

TO: Dr. Sethuraman Panchanathan, Director of the U.S National Science Foundation (NSF)

CC: Sarah Smith, Director of Conrad N. Hilton Foundation's Disaster Relief & Recovery Program and Caitlyn Fife, Director of Budget Division within the Office of Budget, Finance and Award Management (BFA)

FROM: Brains Against Natural Disasters Non-profit Organization

DATE: April 26th, 2022

SUBJECT: The Necessity of the Emergency SOS Alarm Draft and How it Will Protect

A study into the past serves as a clear marker into the issues societies face when it comes to natural disasters. About 3000 people were killed by Hurricane Marie alone and many more lives were lost, unfortunately (Baldwin, 2018). Hurricanes won't stop forming and taking lives, so it's our responsibility as computer scientists to come up with an effective way to protect people and limit casualties as much as possible.

Our team, Brains Against Natural Disasters, understands that one of the most effective ways to limit the loss of life and property is to create a system in which a group of people currently being affected by natural disasters won't need to worry about the inability to communicate and receive aid.

Understanding this, we found a proper solution that makes it such that communication never has to be a problem in a community that's looking for help ever again.

Due to the discovery of this solution, we are requesting funding for the creation and distribution of our Emergency SOS Alarm. This emergency alarm system will be designed solely for natural disasters. The item will be a box-shaped system installed in areas throughout the community that is equipped with radio-wave, flare, and light communication. Depending on the severity of natural disasters, communications lines are usually cut making it a chore for people to call for help. A flare system will help emergency responders see where the areas are that need assistance. A radio-wave system will add on as a form of verbal communication. The light system will make it so that once the distressed group of people receives the emergency responders' attention, it will aid in pinpointing the exact area in trouble. The combination of both the flare and radio-wave system will serve as a sure-fire way for people to be able to reach out for help. The radio-wave system will be created and systematically connected to emergency responder locations beforehand, and the flare system will be color-coded based on the natural disaster. For more information on this system, please take a look at our team's detailed proposal.

We appreciate your consideration, and we look forward to hearing from you so that we can execute our plans and establish a connection based on mutual interests.

For more information feel free to contact us:

development@brainsAND.com

Company Name(Non-profit Organization): Brains against Natural Disasters

Codes of Conduct:

This code of conduct applies to all members of Brains against Natural Disasters, its purpose is to create an effective working environment and promote privacy, equality, responsibility, compliance with laws, safety, and respect for all people.

On plagiarism:

Our organization has no tolerance for plagiarism, we believe in giving credit when credit is due. When using ideas and information from other sources, we use the MLA citation style to give credit.

On harassment:

Our organization has no tolerance for harassment, which includes inappropriate comments, displays, or actions due to sex, color, race, religion, national origin, age, disability, sexual orientation, gender identity, and any other personal characteristic. Everyone should feel safe and comfortable in the organization.

On privacy

We value the privacy of our members and our company, no personal information should be shared without the permission of its owner.

On responsibilities

We value responsibilities in the organization, members in the organization should finish their job in accordance with time and if there is any problem please notify others. Only having responsibility in mind can create an effective working environment.

On equality

We value equality in the organization, everyone should treat others the way they want to be treated. No discrimination on sex, religion, race or other personal characteristics is allowed.

On safety

We value the safety of every member, any unsafe conditions or problems should be quickly reported to the supervisor and solved.

Mission statement:

The non-profit organization Brains against Natural Disasters' mission is to solve problems caused by natural disasters around the world through ingenious ways that will be more effective and cost less. It will also be effective in use in any situation with a device that is made for mobility, space, and convenience after you are in a situation where you are caught in a natural disaster.

Boilerplate:

Brains against Natural Disasters is a non-profit organization located in New York. Our purpose is to solve problems caused by natural disasters around the world through ingenious ways that will be more effective and cost less. We work with governments, other organizations, and locals to find solutions to natural disasters. Currently, the organization has less than 100 members but is quickly growing. Our members are all professionals in their fields with a common purpose of preparing the communities around the world for the increasing changes in the climate.

