

**FAMU/FSU College of Engineering**  
**Department of Mechanical Engineering**

**Code of Conduct**

**Team #8 AUVSI Design Competition**

**Group Members:**

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## **Mission Statement**

The objective of Team 8 is to create a professional, multidisciplinary team that is based around cooperation, respect, and commitment. By building a successful team using all member's knowledge and full contribution throughout the entire life of the project; we will strive to excel in the 2016 AUVSI Design Competition.

## **Roles**

### **Team Leader – Patrick McGlynn**

Team leader is responsible for the overall well-being of the team and the project. The team leader coordinates goals and timeline of the project and keeps the members on task and apprised of updates. The team leader oversees the delegation of tasks and facilitates these tasks. The team leader acts as an intermediary in all team communications and also promote full collaboration and transparency within the group. He will be responsible for leading meetings between the group, sponsors, and faculty. The team leader will review all assignments and documents before verifying their submission.

### **Structural Engineer – Daylan Fitzpatrick**

Structural lead is responsible for any ME-specific tasks. He works in conjunction with the aerodynamic engineer and team lead to make sure all aspects of the project are completed. The Structural Engineer also has in-depth knowledge of the physical design and overall mechanical progress.

### **Aerodynamic Engineer – Kade Aley**

The Aerodynamic Engineer is responsible for ensuring a sound aerodynamic design. This role will work in harmony with the Structural Engineer to encapsulate an efficient overall aircraft design. This role is also responsible for understanding and obeying local laws regarding unmanned aerial systems. Lastly, the Aerodynamic Engineer is the designated test pilot for the aircraft.

### **Mechatronic Engineer – Christian Mard**

The Mechatronic Engineer is the group member responsible for the integration of the electrical and programming aspects to the mechanical parts of the design. The Mechatronic, Electrical, and Programming leads are to work together to ensure successful autonomous flight.

### **Programming Lead – Jake Denman**

Programming Lead is responsible for a majority of the programming-specific tasks. He works with the Electrical Lead to integrate any program-driven devices into the design. He consults with the team leader to delegate programming tasks. The programming lead also communicates with faculty for assistance if needed. He has in-depth knowledge of the project's extensive programming and progress.

## **Electrical Lead – Kikelomo Ijagbemi**

Electrical Lead is responsible for the design of the electrical system. She incorporates the electrical subsystems and ensures the project electrically meets the requirements. She is to work hand in hand with the Programming Lead and other team members in ensuring the electrical stability of the Unmanned Aerial Vehicle system.

## **Communication**

The primary form of communicating within the group will be through calling via phone, text-messaging, and Facebook. For non-immediate messages or for the transfer of larger files between members of the group, Email will often be used. Both of these forms of communication allow for easy contact with other members.

While both previous forms of communication are extremely effective between two people, they are not as applicable for groups. To help promote communication and collaboration between the group as a whole; Facebook, Dropbox, and GitHub groups will be used. Facebook allows quick and public communication to the whole group, Dropbox allows large files and documents to be readily accessible, and GitHub allows for version control when writing firmware.

## **Ethics**

Team members are required to be familiar with the NSPE Engineering Code of ethics as they are responsible for their obligations to the public, the client, the employer, and the profession. There will be stringent following of the NSPE Engineering Code of Ethics.

## **Dress Code**

Team meeting will be held in casual attire. Bi-weekly sponsor/advisor meetings will be business casual and group presentations will be in business formal.

## **Meetings**

Group meetings will be held weekly at a consistent time to avoid conflicts. If additional meetings need to be held or if the time of the meeting needs to be changed, the team will schedule the meetings accordingly. These meetings are crucial in discussing progress, budget, ideas, and problems. Minutes of all meetings will be taken for any absent members and to refer to at a later time. Again repeated options will not be tolerated. There will also be both a bi-weekly faculty and sponsor meeting at a constant time to avoid conflict.

## **Decision Making**

It is conducted by consensus and majority of the team members. Should ethical/moral reasons be cited for dissenting reason, then the ethics/morals shall be evaluated as a group and the majority will decide on the plan of action. Individuals with conflicts of interest should not participate in decision-making processes but do not need to announce said conflict. It is up to each individual to act ethically and for the interests of the group and the goals of the project. Achieving the goal of the project will be the top priority for each group member. Below are the steps to be followed for major decision-making process:

- Problem Definition – Define the problem and understand it. Discuss among the group.
- Tentative Solutions – Brainstorms possible solutions. Discuss among group most plausible.
- Data/History Gathering and Analyses – Gather necessary data required for implementing Tentative Solution. Re-evaluate Tentative Solution for plausibility and effectiveness.
- Design – Design the Tentative Solution product and construct it. Re-evaluate for plausibility and effectiveness.
- Test and Simulation/Observation – Test design for Tentative Solution and gather data. Re-evaluate for plausibility and effectiveness.
- Final Evaluation – Evaluate the testing phase and determine its level of success. Decide if design be improved and if time/budget allows for it.

## **Conflict Resolution**

In the event of discord amongst team members the following steps shall be respectfully employed:

- Communication of points of interest from both parties which may include demonstration of active listening by both parties through paraphrasing or other tool acknowledging clear understanding.
- Team Leader intervention.
- Administration of a vote, if needed, favoring majority rule.
- In event of tie vote, refer to advisor.
- Advisor will facilitate the resolution of conflicts.

**Statement of Understanding**

By signing this document, the members of Team 8 agree to all of the above and will abide by the code of conduct set forth by the group.

Name

Signature

Date

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