1.0 Purpose:

This procedure is a guideline for the use of VTA's Emergency Satellite Phone System. The satellite phones are meant to provide VTA's management staff and divisions, communication capabilities in the event of an emergency or disaster when other communication devices are not in service.

2.0 Scope:

This procedure applies to all VTA Executive staff and operating division personnel involved with the use of the Emergency Satellite Phone System. The procedure contains instructions on setting up the satellite phone system, powering up the phones, using the phones, and powering down the satellite phones.

3.0 Responsibilities:

3.1 The System Safety Unit in the Risk Management Department is responsible for the Emergency Satellite Phone System, including documentation and distribution of the satellite phones.

3.2 All VTA executives and employees issued or operating an emergency satellite phone shall be responsible for ensuring compliance with this Procedure.

3.3 All VTA departments issued or operating an emergency satellite phone must make sure the phone is available and operational at all times.

3.4 All VTA executives and employees issued or operating an Iridium satellite phone are responsible for keeping the phone charged and conducting a monthly test.

3.5 All VTA employees or departments issued or operating a MSAT-G2 satellite radio phone are responsible for conducting a monthly test of the push-to-talk (PTT) function.

3.6 Operations Control Center (OCC) is responsible for monitoring the satellite phone push-to-talk (PTT) system and acknowledging all PTT tests.

4.0 Procedure:

There are two types of satellite phone systems. The first system is the Iridium, which utilizes portable hand held phones. The Iridium satellite phones are assigned to Executive staff members and can be used in vehicles and or at facilities with an antenna extender. The second system is the MSAT-G2 which has fixed and mobile phones located at VTA operating divisions, Operations Control Center (OCC), and the Emergency Operations Center (EOC). The MSAT-G2 Satellite Radio phones have 2 types of modes. The push-to-talk (PTT) function allows all users to monitor and talk over the satellite phone as a radio. The phone function allows users the ability to place and receive phone calls.

4.1 Setting up and using the Iridium satellite phone:

4.1.1 Powering on & off phone:
    4.1.1.1   Power-on phone by pressing red power key.
    4.1.1.2   Phone will display "Registered" then "Iridium" when it is ready to place or receive a call.
    4.1.1.3   If the phone does not power up the battery is probably dead. Connect the 12 volt cord to the auxiliary/cigarette outlet in an automobile or the 110 power cord to AC power; then connect the other end of the cord to the satellite phone.
    4.1.1.4   If the battery goes dead you will need a security code (pin number) to place a phone call. The generic pin number is 1111. If the pin number does not work you will need to contact the System Safety Unit in Risk Management to unlock your phone.

4.1.2 Making a call:
    4.1.2.1   Phone must be used outside, away from trees and tall buildings.
    4.1.2.2   Rotate antenna and extend it upwards.
    4.1.2.3   Power-on phone by pressing red power key.
    4.1.2.4   Phone will display "Registered" then "Iridium" when it is ready to place a call.
    4.1.2.5   Dialing Sequence:
- Iridium to Iridium Dial: 00 + Iridium Number.
- Iridium to Landline Dial: 001+ Area Code + Phone Number.
- Landline to Iridium Dial: 1-480-768-2500 (Follow the instructions provided by Iridium's automated system. Enter the Iridium phone number when prompted.)
  <u>Or use the following if domestic dialing is not available.</u>
- Landline to Iridium Dial: 011+ Iridium Number. (International phone call that cannot be dialed from fixed VTA phones.)

    4.1.2.6   Enter phone number then press "OK" key to initiate call. There will be a delay in voice communications due to the distance of the satellite(s).

4.1.3 Answering & Ending a call:
    4.1.3.1   Rotate and extend antenna.
    4.1.3.2   Press "OK" to answer the call. There will be a lag time or delay in voice communications due to the distance of the satellite(s).
    4.1.3.3   Press and hold "OK" key to end the call.

4.1.4 Add a phone number to memory:
    4.1.4.1   Press "M+" key.
    4.1.4.2   Press "OK" to select "Add to Phone Memory".
    4.1.4.3   Enter phone number (001 + Area Code + Phone Number).