Emergency SOS Alarm

To support the search and rescue process

Members of Brains Against Natural Disasters:

Chengshui Zhu

Furqan Khan

Daniel Ramos

Tahsina Khan

To the U.S National Science Foundation (NSF)

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Abstract

Due to the increase in hurricanes, floods, tsunamis, and other natural disasters due to climate change, in addition to other natural disasters that aren't caused by climate change, the livelihood of people is in danger. Usually, after the worst of the disaster subsides, the search and rescue process begins, but that process has an obvious issue, which is the people who are trapped and need help the most cannot signal for help if they want to, especially if the power grid and the telecommunication grid is out. Our team, Brains Against Organization, makes a proposal to fund our project to make this device we named Emergency SOS Alarm that can send out three types of signals including parachute flare, light, and radio wave. The device will be light, durable, and suitable for long time storage. The estimated budget will be about 2 million to set up a production line and cover Puerto Rico, but with the four years of planned development, we'll bring down that cost and make it suitable for all locations in danger of natural disasters.

Introduction:

1.1 Problem Statement

Since the early 1980s, the intensity, frequency, and duration of North Atlantic hurricanes, as well as the frequency of the strongest hurricanes all, have increased (Walsh, n.d.). The reason for the increase in hurricanes and other natural disasters is climate change, and the result is massive economic damage, property damage, and massive population migrations, but to humans, the worst result that can happen due to a natural disaster is the loss of human life. As an example of a hurricane that created a loss of human life, Hurricane Marie caused an estimated 2,975 deaths (Baldwin, 2018). Another example of loss of human life due to natural disasters is the Sulawesi earthquake and tsunami in 2018 in Indonesia, that disaster caused 4,340 deaths (Sangadji, 2019). The point is the worst that can come out of a natural disaster is always the human loss, and due to the increasing amount of natural disasters, in the future, the problem will increase in severity. Currently, the most direct way to fight the problem of human loss due to natural disaster is the search and rescue procedure after the worst of the natural disaster subsides, but there is a very significant problem with the procedure, that is the survivors could be in a difficult situation to spread the word for help, especially if the electricity grid went out or communication line was cut.

1.2 Background

Ever since 2010, there have been at least 12 major natural disasters around the world and each one caused at least more than 1000 casualties. Most of these natural disasters are floods, earthquakes, tsunamis, and hurricanes. The search and rescue procedure is an emergency medical service that "The immediate priority after a natural disaster is providing emergency first aid and

medical services to injured persons. Local residents, health professionals, emergency workers, and public-safety officers are the first responders”(Direct, 2022).

1.3 Need Statement

The search and rescue save lives, but it does have its limit, because for people in a trapped situation and need to signal for help, the situation will be devastating and all dependent on luck for the search and rescue team to find them. Also if people who are trapped can send out a signal, it would greatly boost their morale and give them hope. So there is a need for something that people can carry during a natural disaster that can help them send out signals after the disasters if they need help in a hurry. The device can also help the rescue notice where it needs the most amount of rescue effort.

1.4 Objective

This introduces us to our team’s proposal. We the non-profit organization titled Brains against Natural Disasters with currently 4 members propose the Federal Emergency Management Agency fund and support our plan to create a device that can transmit different types of signals to support the process of search and rescue. The main objective of the device is to be stored until a disaster happens which then will be lightweight enough to be carried by the people and when they need help after the disaster is over can be used to signal for help. The device will be very durable against water, and temperature, and be really tough. The battery will also be enough for at least one day of continuous use.

1.5 About us

This team currently consists of four members, Chengshui Zhu, Furqan Khan, Daniel Ramos, and Tahsina Khan. We are all deeply concerned about the future of human civilization and wanted to use our knowledge to help, this is why we united to create the non-profit organization Brains Against Natural Disasters. Most of us are software engineers, but eventually, we will have more members and like-minded collaborators. Together we will complete this project to save more and more people from the impact of natural disasters. After this project, this organization will continue to create and propose simple, effective, and economical solutions to natural disasters, this is our fundamental goal.

2. Proposed technical approach:

2.1 Approach:

The objective of this project is to support the process of search and rescue after a natural disaster by giving the people trapped a way to send signals to the rescue teams. To achieve this goal, we will design a device named the Emergency SOS Alarm (ESA). This device will meet four different needs: durable, long-distance transmission, inexpensive, and long-lasting use.

2.2 Specific details:

There will be one waterproof parachute flare inside the device: the model will be ORION Red Parachute SOLAS Signal Rocket(West, n.d.).

Industrial grade long-range radio transmitter, the model has not been decided yet.

Industrial grade light signal. The model will be Werma Signal Lights, 802 Series(Galco, n.d.)

