This document is designed to assist volunteers and staff with the use of inReach or similar two-way satellite messaging devices as field communication tools. The PCTA’s [Check-In and Check-Out Protocol](https://www.pcta.org/wp-content/uploads/2018/03/PCTA-CICO-Protocol-v2017_07.pdf) requires that all trail crews carry two communication devices that get reception at or near the project site. Volunteers and staff are encouraged to carry a communication device even when not doing trail work, such as when scouting.

Acceptable communication devices include:

* Cell phone
* Agency radio
* PCTA radio programmed to local frequencies/dispatch
* Satellite phone
* inReach or other two-way messaging device

**Before going into the field**

Regardless of communication device, fill out a Trailhead Communication Plan (TCP), complete with your primary communication device(s) and a *tracker,* a party who is not in the field with your group who can initiate an emergency response for your group. Communicate and share your TCP with your tracker, PCTA Regional Representative, and agency partner.

In addition, before going into the field with an inReach device:

* Select at least one daily window to turn on the device and check for incoming messages. Record this window on your TCP.
* Send at least one message to your tracker from your inReach prior to leaving the trailhead.
* You are encouraged to create a plan with your tracker to exchange check in messages at least once a day. Record this plan on your TCP, in *Instructions for Other Devices*.

**Regional Differences**

inReach or other two-way messaging devices meet the communication device requirements of the PCTA protocol, but in some areas these tools may not meet the local communication policy of agency partners. Contact the [PCTA Regional Representative](https://www.pcta.org/about-us/regional-offices/) and local volunteer leaders to learn about requirements for specific agency units.

**Types of inReach Devices**

PCTA crews have access to multiple types of inReach devices, including inReach Explorer (branded as Delorme), inReach Explorer+ and inReach Mini. All these devices are supported by Garmin and function similarly. They send text messages via satellite to mobile phones and email addresses. They cannot communicate with landline phones. They all have a SOS button which contacts a 24/7 international emergency response center. No matter which type of inReach you use, PCTA recommends the following best practices:

 **inReach Best Practices**

**inReach devices work best when they have clear lines of sight with the sky.**

* When possible, send messages from wide open areas. The device may perform poorly in dense forests, steep-walled canyons and very bad storms.

 **Communicating with an inReach is not instantaneous. You may experience delays in sending or receiving messages. Reduce the risk of miscommunication by sending messages with complete thoughts and communicating a single action plan.**

* Reduce the potential for confusion by sending complete messages.
	+ A string of messages can be confusing. For instance: “A member of our group has fallen and we are concerned.” (10 minute delay) “We can walk him out.”
	(10 minute delay) “We will update you again by 2 PM. -Laura”
* Sending complete thoughts reduces the probability that your tracker will respond while you are still sending messages.
* Once you communicate a plan, stick to it.
* Sign your name and consider sending messages to both your tracker’s phone number and email address.

**Check for messages before typing your own message.**

* Click the button to check the mailbox when you are expecting a message. To conserve battery, inReach devices do not constantly receive messages like a cell phone. Instead, they connect with satellites at preset intervals to look for messages.
* By checking for messages, you can assure that you don’t miss messages and communicate imprecisely or become unnecessarily frustrated.

**Conserve battery.**

* inReach devices have built-in batteries. They must be charged prior to trips and battery life must be conserved while in the backcountry.
* Battery life will be extended by using the device only for necessary communication, turning the device off outside of your planned communication windows, and preventing the device from getting too cold.
* Check the battery before taking a device into the field. If a device is shared between multiple people, establish a local protocol for charging the device between uses.

**Use preset messages for daily check in.**

* Preset messages are three messages that are set through the [online Garmin portal](https://inreach.garmin.com/). These messages can easily be sent to preset email addresses and phone numbers.
* This feature can be useful for sending daily check in messages to your tracker.

