FAMU-FSU College of Engineering

Department of Electrical and Computer Engineering

# Code of Conduct

Team E#11

SAR Imager

Members:

Matthew Cammuse (ECE) id: mgc11

Joshua Cushion (ECE) id: jlc10e

Patrick Delallana (ECE) id: pnd10

Julia Kim (ECE) id: jk09k

Malcolm Harmon (ME) id: mjh11f

Mark Poindexter (ME) id: mpp12b

Benjamin Mock (IE) id: bam11g

Jasmine Vanderhorst (IE) id: jv11c

Date:

1 October 2014

## **Mission Statement**

The purpose of the design project, SAR Imager, is to deliver a design that best fits the needs of our sponsor, Northrop-Grumman. In order to do so, each member of the team will contribute his/her ideas, and as a team, we will pick the ideas that will best work for the project in a constructive and respectful manner. Each team member will work on the project diligently and put in the effort required to complete each task on time.

## **Group Responsibilities**

Each team member will be assigned a role for the project that best fits the experience and skills that he/she has. Members should help each other whenever one has difficulty completing a task.

1. Jasmine Vanderhorst

*Project Manager*

It is the role of the Project Manager to ensure that all deadlines are met in a timely fashion and that all milestone objectives are inherently achieved. The Project Manager will be involved with the risk/issue analysis of all design phases and coordinate with each function of the team to ensure efficient and effective work is achieved.

*Technical Skill: Project Management, Integrated Production Systems, Risk/Issue Management, Quality Engineering*

1. Benjamin Mock

*Treasurer/Co-Lead Engineer (Industrial)*

It is the role of the Treasurer to manage all monies and budgetary concern for the project to guarantee that the tasks are performed at the lowest cost possible to achieve the highest necessary performance as stated in the objectives of the product requirements. The Co-Lead Engineer will provide the Lead Engineer and the Project Manager with the particular specifications and limitations of the Imager as they pertain to the manufacturing and ergonomic concerns. The Systems Engineer will ensure that the product design is realized from the perspective of manufacturability.

*Technical Skill: Manufacturing Systems Engineering, Production Scheduling, Quality Engineering*

1. Patrick Delallana

*Lead Engineer*

It is the role of the Lead Engineer to supervise the tasks to be completed concerning the design of the Imager. The Lead Engineer will provide weekly progress reports to the design team and also be the main source between the advisors and the sponsor. The computer programmer will do the VHDL programming of the FPGA board.

*Technical Skill: Computer Programming, Signal Processing, Computer Engineering*

1. Joshua Cushion

*Co-Lead Engineer (Electrical)*

The Co-Lead Engineer will provide the Lead Engineer and the Project Manager with the particular specifications and limitations of the Imager as they pertain to hardware and components.

The radio frequency (RF) electrical engineer will do the budget simulations using ADS software (Advanced Design Simulation). It is also the RF electrical engineer’s job to order the components along with help from the Integrated Product Team Management

*Technical Skill: Computer Programming; RF/Electrical Engineering*

1. Julia Kim

*Signal Processing Engineer/Recording Secretary*

The Recording Secretary shall take minutes at all scheduled meetings of the design team and make them available to all members, reviewers, advisors, and the project coordinator.

The Signal Processing Engineers will implement Fast Fourier transform type algorithms to do calibration and image formation.

*Technical Skill: Signal Processing, Electrical Engineering*

1. Mark Poindexter

*Co-Lead Engineer (Mechanical)*

The Co-Lead Engineer will provide the Lead Engineer and the Project Manager with the particular specifications and limitations of the Imager as they pertain to design and structure of the Imager and its components.

The mechanical engineer will design the antenna configuration and the structure to hold the antenna as well as the electrical components. Using both CAD and Professional Engineering Software, mechanical engineers will produce precise models and drawings. Sole responsibility for the material used to produce the structure will fall among the mechanical engineers. They will work in close proximity to the Antenna Engineer to make sure the system is physically working properly.

*Technical Skill: AutoCAD*

1. Malcolm Harmon

*Assistant Project Manager (Mechanical)*

The Assistant Project Manager will work directly with Project Manager and the Co-Lead Engineer to ensure that the deadlines for each task are being met. The Mechanical Engineer will provide all drafts and renderings of the product for the design team.