The motherboard for controlling will be designed independently, not bought.

Currently, we haven't found any battery on the market that fits our purpose. There might be a need to customize the battery.

The other casing of the device will be made with High-density polyethylene (HDPE). The inside of the product will be sealed and waterproof.

2.3 Design details:

The goal of this device is to be able to transmit light, and radio waves, and shoot flares to signal for help. There will be two switches for the light and wave to open, and a button to shoot the flare into the air for help. The product itself will be in the shape of a black box about the size of a computer table. On it will be different buttons that serve different features. The first button will be the call initiator. It will send an emergency signal to the nearest emergency response location. The next button will be the flare detachment button. Once the emergency responders are attentive based on the first signal, this button will detach a large flare that captures the attention of the entire city, so that it is easily visible by the responder unit. There will be one button attached to a microphone that will be used for radio wave communication and alongside there will be a speaker so that the users can hear what the Emergency responders are saying. The next button is a button that shoots a powerful light in the sky, which makes it so emergency responders can pinpoint the exact location of the people who need help. This light system will be attached with sensors that automatically emit a light that is in most contrast to the current color of the day. There will be a steering wheel so that the light can be moved around in the sky. There will be 3 chutes sticking out from the top of the box. This is where the flare will be shot from. Next to those chutes is gonna be the light.

2.4 Quality assurance plan

First there we will design the device and create the prototypes, the prototypes will be tested for their resistance to high and low temperatures, then pressure under saltwater, and last for their ease of use in an anxious state. If the prototypes pass the previous test, then for its capability of storing, meaning if the battery will fail to open after months of sitting, or inside parts will fail to function. At this point, we'll also try to reduce the cost of production, down the estimated amount of \$100 per device. If all of the tests are passed then more products will be produced and sent to places that are in danger of natural disasters to test in real situations. If they proved to be helpful, then a production line will be set up in Puerto Rico. The reason for Puerto Rico is to gather further data and to help with the issue. This product can eventually be used in other parts of the world or in different situations if proven to be helpful and effective.

2.5 The Risk

There are risks to this proposal, the product may lack essential parts and thus cannot be created in the first place, or the cost cannot be brought down thus making the product ineffective and unworthy. Currently, there isn't any radio transmitter or motherboard that can directly be used for this device on the market.

3. Schedule:

Task	Date
Meeting: Meet with Head of Federal Emergency Management Agency and discuss proposal	June 1st, 2022
Development: Production of Prototype Unit	July 1st, 2022 To February 1st, 2023
Testing: The effectiveness of communication based on timing and clarity will be tested.	February 5th to February 27th, 2023
Development: File for Open Patent on Invention	March 1st, 2023 To

	March 1st, 2025
<p>Development:</p> <p>Once an open patent is approved, we will begin mass production.</p>	<p>March 7th, 2025 To May 7th, 2025</p>
<p>Implementation:</p> <p>Once the desired amount of units are created, we will send them out for installation in regions across Puerto Rico</p>	<p>June 1st, 2025 To June 1st, 2026</p>
<p>Long Term Support:</p> <p>Maintenance will be required to affirm the functionality of each unit, and we hope to get the US government involved in its maintenance as this system reduces the aid required to send to Puerto Rico every year.</p>	<p>June 1st, 2026</p>

4. Product Testing:

- After the creation of the Emergency SOS Alarm is complete, we will begin its installation in certain regions across the nation. We will temporarily cut all forms of communication and use the device to contact an emergency responder unit. A certain time range will be established. If the unit arrives at the area the device was used before the time limit, our team can affirm its efficiency, if not, then there are features that need to be worked on to make this an effective alarm system.
- We expect that once the system is tested and fully operational, it will be systematically promoted and installed by the government just as fire alarms and fire hydrants are.
- After a severe natural disaster occurs that knocks out standard forms of communication, we will see a statistic that affirms the decline of loss of life and loss of property, with the Emergency Alarm implemented.
- After the noticeable success of this alarm, other nations will try to adopt this feature and incorporate it into their own lands.
- After the device is put to effective use, we will receive feedback from its users (from both ends), and conjure up constructive methods to make it more quick and efficient. The Emergency Alarm will always be a work in progress even when it's on standby.

