



EOSS Meeting Minutes  
Tuesday August 10, 2019  
Longmont, CO

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

**Previous Meeting Minutes:** Meeting minutes for July 13, 2019 are available on the EOSS web site for review. Tom KE7KCK directed attendees to review minutes online. With no additions or corrections, passage of July's minutes is accepted as written.

**Treasurer's reports:** Rob NØRPF reviewed checking and savings accounts. We have one outstanding invoice for a CU flight. Rob is working on mileage reimbursement sheet and will have more next month. Rob will look into invoice submitted by Mark KCØD that has not been paid. Rob has issued check to Steve KØSCC for SDR tracking computers. Rob reviewed the orders for the SDR tracking systems. Initial order was for 28 units and second batch is for 11 units. Marty is in the process of setting them up. Funds for the ADS-B project have been moved into the savings account.

**ADS-B Project:** Motion was passed to form exploratory committee to assess where we are at and where we need to go on ADS-B project. Marty WAØGEH will form committee to review work done by CU students and find a path forward for EOSS.

**Tech Committee:** Mark KCØD stated that we have had an ongoing problem with digipeating positions and reviewed Steve's KØSCC's work to find a solution. Through experimentation, Steve has found proper audio level to use on the TT4's and will reset all Digi's to this level. Mark KCØD said that the CU ADS-B has flown three time and had problems on each flight. Marty WAØGEH, Russ KBØTVJ, Jim KCØRPS, John KCØL, and Mark KCØD met with the CU ADS-B team to discuss problems they have had and their plans for moving forward. They have experience power issues and problems with altitude reporting. We are waiting for failure analysis report from CU.

**FAA:** Russ KBØTVJ had difficulty contacting the FAA call center on the last flight. He tried every phone number known to him to contact the FAA prior to launch without success. The FAA called Russ when balloon was around 50K feet to see if we had launched. They provided an additional phone number to Russ that can be used if the others fail. Russ will be contacting Michelle at the FAA before each monthly meeting to see if she has anything needs to be passed on to EOSS.

**Ground Station:** Jeff N2XGL said that we had a couple good flights. We found a good area in Genoa that will become the default ground station location on the north side of the softball field. This location offers good line of site access to the repeaters. While in Limon we were able to decode CU's ADS-B prior to launch. We needed to add 20db of attenuation to improve signal to noise ratio. Jeff N2XGL has been working on capturing daily radiosonde information and is working on ways to use this data to improve landing predictions.

**Track and Recovery:** Marty WAØGEH said that we had a good flight and recovery. Marty enjoyed interacting with the students. We landed on a wind farm and found that a contact numbers posted at gate was no longer in service. Marty deployed several tracking teams to locate landowners while he worked on contacting the security service for the power company. Steve KØSCC did locate a landowner and acquired permission to enter property. Marty also acquired permission from the power company. Marty WAØGEH also cautioned against placing your SDR antenna too close to a high gain antenna at 50 watts as it is very bad for the SDR dongle.

**Flight Recap EOSS-291 and EOSS-292:** Tom KE7KCK said that both flights worked very well. The BIRST flight out of Genoa when very well and the owner of the softball field provide free camping to the students and EOSS. A great time was had by all. The Space Grant flight also worked very well. We had good communications with the students and had no difficulties staging the students during the flight.

**Upcoming Flights:** Jim KCØRPS will be flight coordinator for the October 12th NDIA/Fall STEM flight and the November 2nd Metro State flight. Tom KE7KCK will be flight coordinator for the November 9th Gateway to Space flight.

**Tracking Kiosk:** Jeff N2XGL says the kiosk has performed well on the last two flights. The server did experience a heavier load on EOSS-292. Jeff N6BA is working on code to optimize the server and some APRS filtering to help reduce load. The kiosk will be updated to version 1.2 when it is released. Marty WAØGEH and Nick NØLP stated that the kiosk is a gigantic hit with the students. The Jeff's N2XGL and N6BA are thinking about archiving digital data collected on flights to use for analysis of flights and flight predictions.

**C-Base:** Jim KCØRPS says that C-Base is still active, and he is willing to interface with them and report back on how we can help each other. Thanks Jim.

**Privacy Concerns:** Tom KE7KCK has been contacted by QST for input on an article and Tom wanted to make sure we had photo permissions and credits. This inquiry prompted wider discussion of EOSS liability. Rob NØRPF and Tom KE7KCK will contact legal counsel to find out where our liabilities are.

**GPSL Coordinator:** Nick NØLP has been our GPSL coordinator for the last 14 years and is now looking for someone to take on these responsibilities. Nick will help this volunteer to get started. Please contact Nick if you are interested.

Meeting adjourned at 09:00 PM

Minutes prepared by David Lanning, Secretary.