



Intrepid  
**RESPONSE**  
for **FirstNet**<sup>®</sup>

# MOBILE USER GUIDE

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## RESPONSE FOR FIRSTNET



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# MOBILE QUICK START USER GUIDE



# COMMUNICATE, COLLABORATE, COORDINATE

The Intrepid Response platform is a low-cost simple-to-use web and mobile situational awareness platform for day-to-day and emergency operations.

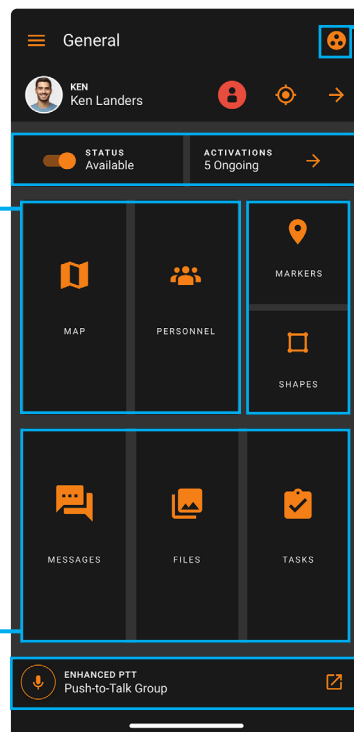
INTREPID RESPONSE DASHBOARD

## LOCATE

Interactive mapping solution based on Google maps with various layers of geospatial data including live user locations, static markers, shapes and traffic. Additional features are available such as turn-by-turn directions and high quality satellite maps.

## CONNECT

A multi-layered collaborative workspace that provides secure team communications and sharing of digital content on demand.



## CHANNELS

Channels segregate information into operational containers with controlled user membership.

## ACTIVATE

A simple-to-use emergency notification and response team mobilization tool.

## PUSH-TO-TALK

Integration with leading Push-to-Talk platforms in order to fuse voice and data together.

The Locate, Connect, Activate and Push-To-Talk modules can be purchased independently for your organization to maximize your budget and capability requirements.

# MOBILE RESPONSE QUICK STARTUP

1. Open the Response App from the home screen.

2. Log in with your user name and password credentials.\*

*\*Contact your Response Administrator if you do not have credentials*

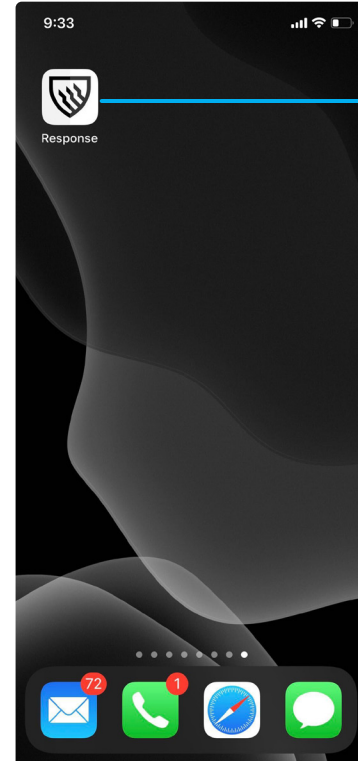
3. Once the application is open, verify that the Active Location icon is orange making you visible on everyone's Locate map. If the icon is gray, you are **not** visible on the Locate map and you must tap the icon to enable location sharing.

4. Click on the Select Channel icon in the top right of the dashboard to verify which operational channel is currently active. The General channel is the default main Response channel that contains all users of an organization and should be highlighted in orange. You may also select additional channels from the list view. After you have selected a channel, the application will automatically return you to the main Response dashboard.

You are now ready to utilize Response for FirstNet.

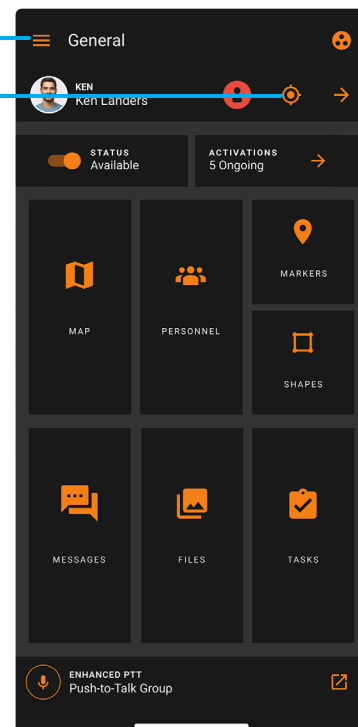
**NOTE:** If your dashboard does not display all the modules that you expect, please contact your organization administrator to add the appropriate module license permissions for your user account.