5. Budget:

5.1 Budget for initial development and single-unit production

Requirements	Cost
Electrical and Mechanical Engineers 4 engineers for the single-unit production.	\$250,000 per year
Market Research	\$200,000
Lab Space	\$24,000 per year
Product Designer	\$40,000 per year
Emergency SOS Alarm Production	\$30,000 per unit
Maintenance	\$12,500 per year

5.2 Budget for Mass Production

Requirements	Cost
Emergency SOS Alarm 234 Units. 78 provinces in Puerto Rico. 3 units per province.	\$7,020,000
Maintenance	\$2,340,000 per year
Regional Installation (Taking the units and installing them, and the labor required)	\$2,808,000

6. Expected Result

- We expect that once the system is tested and fully operational, it will be systematically promoted and installed by the government just as fire alarms and fire hydrants are.

- After a severe natural disaster occurs that knocks out standard forms of communication, we will see a statistic that affirms the decline of loss of life and loss of property, with the Emergency Alarm implemented.
- After the noticeable success of this alarm, other nations will try to adopt this feature and incorporate it into their own lands.
- After the device is put to effective use, we will receive feedback from its users (from both ends), and conjure up constructive methods to make it more quick and efficient. The Emergency Alarm will always be a work in progress even when it's on standby.

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AUDIENCE PROFILE SHEET

Reader's Name: Dr. Sethuraman Panchanathan

Reader's Job Title: Director of the National Science Foundation

Education: University of Madras (BS), Indian Institute of Science (BEng), Indian Institute of Technology (MTech), University of Ottawa (PhD)

Professional Experience: Panchanathan previously served as the executive vice president of the Arizona State University (ASU) Knowledge Enterprise, where he was also chief research and innovation officer. He was also the founder and director of the Center for Cognitive Ubiquitous Computing at ASU. Under his leadership, ASU increased research performance fivefold, earning recognition as the fastest growing and most innovative research university in the U.S. Prior to joining NSF, Panchanathan served on the National Science Board as chair of the Committee on Strategy and as a member of the External Engagement and National Science and Engineering Policy committees.

Job Responsibilities: Oversees NSF staff and management responsible for program creation and administration, merit review, planning, budget and day-to-day operations.

Personal Characteristics: n/a

Cultural Characteristics:

Attitude Toward the Writer:

Attitude Toward the Subject: Attentive, largely due to NSF's dedication to supporting researchers studying hurricanes, floods, wildfires, earthquakes, coastal erosion, and other natural disasters

Expectations About the Subject: Expects the proposal to have credibility, potential, and accurate statistics + estimates

Expectations About the Document: Expects to see a proposal, with details on the funding request, about 5 pages

Reasons for Reading the Document: To decide whether or not the innovation has potential, to decide whether the NSF will accept or reject the proposal

Ways of Reading the Document:

Skim it ___ Study It ___ Read a portion of it ___ Which portion?

Modify it and submit it to another reader ____

Attempt to implement recommendations ____

Use it to perform a task or carry out a procedure ____

Use it to create another document ____

Other ____ **Explain**

Reading Skills: Excellent

Reader's Physical Environment: n/a

AUDIENCE PROFILE SHEET

Reader's Name: Sarah Smith

Reader's Job Title: Director, Legacy Initiative

Education: MA in International Education Policy at Harvard University Graduate School of Education, MA & EdM in Education from Columbia University Teachers College

Professional Experience: Prior to joining the Foundation, she was the head of Education, Child Protection and Youth Livelihoods for the International Rescue Committee (IRC), and was named a "Leading Global Thinker" by Foreign Policy Magazine in 2016. She began her career as a Head Start preschool teacher and was a Peace Corps volunteer in Namibia

Job Responsibilities: Director of Conrad N. Hilton Foundation's Disaster Relief & Recovery Program. Leads the Conrad N. Hilton Foundation's Refugees initiative, partnering with refugees and host communities to improve the lives of children and families affected by conflict and displacement.

Personal Characteristics: n/a

Cultural Characteristics:

Attitude Toward the Writer: No problems

Attitude Toward the Subject: Very passionate about helping victims of natural disasters and conflict

Expectations About the Subject: Expects to see considerable research on the innovation purpose, design, budget and success rate

Expectations About the Document: Expects to see a proposal, with details on the request, about 5 pages

Reasons for Reading the Document: To consider funding this project and accept or deny the proposal

Ways of Reading the Document:

Skim it ___ Study It ___ Read a portion of it ___ Which portion?

