



EOSS Meeting Minutes Tuesday May 14, 2019 Centennial, CO

Call to Order: Tom KE7KCK called the meeting to order at 7:00 PM. There were nine present with six attending via Zoom Meeting.

Previous Meeting Minutes: Meeting minutes for April 9, 2019 are available on the EOSS web site for review. Those attending waived the reading of April's minutes.

Treasurer's reports: Rob, NØRPF, is not available to present the treasurer's report.

Tech Committee: Mark, KCØD, reported that all payloads are in good shape. Tom, KE7KCK, asked about qualification status for the wireless releases. Mark, KCØD, said that the two wireless releases we have are qualified and working correctly.

Launch Team: Larry, NØNDM, said that he found a 1200-gram balloon when he inventoried his stock. We will use this balloon at GPSL. Larry will bring hydrogen along with a spare 1500-gram balloon to GPSL. Larry, NØNDM, had help with balloon fill from Benjie, WØCBH, and for the first time Jeff, N6BA. Launch went very well.

Ground Station: Jeff, N2XGL, reported that everything worked very well during the flight. Randy has his system working as backup I-gate. Russ, KBØTVJ's system is also working but had some difficulties connecting to the internet. Jeff, N2XGL, said that they have implemented for the first time an ADS-B RF receiver at the ground station. We did not receive any packets from the ADS-B payload prior to launch but believe we have the capability to monitor broadcasts at 1090 MHz. Jeff, N2XGL, said he is looking forward to GPSL and will bring some SDR gear to show off.

Track and Recovery: Marty, WAØGEH, said that we had a successful flight. We were able to get trackers and students in position in time to get out of their vehicles and watch the payloads come down. This was a group of sixth, seventh, and eighth graders and I think we made a positive impact on their attitude towards science. Marty, WAØGEH, would like to thank the Launch and Tracking teams for providing a great experience for the students and parents of Summit Middle School.

EOSS-289 Recap: While monitoring the ADS-B, Randy noticed that Flight for Life was operating in an area that trackers and student would travel through on their way to recovery site. Ground station notified Marty, WAØGEH, of the situation. Marty was able to reroute Jeff, N6BA, who leading the students out. Jeff, N6BA, said that the students were very excited and helped some of them configure their cell phones to track.beebott.com to enhance their experience.

GPSL: Nick, NØLP, is about to release revision 2 of the GPSL booklet. If you are going to GPSL and have not received a copy of the booklet, please email Nick. Nick has a payload plan ready that includes Jim, KCØRPS's Geiger Counter Payload and Tom, KE7KCK's dual GoPro Payload. The highlight of the trip will be Jeff N6BA's SDR presentation at the conference. Mark, KCØD, said that he has changed radio

configuration on the bottom beacon from narrow bandwidth to wide to see if it improves digipeating. John, KCØL, inquired if EOSS would be assisting other group's with recovery once we are out of the field. Nick, NØLP, said that he would contact our host once we are finished to see if we can provide assistance. Nick, NØLP, will publish repeater frequencies and tones in next GPSL manual.

Upcoming BIRST Flight: Tom, KE7KCK, notified the group that Ball Aerospace has request to change launch date to July 13. They have a conflict with a rocket launch in Fort Carson. They have extended an invitation to EOSS to attend the launch. Tom will send out more info as it comes available.

CU's ADS-B payload: Mark, KCØD, said that CU has flown their ADS-B unit twice with mixed results. The ADS-B worked well on the first flight but failed to receive any packets on the second. Mark, KCØD, reported that the ADS-B reported sporadic packets after reaching 40,000 feet but data was incorrect. Mark added that bad data is worse than no data. Mark said that ADS-B should be turned off prior to launch if unit is not working correctly. Jeff, N2XGL, will add ADS-B confirmation into ground station checklist. Braedon, NB4V, says team is going through construction of ADS-B unit to verify integrity. Tom, KE7KCK, said our ultimate goal is to build a body of knowledge that can be published in public media on the use of ADS-B in high altitude ballooning.

Tracking Kiosk: Jeff, N2XGL, presented his idea for a tracking kiosk based on a branch of the EOSS Tracker used in tracking vehicles. The kiosk is a public facing web site that students can use to track their flights. Flight coordinators would need to setup the kiosk prior to flights. Ben, KBØUBZ, will look into Jeff, N2XGL's specifications required for hosting the kiosk. Expected cost is about \$55.00 per month.

EOSS Tracker: Marty, WAØGEH, had a zoom meeting last night with those on the dev branch to see what it takes to offer the tracker to the public. It turns out to be a big deal because we do not want to overwhelm the developers with technical support questions. We will support our members and customers to make sure their units are working. Marty, WAØGEH, and Nick, NØLP, suggested that we present the EOSS Tracker at GPSL and gage interest by other groups. We can then work on a distribution method for fall or winter of 2019.

Hamcon Colorado 2020: Ben, KBØUBZ, is requesting seed money for HamCon Colorado 2020 on behalf of Ann, KAØZFI. Nick, NØLP, made a motion to provide \$50.00 of seed Money for HamCon Colorado 2020. Marty, WAØGEH, seconded motion. Those in attendance approved motion.

Meeting adjourned at 08:40 PM

Minutes prepared by David Lanning, Secretary.