



EOSS Meeting Minutes  
Tuesday October 9, 2018  
Longmont, CO

**Call to Order:** Tom KE7KCK called the meeting to order at 7:00 PM. There were 9 present with 4 attending via Zoom Meeting.

**Previous Meeting Minutes:** Meeting minutes for September 11, 2018 were reviewed and accepted.

**Treasurer's reports:** Rob NØRPF reviewed checking and savings accounts adding that everybody is paid and everybody is up to date. Steve KØSCC is working on invoice to be submitted.

**Tech Committee:** Steve KØSCC provided a failure analysis for KCOD-15 on the previous flight. While KCOD-15 was on the ground everything seemed fine but at launch signal strength faded. Steve found that the dipole made using a pill bottle develop a crack that in turn separated the driven element from the coax. Steve believes this happened at launch. We are working on a more substantial solution to replace the pill bottle for the center of the dipole antennas. Steve is looking into different ways to lighten the release mechanism on the cut down. Steve says all payloads are in flyable shape.

**Launch Team:** Larry NØNDM has balloons and gas ready for this weekend's flights. Larry needs to buy a drop hitch that will work with his new truck. Marty suggests that EOSS provide the hitch since it will be used to pull the EOSS trailer. Larry will order balloons for upcoming flights.

**Ground Station:** Jeff N2XGL said we are ready for this weekend's flights out of Deer Trail, CO. Randy has issued the HiBal. Jeff N2XGL has been working on an SDR radio in an ammo can that can be placed a short distance away from the launch site to verify beacon signal strength prior to launch. This won't be ready for this weekend but should be ready for the November flights. Steve KØSCC offered to help with testing when Jeff is ready.

**Track and Recovery:** Marty WAØGEH reported that he has 6 tracking teams ready for this weekend. Predictions indicate payloads will land approximately 86 miles down range. Marty will position trackers prior to launch. Marty informed the group that there are no repeaters in the area and he will be finding high ground for simplex operations. Randy will send out contact list so trackers can communicate via cell phone if they get out of range.

**C-Base Students:** John KCØL asked if someone in the C-Base group could provide an article that could be sent to the ARRL and QRZ magazine. Nick NØLP suggest that they include 3 or 4 photos to go with the article. Braedon NB4V will take a look at this.

**SDR Tracking System Project:** Steve KØSCC presented an example enclosure made by Hammond that could be used to house SDR system. The system will include everything except an antenna. Jeff N6BA has a working prototype in his tracking vehicle and has made a few improvements. Jeff has offered to demonstrate the system at the next meeting. Tom KE7KCK will add Jeff to next month's agenda. Marty

WAØGEH will send blanket email to determine interest so Steve KØSCC can work on pricing. Expected cost will be \$500.00 plus or minus \$100.00.

**Fall STEM Flight:** Tom KE7KCK reported for Jim KCØRPS that the Fall STEM flight will be out of Deer Trail, CO this weekend at 8:00 AM. Ground crew will setup at 6:30AM. Steve KØSCC will need some help with weighing and stringing payloads. C-base students are still waiting for a call sign for their ADS-B beacon so they will fly their payload with dummy weight, strobe, and battery. John KCØL will do the Friday night net from Texas.

**Metro State Flight:** Tom KE7KCK says Metro State will attempt to run air operations on their flight. Anyone interested in flying with them to help support trackers should contact Tom.

**Meeting Notices:** Marty WAØGEH offered thanks to Randy for his work on the new monthly meeting notices. Randy at Steve's request will add RSVP for dinner so restaurant can be informed of group size.

**Email Migration:** Dave KDØSEM is working on migrating email from Yahoo to groups.io. John KCØL asked about obtaining email [accounts@eoss.org](mailto:accounts@eoss.org). Tom will place John's request on the agenda for next month's meeting for research and discussion.

**Ben KBØUBZ:** Marty informed the group that Ben KBØUBZ is going through some tough times and asked that we send him a note to say hi and wish him well. Hi Ben, I hope things are looking up.

**Assent Data Presentation:** Having received some complaints about low assent rates on some recent flights, Nick NØLP began looking at past flight history to see if something has changed. Nick averaged the assent rates of 27 flights going back from flight 278. Nick then looked for flights that had assent rates that fell more than 15% outside of the average. Nick found that 3 flights fell out of range above 45,000 feet and 10 flights fell out of range below 45,000 feet. He believes this could be due to winds with a vertical component that affect assent rate. Nick NØLP question is, do we keep doing things the same way? Nick had much more data than can be presented here. Nick is continuing his analysis. Thanks Nick for your work on this.

**GPSL:** Anyone who would like to present at GPSL in Pella, Iowa please contact Tom KE7KCK.

**Christmas Social:** Tom KE7KCK will send out email to gauge interest in a social gathering.

Meeting adjourned at 09:00 PM

Minutes prepared by David Lanning, Secretary.