**NOTE iOS Users:** Starting with iOS 14, Apple requires specific configuration to allow reporting location from the background. To enable this:  
 1. Go to your device Settings, 2. Scroll down and tap on "Response for First Net" from the list of apps, 3. then tap "Location", and 4. then tap "Always". This will enable your peers to know where you are when the app is open on your phone but isn't on your screen.



INTREPID RESPONSE ICON

1



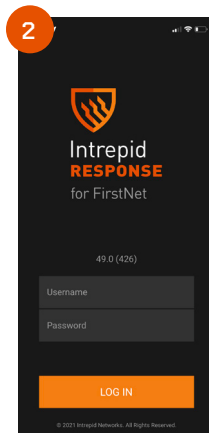
MENU BAR

ACTIVE LOCATION

SELECT CHANNEL

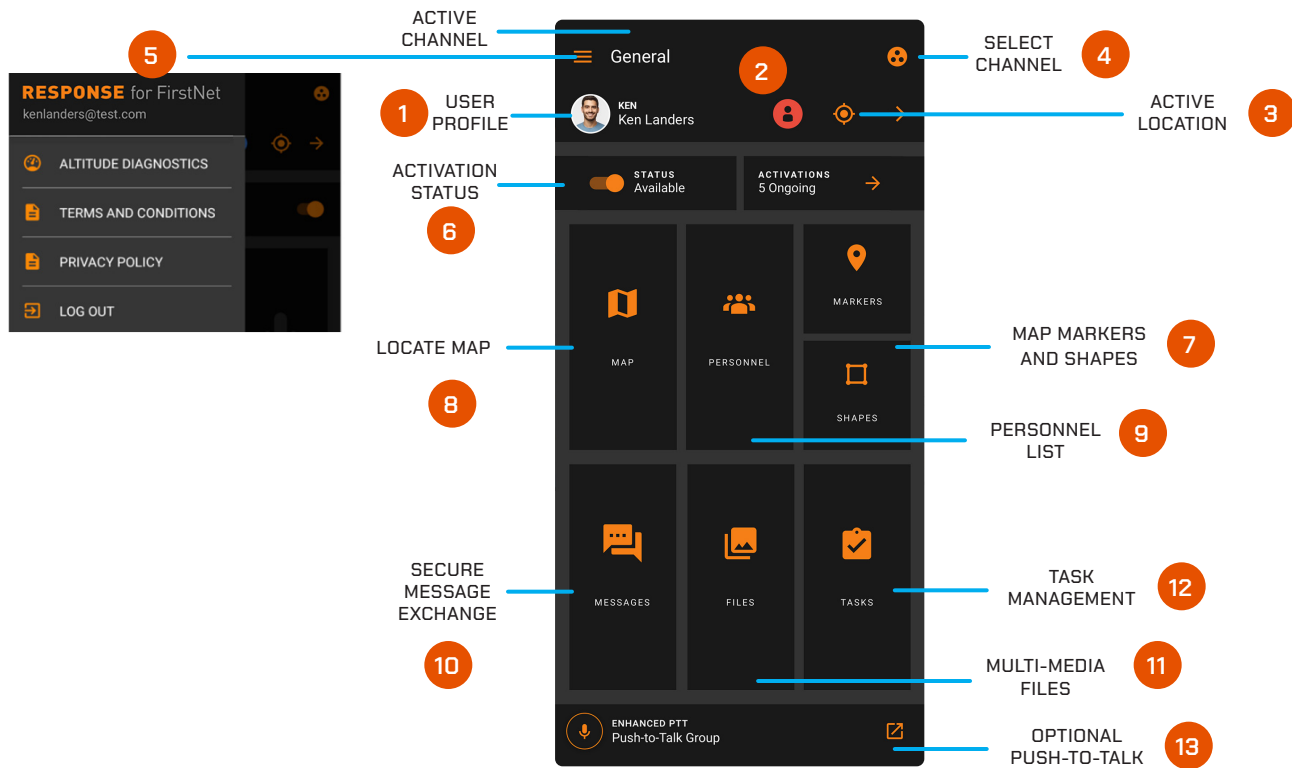
4

3



2

# MOBILE DASHBOARD AT A GLANCE



1. **User Profile:** Change your profile picture, name and call sign that will be utilized within the Response platform.
2. **User Team Color and Icons:** Choose your role from many unique icons as well as the icon color.
3. **Active Location:** Turn location sharing on or off, orange is active and gray is inactive.
4. **Select Channel:** Open the Channels list view and select the channel you want to become active.
5. **Review Terms and Conditions, Privacy Policy, and log out** through this menu.
6. **Activation Status:** Toggle to adjust your activation status on or off so you can receive call out requests through Activate.
7. **Map Markers and Shapes:** Easily access any markers and shapes that have been added to the map.
8. **Personnel List:** List of active and stale personnel on your channel.
9. **Locate Map:** View live locations of personnel, markers and areas of interest on a Google map.
10. **Secure Information Exchange:** Share text messages, photos, documents and numerous other multi-media types.
