 75 30.0, 36 36.0 to 74 35.0, 36 36.0
  - Recover 74 45.0, 36 30.0
- OSU3 (jane)
  - Deploy 74 45.0, 36 30.0
  - Line 75 30.0, 36 28.0 to 74 35.0, 36 28.0
  - Recover 74 45.0, 36 30.0
- OSU4 (john)
  - Deploy 74 43.0, 36 50.0
  - Line 74 50.0, 36 44.0 to 74 15.0, 36 44.0
  - Recover 74 43.0, 36 50.0
- OSU5 (sg157)
  - Deploy 74 45.0, 36 30.0
  - Line 74 50.0, 36 36.0 to 74 15.0, 36 36.0
  - Recover 74 45.0, 36 30.0



# TW13 Deploy Transit Leg Plan

Depart: 08 Jul WHOI

09-10 Jul Deploy:

D1. 74° 43.0' W, 36° 50.0' N: Deploy 3 gliders (NRL1, doug, john)

D2. 74° 55.0' W, 36° 50.0' N: Deploy 1 wave buoy (SIO3)

D3. 74° 30.0' W, 36° 30.0' N: Velocity Survey to D4, Gulf Stream location

D4. 74° 45.0' W, 36° 30.0' N: Deploy 6 gliders (NAVO1, NAVO2, NRL2, bob, jane, sg157)

D5. 74° 55.0' W, 36° 30.0' N: Deploy 1 wave buoy (SIO5)

D6. 75° 24.7' W, 36° 30.0' N: Deploy 1 wave buoy (SIO4)

D7. 75° 24.7' W, 36° 46.8' N: Deploy 1 wave buoy (SIO2) and 2 wavegliders

D8. 75° 51.4' W, 36° 46.8' N: Deploy 1 wave buoy (SIO1) and 2 wavegliders, then RF Survey track inbound

Arrive: 10 Jul Norfolk

04:30	08 Jul	Depart WHOI (low tide); Transit 360 nm @ 11 kt ≈ 33 hr
13:30	09 Jul	Arrive D1: Deploy 3 gliders (1.5 hrs); NRL1, doug, john
15:00		Transit 9.6 nm @ 10 kt ≈ 1.0 hr
16:00		Arrive D2: Deploy 1 buoy (0.5 hrs); SIO3
16:30		Transit 28.3 nm @ 10 kt ≈ 3.0 hr
19:30		Arrive D3: Transit 12.1 nm @ 10 kt ≈ 1.5 hr
21:00		Arrive D4: Deploy 6 gliders (3 hr); NAVO1, NAVO2, NRL2, bob, jane, sg157
00:00	10 Jul	Transit 8.1 nm @ 10 kt ≈ 1.0 hr
01:00		Arrive D5: Deploy 1 buoy (1/2 hr); SIO5
01:30		Transit 23.9 nm @ 10 kt ≈ 2.5 hr
04:00		Arrive D6: Deploy 1 buoy (1/2 hr); SIO4
04:30		Transit 16.8 nm @ 10 kt ≈ 2.0 hr
06:30		Arrive D7: Deploy 1 buoy (1/2 hr) , 2 wavegliders (1 hr); SIO2, Sharcs 3&4
08:00		Transit 21.4 nm @ 10 kt ≈ 2.5 hr
10:30		Arrive D8: Deploy 1 buoy (1/2 hr), 2 wavegliders (1 hr); SIO1, Sharcs 1&2
12:00		RF Survey inbound to Norfolk (3 hr)
16:00		Arrive Norfolk



# Gliders

NAVO and OSU gliders run cross-shelf lines  
NRL glider runs zig-zag near shore

Gliders can be stored on deck before deployment and after recovery

OSU gliders will be piloted from Knorr. We need internet access and space for a couple of laptops

NRL/NAVO gliders will be piloted from home.



## SIO Wavebuoys

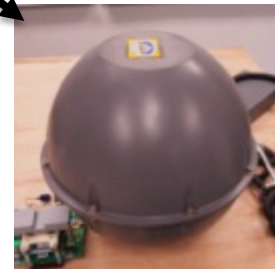
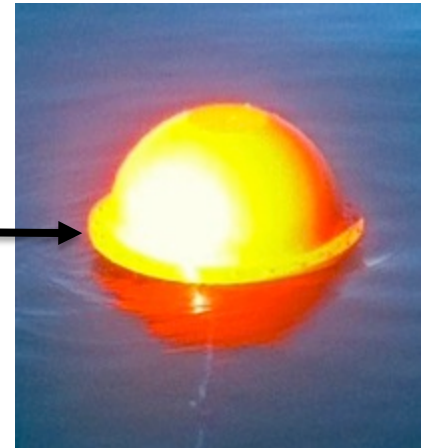
The five (5) moored 15.5" diameter wavebuoys in Pelican cases will be shipped to WHOI prior to MOB. Cases are 20.50" x 20.50" x 19.25", 105 lb. each including 50 lb. mooring weight

6<sup>th</sup> Pelican case with the 10" diameter drifter buoy in it, no mooring

Deployment logistics are:

transit to the five (5) mooring sites each of which is separated by approximately 25 NM, with an approximate 1/2 hour deployment time.

During the experiment, we will want to deploy/recover the drifter buoy using the RIB from the Knorr on a daily basis, starting up-wind/wave/current, and recovering down wind/wave/current.





# 4-Wavegliders

- Can be stored on deck before deployment and after recovery.
- Will be piloted from the UMVC2 Van on the KNORR
- WaveGlider navigation areas will be coordinated with AUV team (typically 10-15 nm apart)
- Deployment: ~25min per vehicle
- Recovery: ~45min per vehicle
  - Small boat support required.



L&R from KNORR



L&R from RHIB

