

Drone SWARM Budget Proposal

A Capstone Project

By: Natalie Jones, Anthony Torres, Anzam Sheak,
Austin Worrell, Daley Goff, Logan Johnson,
Maggie Atkinson, Mahmoud Zeid, and Tim Kent

Faculty Advisors: Drs. Krishna Kaipa, Thomas Alberts, & Drew Landman

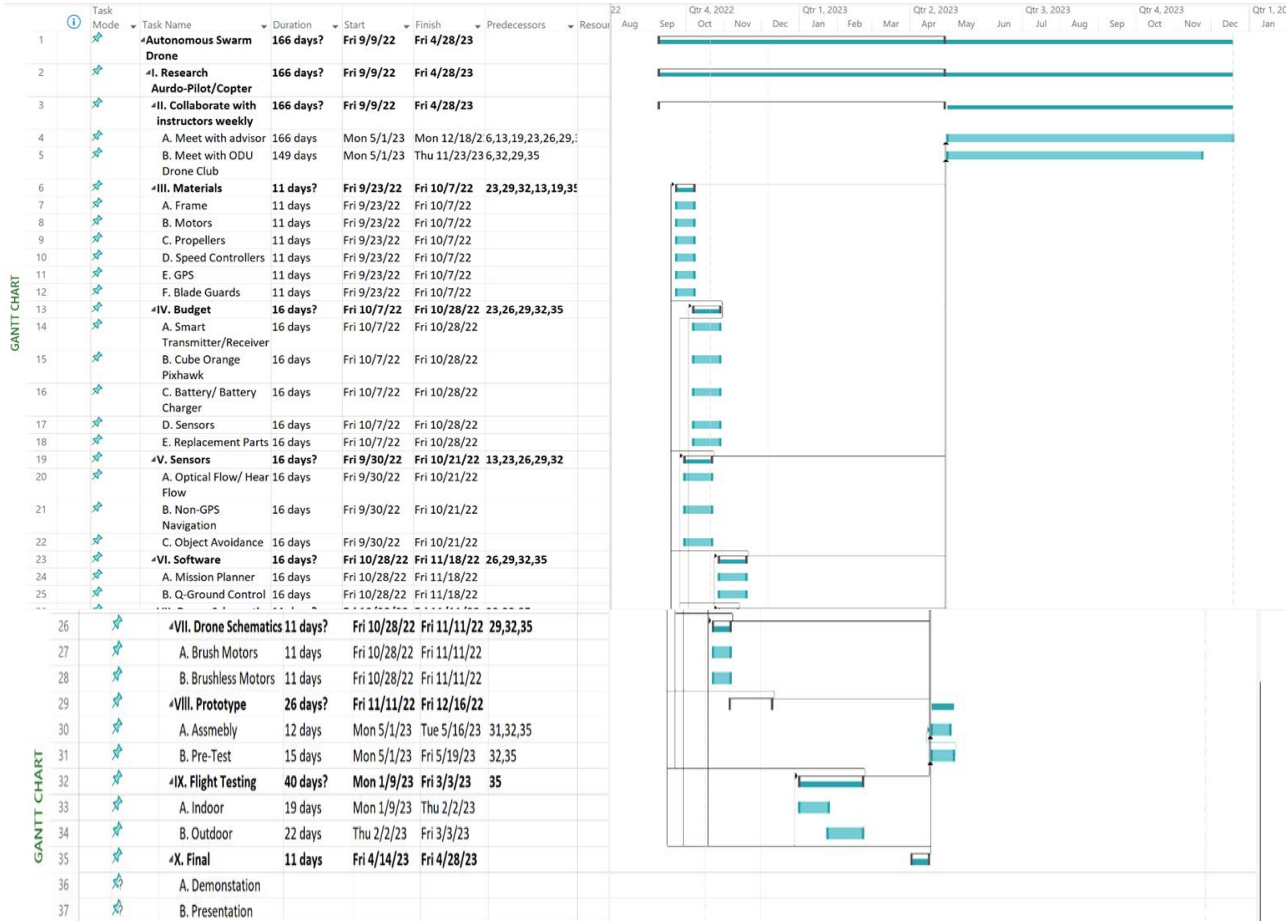
Department of Mechanical and Aerospace
Engineering



Project Objectives and Relevance

- Deliver a fully autonomous multi-drone swarm
 - Our team will utilize two drones with parallel routes, in close proximity without collision and user input
 - Our team will use high quality sensors and flight controllers for our two drones

Project Timeline





Budget

Necessary Materials	Number of Units	Price	Total
SIYI MK15 enterprise fpv combo	1	600	600
Cube Orange/Black Pixhawk	2	350	700
Battery 4s	3	900	2700
Battery Charger	1	150	150
SIYI HM30	2	360	720
Hex Hereflow Optical Flow Sensor	2	125	250
HC-SR04 Sonar Range Finder	1 (pack pf 5)	10.99	10.99
Lidar Lite Range Finder	2	150	300
360 Lidar Sensor 12 m	2	100	200
Prop Guards	2	20	40
24ga Silicone Jacketed Pre-Tinned S	1	14.99	14.99
14ga Silicone Jacketed Pre-Tinned S	1	23.38	23.38
	Cost	One Drone	Two Drones + 1 spare battery
		2804.36	5709.36



Other Sources of Funding/Materials

- Body of drone given by Dr. Landman
- Tools already owned by team members/ODU Drone Club



Budget Justification

- Many sensors are needed to perform swarm
- Two drones need to be built to swarm
- Different wires are needed
 - 24 gauge = sensors and 5V applications
 - 14 gauge = battery



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**Thank you, any
questions?**

