



Eclipse Activity Report (EAR)

Nationwide Eclipse Ballooning Project

Issue #17

7/16/2017

<http://eclipse.montana.edu>

EAR Issue 17

Summary

This and all previous issues of EAR can be found at:
<http://eclipse.montana.edu/news/>

General Updates

Next to last all teams telecom

Last code updates

Dry Run

Reminders: Preparing for Eclipse Day

Team Intro Videos and Team Websites

Press Release Template and Media Resources

Communication

Next Telecom 7/20/2017 at 11AM Mountain Time. We will spend about 20 minutes on updates then open the floor for questions.

- Call toll free 855-797-9485
- Pass code 921-692-445# then # again

Action Items

- Send Shane Team Photo
- Send Shane Team Website/Blog/Facebook Page
- Send Stream Team Video
- Telecom 7/20/2017, 11 AM Mountain Daylight Time

General Updates

T-Minus

5 Weeks 0 Days 17 Hours 15 Minutes

Next to last all teams telecom

As we are just about one month until the big day (!!), we need to make sure a few last details are heard by everyone. Please make sure at least one person from your team is on the next to last all teams telecom Thursday July 20th at 11 AM Mountain time.

Last code updates

We are working very hard to get the live streaming video working as best as possible given our low power/low cost equipment. It's amazing what we're able to do but it does take practice. The two key components to making the video system work well are optimized video code for our bandwidth and power constraints and the pointing of the ground station antennas. There will be code updates for both the video system and ground station coming that you will need to implement. Instructions on how to make the code updates (straight forward) will be available via videos.

Uploading Eclipse Day Video and Images

Instructions for uploading your eclipse day flight video and images will be shared soon. Upon completion of everyone's flights, we would like to begin stockpiling images and video ASAP, the purpose being to share images/video that:

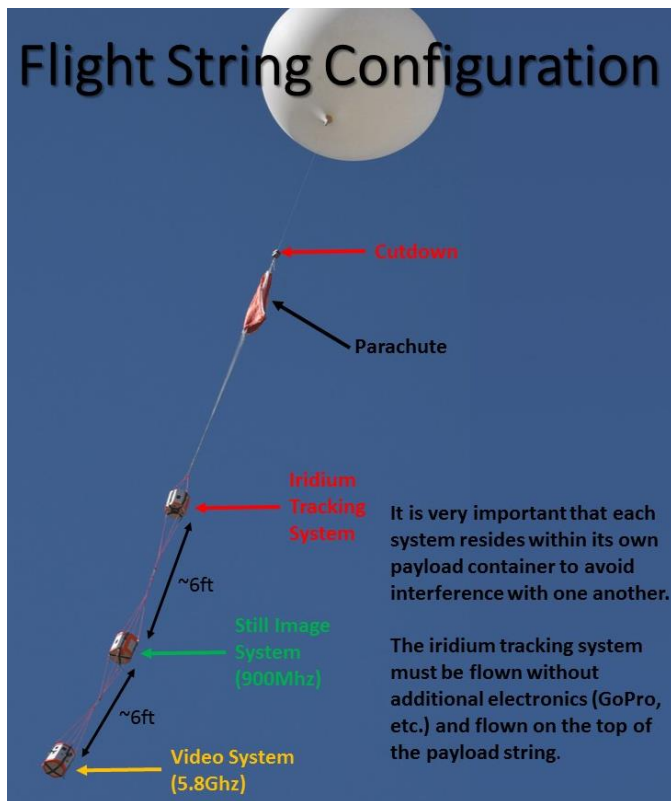
- 1) will be available for the public to view post-eclipse (since the live views will be gone)
- 2) to starting editing together a highlights reel
- 3) to share with the Eclipse MegaMovie project for their science.

Launch Spreadsheet information

Verify your team information within the spreadsheet attached in the EAR17 email and email Shane any updates ASAP.

