Mission Planner

Zhaopeng Li, Anthony Ear, Hieu Dao-Tran
Professor Peter Burke
Department of Electrical Engineering and Computer Science

Introduction

Mission Planner is an open source ground control station application on Windows designed for autonomous vehicles that can link to it via cable or wireless connections like Bluetooth.

Progress Made

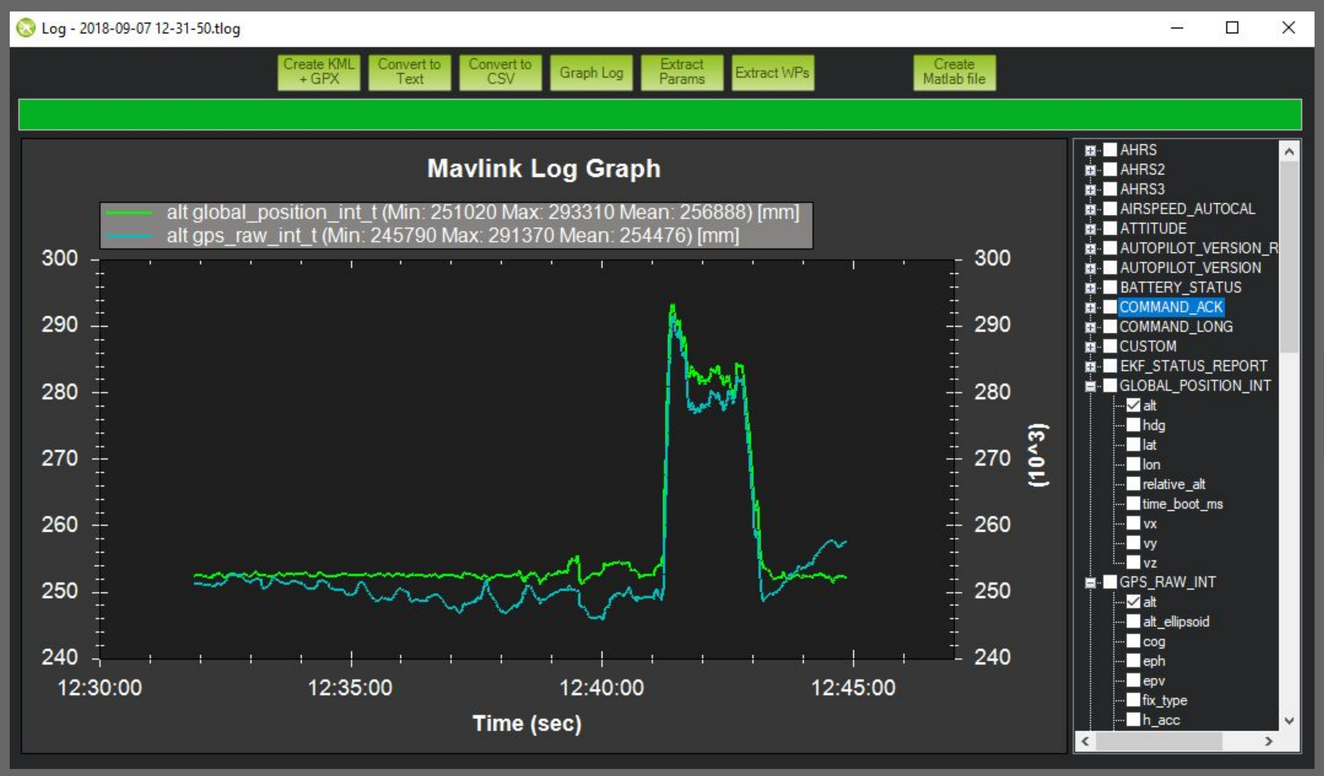
- Implemented metric unit display onto the log graph depending on data selection
- Analyzed the workflow of the .tlog and .bin files
- Working on selective data exportation into .txt files