Modify it and submit it to another reader ___

Attempt to implement recommendations ___

Use it to perform a task or carry out a procedure ____

Use it to create another document ____

Other ____ **Explain**

Reading Skills: Excellent

Reader's Physical Environment: N/a

AUDIENCE PROFILE SHEET

Reader's Name: Caitlyn Fife

Reader's Job Title: Director of Budget Division within the Office of Budget, Finance and Award Management (BFA)

Education: MA in Public Service Administration at Texas A&M University, B.A in Political Science and History at Mercyhurst University

Professional Experience: Director of the Division of Discretionary Programs at U.S Department of Health and Human Services, Budget Officer for the Office of the National Coordinator for Health Information Technology

Job Responsibilities: responsible for the development, analysis, and execution of the Foundation's annual budget to the Office of Management and Budget and the Congress. This responsibility encompasses budget formulation and development, implementation and management of appropriate budget operations and control processes through development of operating plans and special analyses, assisting the development of long-range plans for the Foundation, and assisting the CFO and Deputy CFO in the resource management of the Foundation

Personal Characteristics: n/a

Cultural Characteristics: n/a

Attitude Toward the Writer: No problems

Attitude Toward the Subject: Understands and approves of the cause

Expectations About the Subject: Expects to see a valid argument which will thoroughly relay the budget information and justify why this amount of funding is necessary

Expectations About the Document: Expects to see a proposal, with details on the request, about 5 pages

Reasons for Reading the Document: To report back to the director on whether or not the NSF budget can support this project

Ways of Reading the Document:

Skim it ___ Study It ___ Read a portion of it ___ Which portion?

Modify it and submit it to another reader ___

Attempt to implement recommendations ___

Use it to perform a task or carry out a procedure ___

Use it to create another document ___

Other ___ Explain

Reading Skills: Excellent

Reader's Physical Environment: n/a

Reflection Paper(Chengshui Zhu):

This project is a rather new experience to me, I haven't done any proposals before, never focused on my papers on this topic before, and the group work on this level is really new to me. I must confess that this paper is very difficult for me to do. From the start, my group came into trouble. For example, there is trouble finding the topic, there is trouble researching the topic, and there is trouble even finding time together to discuss the topic. Our group's first proposal is not what we have right now, it is a plan to do something that can bring the people who are displaced by hurricanes back home. Looking back on that topic, I think that project will be hard to complete because it is not just what we're going to create unclear, but also who we will be proposing to will be even more unclear. That topic is also something better suited for civil engineers, and none of my group mates and I are civil engineers or plan to be. For this project, I had done a lot of research, and almost half of them are futile, that is another reason why this project is so hard, in a category that is new to me, combined with the professionalism of the subject it felt like I had hit a brick wall, in the end, I must walk around it. The current and second topic that we have is brought up by Furqan in class, it is more workable and requires the skill of electrical engineering, which my groupmate has. During writing the whole project, I felt like I have so many ideas but nowhere to start, I want to list all of the components I will use to build the device, set up plans on how the production line will run, and which companies will be our partner for this project, where and how the device will be first used, and how effective it will be. In the end, I realized that I don't have the skill and the knowledge to put all of those ideas in, and also writing those ideas will make the paper too long and too much work for me to handle, so I wrote what I have.

Furqan did the budget, scheduling, some of the PowerPoint, and memos for this project. Tashina did the audience profile sheet and some of the PowerPoint. Daniel did most of the PowerPoint. Without them, I cannot complete this project.

The three learning outcomes of this project for me is:

- to acknowledge your and others' range of linguistic differences as resources and draw on those resources to develop rhetorical sensibility
- develop and engage in the collaborative and social aspects of writing processes
- enhance strategies for reading, drafting, revising, editing, and self-assessment

During this project, group work is the most important and from it I learned that I can't complete everything myself and should work with others as a team, and working together as a team gave me new experiences on collaborative work and social aspects of writing. For example, how my group decided on our topic, how we split up the work, how we help each other when others need help, all of those contribute to the completion of this proposal. The last learning outcome I chose is because this is a long time span project and has a lot to write, all of the skills in drafting, revising, and editing becomes even more important and emphasized in this project, thus upon completion, I've enhanced on these skills.