11. **Multi-Media Files:** All multi-media files shared in a channel can be viewed and managed here.
12. **Task Management:** Create, edit, assign and close tasks within each channel.
13. **Push-To-Talk:** If enabled, press here to open your PTT application paired with Response.

# HOW TO USE MOBILE

## 1. User Profile

Click your name or tap the arrow in the same section of the Response dashboard to edit your profile. Update your profile photo, call sign, team color, user role icon and change your login password.

## 2. Map

Click the “Map” tile on the dashboard to view locations of all users in the selected channel as well as markers and other geospatial data. This includes shapes drawn on Locate web that are viewable on mobile clients.

Selecting the vertical 3-dot menu button in the upper right-hand corner of this screen allows you to choose various personnel and marker display options. Use common gestures (swipe, double tap, pinch, etc.) to move around the map or zoom in and out.

Selecting the map settings icon on the upper-left side of the map adjusts the map view type to Standard, Satellite, or Night Mode. Also select map details like traffic, shapes, and overlays of additional channels.

Tapping on an individual user icon will display a pop-up with more detailed information. Click on the vertical three dots on the right-hand side of the pop-up to select turn-by-turn directions to that individual. If PTT is enabled, other voice calling options will be available as well.

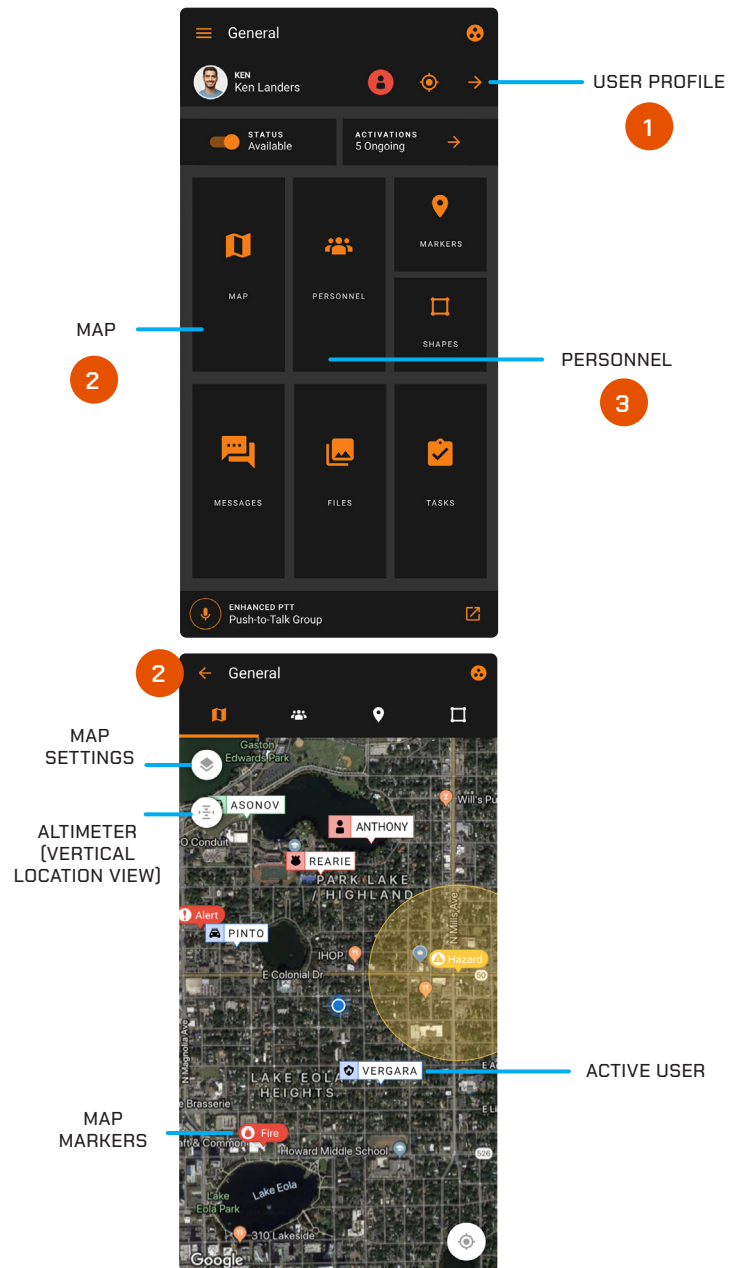
To create static map markers, touch and hold the spot where you would like to place a marker.

