



EOSS Meeting Minutes Tuesday November 10, 2020 Online via Zoom

Call to Order: Tom KE7KCK called the meeting to order at 7:00 PM. There were sixteen attending via Zoom.

Previous Meeting Minutes: Meeting minutes for October 2020 are available on the EOSS web site for review. Tom KE7KCK asked if anyone had comments or corrections to the minutes. October's minutes is accepted as written.

Treasurer's reports: Treasurer's report will be tabled until next month's meeting

Tech Committee: Mark KCØD said that everything worked well on the last flights where cut downs were used on both flights. Mark KCØD thanked Steve KØSCC for kitting everything for launch. This made stringing flights for Mark KCØD and Doug KØBRA go very smooth. Mark KCØD handed off boards and components to Steve KØSCC to build four more payloads like KCØD-3. Steve KØSCC said that along with building the new tops he will be building new releases to go with them. The goal is to have them ready for the spring qualification flight in February. Steve KØSCC said we have received donations of some Tiny Track 4's which will be used to build some new bottoms after the tops are complete. Steve KØSCC said that on a previous flight we had some damage to one of the cutters. This was an experiment to see how light we could make an enclosure around the cutter. Steve decided that he had removed too much and added a little back on when repairing. Steve KØSCC added that he will be ordering some flight line and quick links over next few weeks.

Ground Station: Jeff N2XGL said both flights went very smooth. Jeff N2XGL offered special thanks to Randy and Thomas K5JK (Jeff's N2XGL's dad) for joining at the ground station. Jeff N2XGL says we are in a position now to capture ADS-B packets, filter packets of interest, and route them on to the internet. Jeff N2XGL added that ground station is working well.

Track and Recovery: Marty WAØGEH said we had a good crowd of trackers for EOSS-304 and EOSS-305. Marty WAØGEH expressed thanks to John KCØL for his efforts to contact the manager of the Sidney NE airfield to inform him of our flight heading their way. This provided a fifteen-minute warning before payloads passed over the field at about 6600 feet above ground level. Marty WAØGEH also expressed appreciation for the decision to cut down EOSS-304 and EOSS-305 to shorten the flights and allow them to land near each other. Thanks to Mark KCØD and Steve KØSCC for their work in providing reliable cut down mechanisms.

FAA: Russ KBØTVJ said he has not heard anything from the FAA after the flight, so he believes everything went well. Russ KBØTVJ did receive a call from TRACON before the flight. Russ thinks they are becoming more interested in EOSS since Michelle will be leaving at the end of the year. Randy reported nothing out of the ordinary in communicating with the FAA. They just wanted to know when both flights were on the ground.

Tracking Bricks: Jeff N6BA said we had a couple bug fixes prior to this flight. The first improves the use of finger gestures on Microsoft Surface® computers and the second fixes a GPS date rollover issue that prevents the brick from showing the trackers position on the map. Thanks to Jeff N2XGL these fixes have been incorporated into the 1.31 production release.

EOSS-303 Recap: Jim KCØRPS said that EOSS-303 was for Metro State on November 1st that was launched from Wiggins, CO. There was a one-day launch delay due to high wind prediction for Saturday. Students were not able to see the payloads land because of delays getting everyone to the staging location on time. Jim KCØRPS said Metro State was happy with their flight experience and all payloads were successful.

EOSS-304 and EOSS-305 Recap: Tom KE7KCK said that the flight plans were originally for one 3000-gram balloon and one 1500-gram balloon and was changed late in the week to be two 1500-gram balloons. EOSS-304 was comprised of twenty-one BUFFS payloads. These payloads are sent to students to build at home and average about 180 grams each when completed. EOSS-305 had eight payloads for CSGC and one from Johnson Space Center. Both flights were successfully cut down. Landowner permission was received, and recovery went very smoothly. Tom KE7KCK said he was happy to see recovery personnel wearing high visibility vests.

Flight Plan Accuracy: Tom KE7KCK said he had some problems posting accurate flight plans late in the week which caused some distress to those preparing payloads. Tom KE7KCK is looking for some ideas to help improve the process. Mark KCØD suggested that payload plans be posted early in the week and as revisions are made an email be sent to key personnel. Mark KCØD added that changes should be noted at the top of the document. Doug KØBRA suggests that we take advantage of the revision tracking feature in Microsoft Word.

EOSS Contact Info: Tom KE7KCK said that contact info posted on the web site is dated and makes it difficult for someone interested in high altitude balloons to contact EOSS. Doug KØBRA will get admin rights for G Suite to Ben KBØUBZ so he can create mail drops for EOSS officers.

ADS-B: Steve KØSCC asked if we believe that ADS-B will have any impact on the pursuit of different FAA waiver conditions and if so, should we be looking to obtain an ADS-B for EOSS. Marty WAØGEH said that Russ KBØTVJ reminded him that we only have data for two successful ADS-B flights, and we need to build a body of evidence before we approach the FAA. Steve KØSCC and Mark KCØD will investigate which ADS-B units are available and which may work well for EOSS. Tom KE7KCK will add ADS-B to Decembers meeting agenda.

Increase EOSS Depth: Steve KØSCC says we need to do some cross training to increase depth across the organization. We need people to learn payload stringing, balloon fill and launch, Ground station operations.

Meeting adjourned at 09:00 PM

Minutes prepared by David Lanning, Secretary.