Reflection Paper (Tahsina Khan)

For this project, my role was to research the audiences we will be impacting, who we will be presenting to, and how we should persuade our audience through writing. I created the audience profile sheets and edited the memo, introduction, and other sections, deciding what should be cut out, revised, or added. For this project, teamwork and collaboration was extremely important, because it's a huge workload, and also the ideas need to be elaborately communicated since it's difficult to relay the visualization of an object through speech. For example, Furqan first developed the idea for the Emergency SOS Alarm Draft, when we were in class, in our groups. He sketched his idea on a piece of paper and explained how it would function, as well as the different parts which are meant for different purposes. Later on, we added more functions and changed some aspects of the design so that the innovation was more efficient. This is a display of our team's effective communication and strong dynamic. We were able to build on each other's brainstorming in a supportive and positive manner. This is extremely important because successful teamwork and collaboration is an essential aspect of engineering. However, our communication wasn't always the best, it was definitely a challenge. It's commonly known that time management is an important skill, especially for group projects, but I think that lesson was even more emphasized for this proposal, because it was challenging for everyone to meet up or work together due to our differing schedules. The project does fit into each of the rhetorical elements. The audience was targeted towards the National Science Foundation (NSF), specifically the director, Dr. Sethuraman Panchanathan, because the NSF is an independent federal agency created by Congress in 1950 with a Disaster Preparedness and Response sector that supports researchers who are trying to help those affected by natural disasters like hurricanes, tornadoes, and volcanic eruptions. The director himself was chosen by the President

of the United States, Donald Trump, in 2019. The purpose of our proposal was to persuade our audience to provide funding and equipment for us in order to execute the experimentation and development of our innovation, which would help locate victims of natural disasters during the event so that they can reach safety. Our stance on the topic is that our product is impressive and will prove to be very effective during times of emergency, and we should have funding. The genre of this document is a proposal, which is an offer to develop a product or service for something. The media is a digital online google document and a powerpoint presentation. The exigence of this proposal was the sundry of natural disasters happening all around the world, specifically hurricanes Maria, Irma, and Micheal, which destroyed power lines and data signals, and resulted in many missing victims who were not able to receive help. This proposal met multiple course learning outcomes. First, we negotiated our own writing goals and audience expectations regarding conventions of genre, medium, and rhetorical situations, by researching detrimental hurricane effects, as well as our product's functionality and materials, which resulted in us constantly changing and modifying our writing purpose and audience. We knew that our expensive budget meant our purpose and audience had to be meaningful. Last, we developed and engaged in the collaborative and social aspects of writing processes by working together as a team and brainstorming ideas, editing each other's writing, and discussing plans.

Reflection Paper (Furqan Khan)

When first starting this assignment, we focused on shelter methods or techniques that mitigated disaster. What was thrilling about this assignment is how it began. In the beginning, we focused on technological innovation. However, it became clear that due to natural disasters essentially cutting off all communication systems, we needed to focus on technological regression. We had to find a way to implement old systems into a form of communication in the modern world, and that is exactly what we did.

We ended up creating the Emergency SOS Alarm that focused on an old-timey flare system that was used in war to communicate with others. My job in this was creating the design and developing the functions the system would lay out. I also layout the single unit budget cost and the long term mass production budget cost.

Throughout this project we effectively displayed proper teamwork. Once I came with the idea of the flare system, my partners critiqued it and revised it into something tremendous, and through the help of a friend whos a mechanical engineers major I was able to have a blueprint created for the design.

The reason this was so essential to our topic was because, this was a system that focused solely on improving the one thing that puts people in a predicament the most in a natural disaster, the lack of communication.

Another course genre we effectively used was the use of research and referencing to enhance of work. We researched the casualties and budget costs that would end up making our case stronger.

Reflection Paper

This group has been a very interesting group in terms of being able to learn each other's learning habits and being able to put each other's ideas into an assignment which will allow them to become successful. It was fun getting to know my group members. It helped each other get comfortable with working with one another easier. Chengzui worked on the doc and figuring out who and what type of engineer we need that would be able to help with this situation , including who the audience should be. Furqan was able to put a good amount of information into the google doc and the slides which includes the statistics and the drawing of the sos box that he first had the idea of which releases a flare asking for help. Tahsina was able to give her ideas on what she thought the structure of the doc and slide should be, including giving information of outside sources that is then added into our doc. I started the slides and edited it along with the help of my group members. I also suggested certain information that helps with outside sources on who was affected by the hurricane with websites I thought were good sources also. Teamwork in this project was good in terms of helping each other learn how to make proposals and many more.