### **User Manual**

Year: 2014 Semester: Fall Team: 4 Project: Aerial Distress Beacon Creation Date: October 7, 2015
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### **Assignment Evaluation:**

Item	Score (0-5)	Weight	Points	Notes	
Assignment-Specific Items					
Product Description					
Product Illustration					
Setup Instructions					
Usage Instructions					
Troubleshooting Instructions					
Writing-Specific Items					
Spelling and Grammar					
Formatting and Citations					
Figures and Graphs					
Technical Writing Style					
Total Score					

5: Excellent 4: Good 3: Acceptable 2: Poor 1: Very Poor 0: Not attempted

**Comments:** 

#### 1.0 Product Description

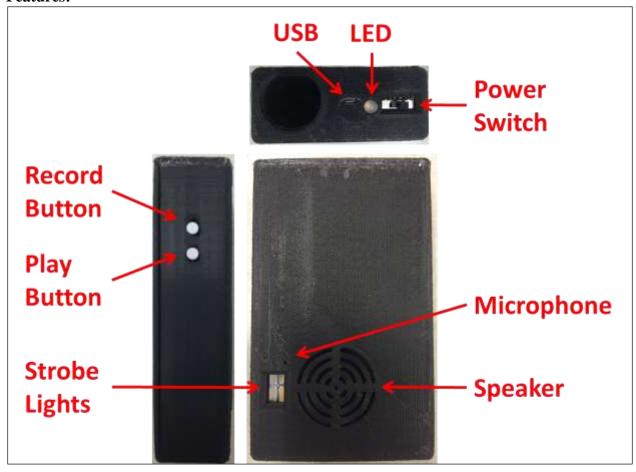
Any time we venture away from civilization, there is a risk of encountering an injury or emergency that requires modern emergency services. However, there is a chance that in remote areas, you may not be able to call 911 on your phone and may become stranded without a means of rescue. To mitigate this risk, the Areal Distress Beacon (or ADB) provides a system to give you the best possible chance of rescue. By taking advantage of altitude, the ADB offers enhanced range and operating conditions over conventional radios. Just carry it with you on your next adventure and it will track your GPS coordinates. If you should require emergency services, simply speak into the ADB to record your voice, giving a brief description of your situation. Then, inflate the balloon with hydrogen and release your message into the air. It will broadcast from a high altitude and drift over a large area.

#### 2.0 Product Illustrations

**Complete System:** 



#### **Features:**



### 3.0 Setup Instructions

### Charging the Launcher:

- 1. Insert the **Beacon** into the **Launcher**.
- 2. Plug the small end of the **USB Cable** into the **Launcher**.
- 3. Plug the other end the **USB Cable** into the **Power Supply** or any available USB power source.
- 4. Allow the device to charge overnight.
- 5. The above should be repeated before each trip you take with your ADB.

#### **4.0 Usage Instructions**

### Monitoring:

- 1. Turn on the **Launcher** when you start your trip by sliding the **Power Switch** to the center position.
- 2. Carry the ADB with you and it will keep your GPS coordinates up to date.
- 3. If you will remain in the same location for more than an hour, slide the **Power Switch** to the left-most position while you are stationary to conserve power, and then turn it back on when you begin moving again.

# Deployment:

- 1. CONTACT 911 BY CONVENTIONAL MEANS IF POSSIBLE. The ADB is intended for use as a last resort only and does not replace contacting emergency services by phone where possible.
- 2. If the **Launcher** is off, turn on it on by sliding the **Power Switch** to the center position.
- 3. Place the **Microphone** near your mouth and press the **Record Button**. The **LED** will illuminate red to indicate that you may begin recording.
- 4. Provide a brief voice description of your emergency. You have up to 12 seconds.
- 5. Press the **Playback Button** and listen to what was recorded. Your GPS coordinates will be automatically appended. Repeat steps 3-6 until the recording is what you want to transmit.
- 6. Insert the nozzle of the **Hydrogen Generator** into the **Balloon**.
- 7. Twist the two ends of the **Hydrogen Generator** firmly and shake to activate. Wait until the **Balloon** ceases to expand then tie the end to seal it.
- 8. Tie one end of the **String** to the **Balloon** and the other end to the loop at the end of the **Antenna** on the **Beacon**.
- 9. Remove the **Beacon** from the **Launcher** and release the assembly into the air.

#### Strobe Mode:

- 1. As you await emergency services, you may increase your visibility by activating strobe mode.
- 2. Slide the **Power Switch** to the right-most position.
- 3. The **Strobe Lights** will flash periodically.

## **5.0 Troubleshooting Instructions**

Problem	Potential Solutions	
Launcher will not turn on.	<ul> <li>The Launcher may need to be charged. See setup instructions.</li> <li>If none of the above solves the issue, please contact the ADB support team at the number below.</li> </ul>	
I do not hear my message when I press the playback button.	<ul> <li>Is the launcher on? Check the power switch.</li> <li>Did the LED blink green when you turned on the device? If not, it may need to be charged. See setup instructions.</li> <li>Is the Beacon in the Launcher? If not, insert the Beacon into the Launcher</li> <li>Verify that the Beacon is fully inserted into the launcher by pressing down on it.</li> <li>If none of the above solves the issue, please contact the ADB support team at the number below.</li> </ul>	

We are sorry you are experiencing trouble with your ADB! 24/7 Customer Support: 1-800-123-4567.