**Be familiar with** **other standard** **settings and device capabilities, including:**

**Location**

* The location button displays your exact location in latitude and longitude. This is useful in many situations, including coordinating during an emergency.

**SOS**

* The SOS button sends a distress message to GEOS International Emergency Response Coordination Center. Trained professionals at the monitoring facility respond to your message, ask for more information about your emergency, coordinate with the appropriate emergency responder, and communicate with the emergency contact registered to the device.
* Once in contact with GEOS, you can cancel your SOS if you find a solution and don’t need assistance.
* If you activate the SOS feature, use the device to alert PCTA and the emergency contacts on your Trailhead Communication Plan as well.
* Learn more about the SOS feature on Garmin’s Youtube channel: [what happens when you trigger an SOS](https://www.youtube.com/watch?v=z8XtPH5OMwc).

**Contacts**

* inReach devices can store phone numbers and email addresses. By creating new contacts, you can input your tracker’s information into the device and save time.
* Each device has a unique inReach address (example: username@inreach.garmin.com*)*, listed as a contact. inReach addresses can be used for inReach-to-inReach communication.

**Quick text messages**

* InReach devices store 10 short messages which can be selected and sent quickly.
* These are different from Preset Messages because they are not programmed to specific contacts. If you use a device regularly it can help to set quick text messages to cover common themes, such as “We are running late.”

**If you have a compatible smartphone, download Garmin’s free Earthmate app and pair your phone to your inReach using Bluetooth.**

* The Earthmate app creates a simpler interface for those accustomed to smartphones and allows for faster typing or voice dictation.
* To pair your devices, open the app and enter the inReach address and Garmin password associated with the device. For PCTA owned devices, these are printed on laminated cards stored with the device.
* On the inReach, visit Settings>Bluetooth>Pair inReach from your inReach Explorer. Follow the instructions on the screen. Make sure Bluetooth is turned “on” on your phone.
* The inReach notifies you when it has successfully paired. You only need to pair the devices once; from then on, the devices will communicate with each other anytime they are in range, turned on, and Bluetooth is active.
* Complete instructions are available in the [inReach Explorer Manual](http://static.garmin.com/pumac/inReach-Explorer-Manual.pdf). Instructional videos can also be found on Garmin’s Youtube channel: [pair with your Android phone](https://www.youtube.com/watch?v=NTkFufRPjlM) or [pair with your Apple phone](https://www.youtube.com/watch?v=el3j7J0hACM).

 **Sample Frameworks for Using inReach Devices**

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| **Volunteer using inReach as backup communication tool** |
| How the device is used: | inReach is carried as a backup to a radio or cell phone. It is not used for daily communication but is useful for gaps in radio or cell phone coverage. |
| Before going into the field: | Turn on the device and note how to start a new message using the contact information on your TCP. Consult TCP and note which numbers are cell phones. Reminder: inReach devices cannot communicate with landlines. Notify your tracker that you will be carrying an inReach as a backup communication device by including it on your TCP.Send a message to your tracker. This will make communicating with your tracker easier if you need to use the device in the field. Confirm the inReach is fully charged. |

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| **Crew Leader/Communication Lead using inReach as primary communication tool** |
| How the device is used: | inReach is carried as the primary communication tool and used for daily communication with the tracker. |
| Before going into the field: | Crew Leader acquires two devices with enough time for the Crew Leader and/or Communication Lead to become familiar with their operation. Designate a primary device for checking in and out and receiving incoming messages. The second device is available as a backup and used if the crew spreads out in the field.Prep for communication between the two devices by adding the other device’s inReach address as a contact. Create a plan to communicate with your tracker and document it in *Instructions for Other Devices* on your TCP. Use the primary device to send a message to your tracker. This will make communicating with your tracker easier once you are in the field.Open both devices and note how to start a new message using the contact information on the TCP. Consult the TCP and note which numbers are cell phones. Reminder: inReach devices cannot communicate with landlines. Confirm both devices are fully charged. |