Reminders: Preparing for Eclipse Day

- Hardline internet is strongly recommended with ~3Mbps upload speed
- Video streaming range is ~25 miles – precise tracking is important at longer ranges
<http://eclipse.montana.edu/wp-content/uploads/2015/03/Preparing-Your-Ground-Station-Location-and-Launch-Location-and-Time.pdf>
- Practice manual pointing as a backup (the signal strength can be seen on the back of the ground station Ubiquiti modem)
- Be prepared for cellular network outages (texts may be more reliable for those without WPS)
- Have an eclipse day logistics plan
 - Arrive at your site(s) early!
- When transporting helium tanks, make sure you follow the rules and **make sure you have shipping papers should you be required:**
<http://eclipse.montana.edu/participant-ballooning-resources/>
- Double check you have all the resources on the FAQ/System Resources/HAB Resources pages that you may need
- Perform your own long-range tests!
- Practice, practice, practice!

Payload string configuration:

The Iridium tracking system must be flown without additional electronics (including GoPros, etc.) and flown at the top of the payload string.

Leadership teams will NOT be available for questions or support August 19th-22nd

The leadership teams will not be available for technical support leading up to and the day of the eclipse. Important balloon flight/launch related contact will be shared before the day of the eclipse.

To best prepare your team for any mishaps on eclipse day, make sure you have all the resources you need including your own unique *Checklist for Eclipse Power up and Testing* (found on the System Resources page). Remember there are 3 major resource pages:

- FAQ - <http://eclipse.montana.edu/faq/>
- System Resources: <http://eclipse.montana.edu/resources/>
- HAB Resources: <http://eclipse.montana.edu/participant-ballooning-resources/>

Team Intro Videos and Team Websites

This project is a collaboration of 55 teams of universities, colleges, community colleges, high schools and independent groups. Nothing like this has ever been done before! We want to share this project with the world and that means you, the teams. Please prepare a website, Facebook page or blog and send to Shane so we may share it both on the EBP website and on the streaming page.

Also, please consider making a team intro video and sending it to Keith at Stream. Instructions can be found in the pdf attachment included in the EAR 17 email.

Press Release Template and Media Resources

You may want to communicate with your university, community college, school, etc. communication department or contact to share the press release template (attached in email) and media resources.

As the project slides further into the national spotlight you may begin receiving more inquiries from both local and national media sources. It is also worthwhile to reach out to local media to promote your operations and activities during the eclipse. To help you with these inquiries, and to share a globally consistent vision of the project, we have compiled several resources to assist your correspondence with the media. Attached is a press release template which has an overview of the project which you may adjust to match your teams' circumstances (highlighted in blue).

Media Resources Page:

<http://eclipse.montana.edu/media/>

- Links to a Media Image Repository (Password **Bobcats**)
- Videos overviewing the project, balloon launch and a float demonstration
- Links to the "The Teams" and "Programs Page" (send us your team website so we may link to it)
- Links to the project white paper and infographic

- Links to our project news archive

If you have additional resources (such as images or videos) you would like us to consider including within these resources please feel free to send them to Shane. Below you will find the national and project media contact:

National contact: Dr. Angela Des Jardins, director,
Eclipse Ballooning Project

Media Contact: Marshall Swearingen at Montana State
University Communications
marshall.swearingen [at] montana.edu – (406) 994-
5036

Technical Activity

ProBoards

<http://eclipsedesign.proboards.com/>

GitHub

<https://github.com/MSU-BOREALIS>

New FAQs

See answers at <http://eclipse.montana.edu/faq/>

Communication

- Points of Contact for eclipse path state hosts can be found from the FAQ page.
- The next group **telecom** will be Thursday July 20 at 11 AM Mountain daylight time. At the telecoms, we will spend about 20 minutes on updates then open the floor for questions.
 - Call toll free 855-797-9485
 - Pass code 921-692-445# then # again
- We're putting together a **social media** team. Anyone interested in helping, please contact Shane or Angela.
- There will be eclipse ballooning sessions at the Southeast and Western **Space Grant regional**

meetings at the end of September. We invite you to share your progress if you'll be at one of these meetings.

- Facebook page:
<https://www.facebook.com/EclipseHighAltitudeBallooning/>
- Twitter:
https://twitter.com/Eclipse_HAB

Action items

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