



NS-56 Confirmed for Saturday July 23.

After checking the weather and the ground track daily for favorable conditions this weekend, NS-56 is confirmed for this Saturday, July 23, 2016!

While the weather is favorable for the balloon, the weather tomorrow is supposed to be very hot! If you plan on joining us, please bring sunscreen, hats, water, or anything else that could help you stay cool. We will try to aim for an earlier launch to avoid the hot weather.

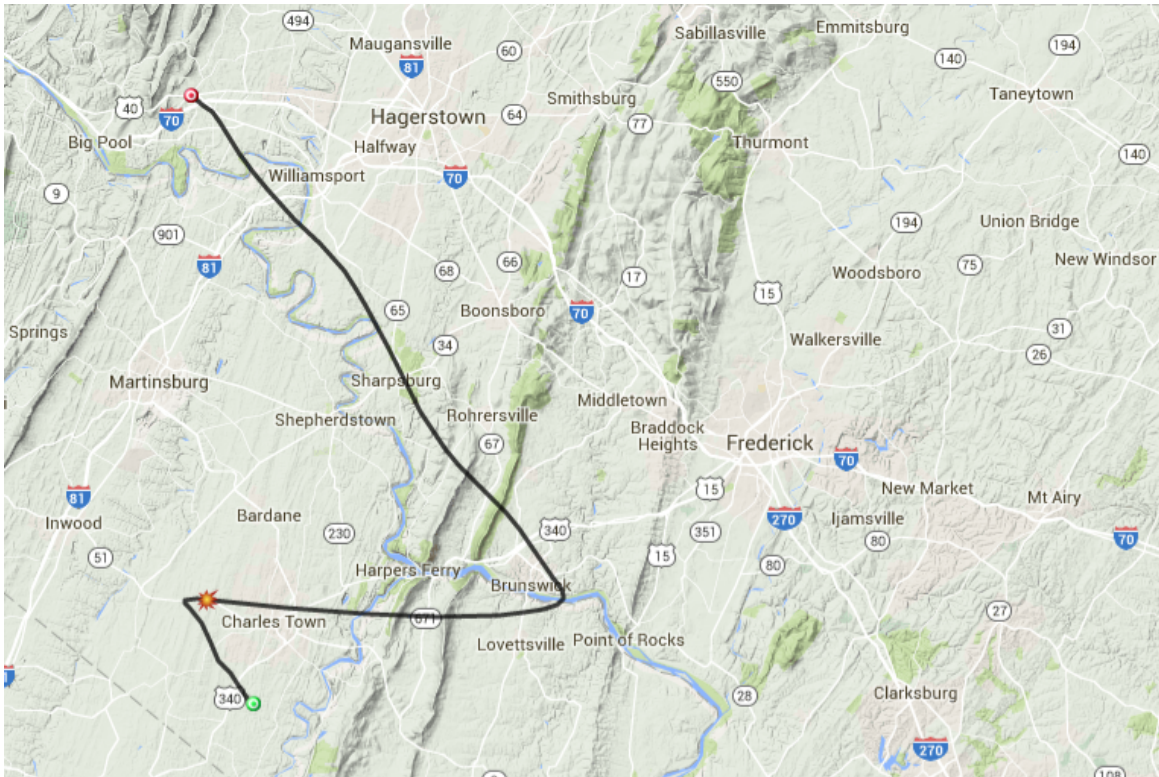
The time and location for the launch are Clear Springs Elementary School (12627 Broadfording Rd, Clear Spring, MD 21722) around 8 AM. Link to Google Maps [here](#).

Tentative Schedule

Saturday, July 23, 2016

- 4:15AM - Launch team and visitors meet at the Space Systems Lab parking lot.
- 6:15AM - Projected arrival at the Clear Springs McDonads.
- 6:50AM - Begin set up in the parking lot of Clear Springs Elementary School.
- 8:00AM - Balloon and payload release!

Current Ground Track Predictions



The preliminary ground track predicts the balloon burst around Charles Town, West Virginia.

Payload Lineup

Helios

Helios, the altitude control system, returns! Flying with a modified and lighter iteration, Helios will be releasing helium at around 65'000 feet.

Command Module

Command Module is the main tracking and telemetry payload for every flight. CMD also serves as the link from the balloon string to the ground station.

Bach's Box

Bach's Box, the weather payload, is flying again with a dust sensor, multiple pressure / temperature / humidity sensors, and a GoPro.

Cloud360

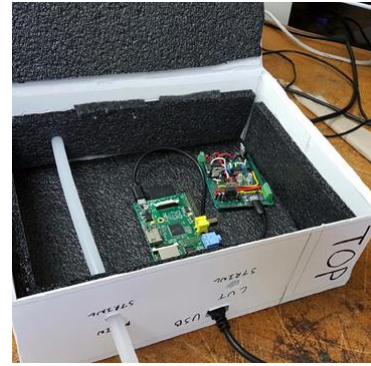
Cloud360, a CapTech payload, focuses on the acidity of moistures in clouds. This payload will be flying a 360-degree camera and aerogel to record the clouds and collect particulate matter.



IRENE



Frequent Flyer Bach's Box



DataPigeon

Payload Lineup (cont...)

IRENE (Ionizing Radiation Exposure Nearspace Experiment)

IRENE will measure beta and gamma radiation as it rises through the atmosphere to compare with a peak in radiation seen in another experiment.

GANONDORF (Gravity Assisted Next-gen electromagnetic Node for Downward Oriented Release)

GANONDORF is a mechanical cut-down that will be tested with a static line this flight.

DataPigeon

DataPigeon is an experimental payload attempting to create a droppable data carrier. In its final iteration, DataPigeon will log data from other payloads and detach from the main payload string to provide access to flight data while the balloon is still in the mid-flight.

SCORCH

SCORCH returns after NS-55 to test its cut-down method this launch!

HABScope

HABScope is a proof-of-concept low-cost telescope. Costing well under 200 dollars, HABScope includes a COTS telescope, a raspberry pi IR camera, and a custom built attitude control system.

Any Questions?

Please contact Dr. Mary Bowden.

Email: bowden@umd.edu

Phone: (301) 275-7723

Live Updates

Follow our live tweetup of the launch day [here!](#)

You can also track us on the [APRS website](#) using UMD's callsign: **W3EAX-8**.

Join us on our Zello (app) channel UMD NS-56!

*The NearSpace High Altitude Balloon Team thanks the **Maryland Space Grant** for its continued support and effort to make our program possible.*