**Script for Usability Test:**

* Introduction (for participant)
  + Purpose of the user test
  + Briefly describe prototype function
* Introduce tasks
  + Describe in terms of goals
  + Between 3-5 tasks
  + Optional: ask user to think aloud
* Present questions that you will ask at the end of the study
  + Improvements to prototype?
  + Specific topics
  + About 3 questions

**Conduct Usability Test**

* 15-minute study
* Test on real participants
* 2-5 users
* Target end user or a related subject expert
* Follow script
* Do not record user test
* Use timer
* Take notes
* Write down high-level points of their feedback

**Report:**

* 1-2 pages

1. Introduction
   * Introduce technology
   * Overall purpose
   * How prototype was constructed
   * Connections to other work
   * Indicate new features being tested
2. Design Rationale

* Findings from interviews, observations or other target user’s data collection
* Describe influence on design

1. Overview of Study

* Attach script as an appendix
* Briefly describe study
* Users
* How did you recruit users?
* Did you ask them to think aloud?
* Is there anything unique about your study?

1. Results & Implications

* Overview of feedback
* Explicit feedback
* Timing information
* Observational notes
* High level findings/trends
* 3-5 findings
* How findings influence design revision

1. Discussion

* What did you learn about user testing in the process of conducting this test?
* Did anything surprise you?
* What would you do differently next time?

1. Design Improvements

* Discuss design improvements based on study observations, notes, and feedback
* Prioritize which results are most important
* Elements of feedback within scope of design

1. Initial Prototype
2. Updated Prototype
3. Appendix

* Screenshots or photos of interface
* User Script

Submission: Initial User Study Report, Links to Initial and Updated Prototypes

Testing Script

Hello and thank you for agreeing to participate in our usability testing of our upcoming product today. First of all, I wanted to introduce ourselves and our project, STARFare. This project has been developed by the owners of the technology, Preston Dotsey and Pourna Sengupta. We are both Computer Science Majors at CU Boulder and were recently tasked to create a new user interface for a technology of our choice and we decided to create an interface for navigation and systems control aboard a space-faring vessel. The interface is operated through user voice commands and is intended to allow a crew member aboard a space ship to be able to control the various systems on the ship through voice-interaction , as well as to be able to attain systems statuses, interact with messaging and data analysis systems and relay information between the user, the ship, and other related parties to the ships flight plans.

We intended to create a system in which the crew no longer has to physically interact with the systems, allowing them to carry out their desired operations and a fast, safe and accurate manner. Where you come in as out tester is to help us gain a better understanding of how the systems feels to operate and our us to identify what parts of our prototype are successful and what parts of it may need to be improved. In order to find this out we are going to show you our prototype and ask you how you would use it to carry out three separate tasks which we think are crucial to the success of this project. We will then use your input to help reshape our prototype to be as efficient and effective as possible.

1. The first task we have for you is one related to the ships security system. In times of crisis, it can be necessary to set the ships status into a red alert where extra security measures are enacted. Using our prototype, how would you interact with it to initiate a red alert status?
2. The next task involves the ships messaging system. While on a space flight, communication is of extremely high importance to ensure that all the needed information to ensure a safe flight can be both received and relayed from the ship. Using our prototype, how would you use it in order to send an outgoing message to another ship?
3. Our last task has to do with using the ships onboard systems to collect external information. One of our data collecting tools is the use of sensory instruments on the ship to perform an exterior scan which the computer collects data from and then gives the user an interpreted result of. Using our prototype, how would you use our prototype to perform an exterior scan?

Thank you for providing your input about how you would use our prototype to perform these actions. In order for us to gain a better understanding of what we can improve and what is working well, we have three questions for you about the prototype that you just tested for us:

1. What, if anything, would we possibly add to our interface in order to provide greater assurance that the interface has executed your command in an accurate manner?
2. Without having prior experience using voice interfaces, do you think this prototype would be something you could easily learn to use?
3. What tasks could you see this voice interface being the most helpful for if you were to use it? What tasks do you think would be the least helpful?

We just wanted to say thank you so much for taking the time to participate in this usability test for STARFare. We hope to incorporate your feedback to make an even more function interface and we greatly appreciate your help in making this technology the success that we know it will be!