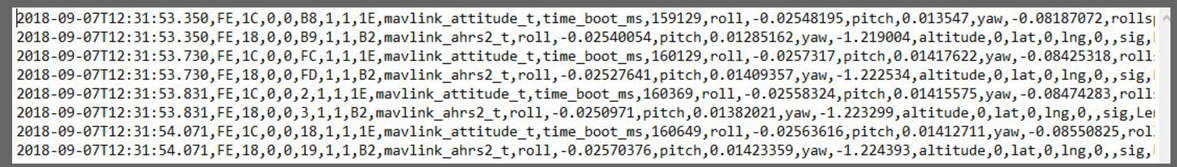
Challenges

- Understand the source code of Mission Planner
- Research the Micro Air Vehicle Link Protocol
- Developing code that does not conflict with existing features

Future Goals

- Export data into files for other programs to use
- GUI Improvements for the Mission Planner application
- Implementations to be accepted by Michael Oborne





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```

Convert tlog binary file to the desired .csv format

```
date,time,mavlink_attitude_t_time_boot_ms,mavlink_attitude_t_roll,mavlink_attitude_t_pitch,mav
2018-09-07,12:31:53.350,159129,-0.02548195,0.013547,-0.08187072,0.001784209,0.002066399,-0.001
2018-09-07,12:31:53.730,160129,-0.0257317,0.01417622,-0.08425318,0.0009900783,0.003273377,-0.0
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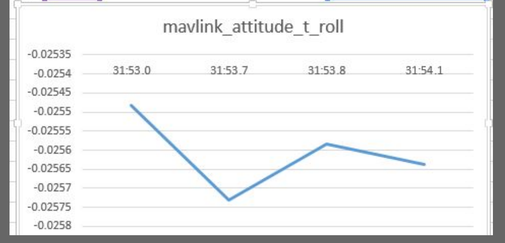
2018-09-07,12:31:54.071,160649,-0.02563616,0.01412711,-0.08550825,-0.002114733,-0.001312248,-0
```

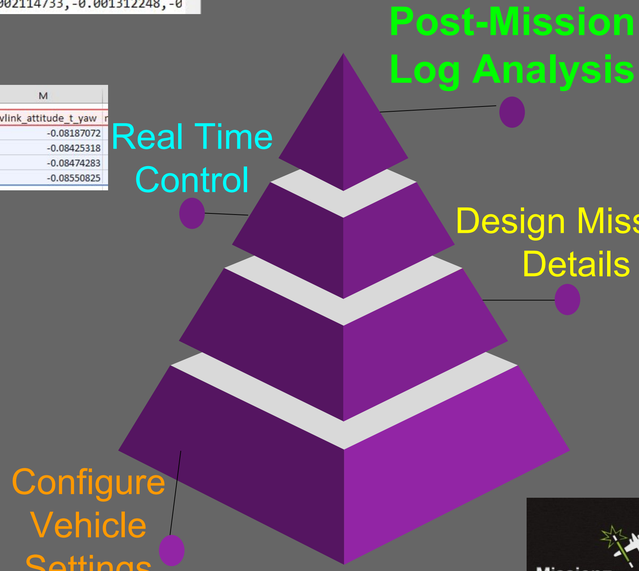
Import the csv file in Excel

	G	H	I	J	K	L	M
2		date	time	mavlink_attitude_t_time_boot_ms	mavlink_attitude_t_roll	mavlink_attitude_t_pitch	mavlink_attitude_t_yaw
3		2018/9/7	31:53.0	159129	-0.02548195	0.013547	-0.08187072
4		2018/9/7	31:53.7	160129	-0.0257317	0.01417622	-0.08425318
5		2018/9/7	31:53.8	160369	-0.02558324	0.01415575	-0.08474283
6		2018/9/7	31:54.1	160649	-0.02563616	0.01412711	-0.08550825

Simply graph the data in Excel

	time	mavlink_attitude_t_time_boot_ms	mavlink_attitude_t_roll
8/9/7	31:53.0	159129	-0.02548195
8/9/7	31:53.7	160129	-0.0257317
8/9/7	31:53.8	160369	-0.02558324
8/9/7	31:54.1	160649	-0.02563616





Mission Planner Website: http://ardupilot.org/planner/index.html

The Henry Samueli School of Engineering
University of California • Irvine