The mechanical engineer will design the antenna configuration and the structure to hold the antenna as well as the electrical components. Using both CAD and Professional Engineering Software, mechanical engineers will produce precise models and drawings. Sole responsibility for the material used to produce the structure will fall among the mechanical engineers. They will work in close proximity to the Antenna Engineer to make sure the system is physically working properly.

*Technical Skill: Pro-E, AutoCAD*

Matt Cammuse

*Assistant Project Manager (Electrical)*

The Assistant Project Manager will work directly with the Project Manager and the co-Lead Engineer to ensure that the deadlines for each task are being met.

The aperture analysis will be the responsibility of the antenna engineer.

*Technical Skill: Electrical Engineering, Antenna Engineering*

## **Communication**

The main form of communication between all team members will be by text messaging via the GroupMe application and by the weekly meetings that have been scheduled throughout the semester. Team members must keep an eye out for text messages as it may contain information on team meetings and any urgent information.

The secondary form of communication will be through emails. Files and information transfer will be done through Dropbox and Blackboard. It is important for each team member to check their email accounts periodically throughout the day so that they won’t miss out on any emails sent from the project advisors, sponsors, or team members.

If a team member cannot make it to a meeting, he/she must inform the other team members through text message or email within 24 hours of the scheduled time. Each team member has up to 3 excusable absences from team meetings. If a meeting is to be canceled, the group will be informed through text message and email at least 24 hours in advance, and the rescheduled meeting date, time, and location will be announced as soon as it is determined.

A log book will be kept by each of the team members of various information that is either useful and/or essential to the successful completion of the project. This will help keep track of which person is doing which work.

## **Team Dynamics**

Team members shall work together as a team, and thus will respect each other. Team members are encouraged to voice their ideas and suggestions, and they should not be ridiculed for their ideas. Any comments in regards to those ideas/suggestions should be done in a respectful and constructive manner. If a team member is having problems with the assigned task, he/she should ask other team members for help. If there is any conflict between members, it should be addressed in a timely and professional manner in order to avoid any disruptions in the project.

## **Ethics**

Team members shall at all times obey the honor policy of their respected university (FSU or FAMU) and shall at all times obey the honor policy of the FAMU/FSU College of Engineering. All team members will treat others with respect, which includes other team members, faculty, sponsors, advisors, and/or anyone else. If information is to be used that was not created by someone in the team, it **MUST** be properly cited **WITH** given permission from all of the faculty and/or parties involved (including the original owner of the information). Failure to do any of these steps may result in academic action taken against the team member and includes (but not limited to) lowering of course grade, F in the course, academic suspension, and/or academic expulsion from the FAMU/FSU College of Engineering.

## **Weekly and Biweekly Tasks**

Internal team meetings will be held at least once a week on Thursdays at 7:00 PM in order to discuss the project and tasks, and team members should not be late to meetings. If needed, team members will meet more than once weekly as required. Any additional meetings shall be agreed upon by all team members and attendance will be required. If team members grouped for a specific task must meet together in order to complete it, they must agree on a convenient time and day to finish said task in a timely manner.

Team members will also have biweekly meetings with the department coordinator, Dr. Frank, and weekly meetings, if possible, with the contact from Northrop-Grumman, Pete Stenger, via videoconference, as well as with the project advisors, Dr. Foo and Dr. Bernadin. During the meeting times, all progress and ideas will be discussed, as well as budget, any conflicts, timelines, and due dates.

## **Decision Making**

All ideas shall be discussed between team members. Any decisions that is to be made shall be done by agreement and by majority of the team members. This means that 5 or more team members should all be in agreement. If at any time, a decision cannot be made, the team leader will make a final decision. Each member has their own unique ability to make decisions. To allow one member to make the first, as a final, decision would be unfair to the other members.

## **Dress Code**

Dress code for internal team meetings are casual. Dress code for meetings with sponsors and/or advisors will be casual. Presentations will always be business professional.

## **Conflict Resolution**

If there is any conflict between team members, then team members must communicate with each other in regards to said conflict. If needed, voting will be done in order to determine the course of action and majority rules with voting. If conflict cannot be resolved, then the team leader will step in to determine what can be done. If all fails, the project coordinator and/or advisors will be alerted in order to resolve the conflict.

By signing the code of conduct, the members of Team E#11 of the SAR Imager project agree on all of the points stated above and will abide by the code of conduct. If any changes must be made, team members will agree on the changes and the document shall be signed again.

Name Signature Date

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