    4.1.4.4   Enter a name to be associated with the phone number.

4.1.4.5   Enter a number between 1 and 99 to assign the phone number to a location in the phone book.

4.1.5 Dial a phone number stored in memory:
4.1.5.1   Press "Quick Access" key.
4.1.5.2   Press "OK" to select "Find Name".
4.1.5.3   Enter one or more letters of the entry and press "OK".
4.1.5.4   Scroll to the entry you are looking for and press "OK" to dial.

4.2   Setting up and using the MSAT-G2 satellite radio phone:

4.2.1 Setup and Powering on a "fixed" MSAT-G2 radio phone:
4.2.1.1   The MSAT-G2 should be powered up at all times. If the system is not powered up press and hold the "PWR" button on the top left side of the handset. It is important to hold the "PWR" button until the handset lights up. When it does light up, release the button and wait until the screen shows 01 and the signal reads 99 (or close to it). You are now ready to use both the Satellite Phone and 2-Way Radio.
4.2.1.2   If your system doesn't power up automatically make sure it is connected to a power source then repeat 4.2.1.1.

4.2.2 Setup and Powering on a "mobile" MSAT-G2 radio phone:
4.2.2.1   Connect the antenna cable to the threaded connector on back of the orange case and to the SATRAD antenna. **Make sure the antenna is connected before plugging in the power source.**
4.2.2.2   Plug the handset into the connector on the side of the orange case.
4.2.2.3   Make sure that the SATRAD antenna has a clear line of sight to the southeast sky.
4.2.2.4   Connect the 12 volt cord to the auxiliary/cigarette outlet in an automobile OR the 110 power cord to AC power; then connect the other end of the cord to back of orange case. Do not use both power sources at the same time. **Make sure the antenna is connected before plugging in the power source.**
4.2.2.5   If your system doesn't come on automatically when connected to a power source press and hold the "PWR" button on the top left side of the handset. It is important to hold the "PWR" button until the handset lights up. When it does light up, release the button and wait until the screen shows 01 and the signal reads 99 (or close to it). You are now ready to use both the Satellite Phone and 2-Way Radio.

4.2.3 Using the Phone:
4.2.3.1   Simply dial the number and press the green "SEND" button. It operates just like a normal telephone. To end the call, press the red "END" button. There will be a delay in voice communications due to the distance of the satellite(s).

4.2.4 Using the 2-Way Radio:

4.2.4.1 To talk, Press and hold the "PTT" button on the left side of handset (long button). Wait for the 2 beeps and then talk. When finished talking, Release, and there will be a tone to let the other person know that it is their turn to talk. They will do the same thing at there end. There will be a delay in voice communications due to the distance of the satellite(s).

4.2.5 Powering down MSAT-G2 radio phone:

4.2.5.1 Press and hold "PWR" button until you hear a short beep and you will see the screen read "MSAT". You can then release the button.

4.2.5.2 Disconnect the power cord (12 volt or 110). **Make sure the power source is unplugged before disconnecting the antenna.**

4.2.5.3 Disconnect antenna. **Make sure the power source is unplugged before disconnecting the antenna.**

5.0 Definitions:

Iridium is a Satellite-based communications network which utilizes 66 active satellites in a near-polar orbit at an altitude of 485 miles.

MSAT-G2 Satellite Radio is a Satellite-base communications system that utilities 6 beams to support continent wide Push-to-Talk (PTT) and voice communications through two satellites in geosynchronous / geostationary orbit at an altitude of approximately 22,000 miles.

6.0 Records:

The System Safety Unit shall maintain records of the locations and personal assignments for all satellite phones.

7.0 Appendices:

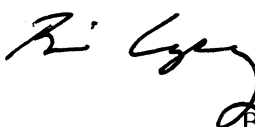7.1 Satellite Phone - Numbers and Names.pdf

8.0 Training Requirements:

User training is provided by the System Safety Unit in Risk Management.

9.0 Summary of Changes:

Initial release of this procedure.

10.0   Approval Information:

Prepared by	Reviewed by	Approved by
signature	*signature*	*signature*
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