

Groundstation Progress Report

Date: November 15th, 2019

Supervisor: Dr. Jayshri Sabarinathan and Nicholas Mitchell

University of Western Ontario, Department of Electrical and Computer Engineering

Alexander Tavares:

1. Researched different bandpass filter designs for 500MHz frequency range
2. RLC Butterworth filter circuit built in microcap
3. AC Analysis of butter worth filter

Sarah Coveney:

1. Looked over and formed questions about link budget spreadsheet
2. Polarization Research
3. Watched Sat Comm 101 Video

Ruhmaa Bhatti:

1. Reviewed presentations from team's previous meeting
2. Began understanding Noise temperature equations, researched fundamentals of antenna noise temperature and how to calculate it
3. Shifted focus to filters to help with AC Analysis of butterworth filter, reviewed butterworth and chebyshev filter designs, created preliminary design constraints for 4 bandpass filter designs

Zoe Fox:

1. Researched notch filters to buy
2. Went through second year notes on microcap to jog memory
3. Redownloaded microcap and attempted some filter design (not successful)