A menu will appear to “create map marker”. Add marker name (optional), insert a URL link (optional), define the marker icon and color, and assign a HAT value (optional if you have a NextNav license). When complete, click “Done” in the top right corner. The marker will now display on the Locate map.

To remove a marker you placed, select the marker and click to display the pop-up menu, choose the three dots menu on the right and select delete. You are also able to edit the marker from this pop-up.

## 3. Personnel

Choose the “Personnel” tile on the Response dashboard to view all active and stale users in the selected channel. The Personnel list is sorted by linear distance of other users to yourself, with the closest user at the top of the list. View first and last name, call sign, profile picture and get turn-by-turn directions to their location.



### 4. Channels

Channels segregate information into operational containers and only allow invited users to share and view operational data within unique channels. Channels enable organizations to manage multiple operations, departments, sectors, groups or investigations simultaneously within Response. To change your active channel, tap the Select Channel icon at the top right of the application and choose the desired active channel from the list. When connected, Response automatically returns to the main Response dashboard.

**NOTE:** Your location will only be visible on the active channel. Other information shared within that channel will only be stored in that channel container. The General channel includes everyone in your organization and is your default channel upon first time login. The Personal channel only contains yourself and is useful for information you do not want to share with other users at that time.

### 5. Activate

Change the Activation Status slider position right or left to choose either a status of available or unavailable for activation requests.

### 6. Markers and Shapes

Select Markers or Shapes to see a list of all active markers and shapes displayed on the Response map. Add new markers by pressing your finger down on the screen labeling the new marker.

### 7. Secure Message Exchange

Select the Messages tile on the lower-left side of the Response dashboard to share information within the active channel. Messages allow you to create, send and receive instant messages, files, PDF's, photos, short video files, tasks as well as other multi-media formats. To share only a text message, type in the "Send Message" dialog box at the bottom. Optionally, choose the "+" icon to select and share other multi-media types.

### 8. Multi-Media Files

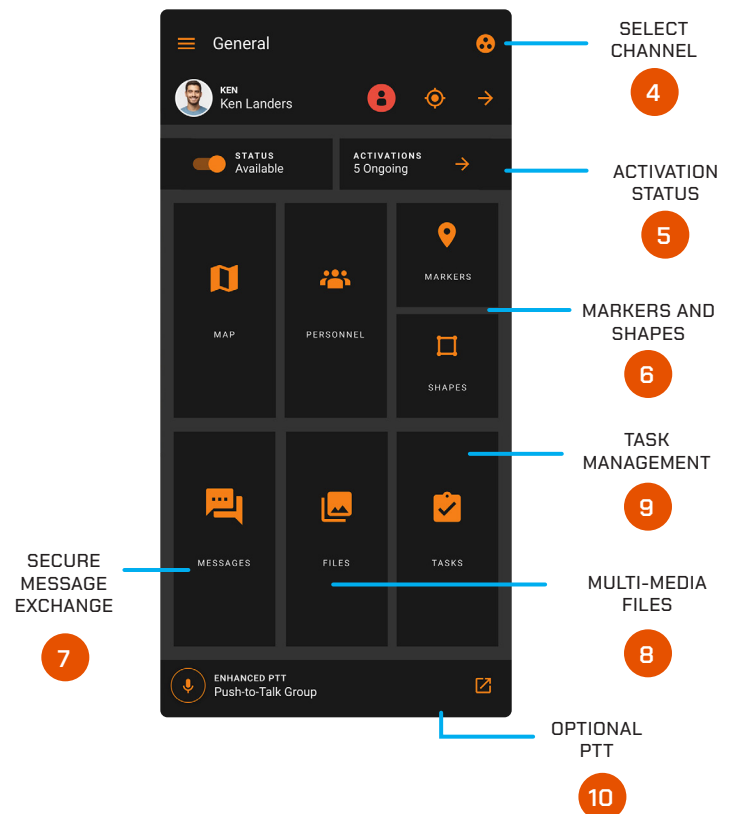
Select the Files tile on the Response dashboard to only view and manage multi-media files within your active channel. Choose from various multi-media file types from this screen, select the "+ Add" at the bottom and choose from file types to add short video files, photos (existing or new capture), notes, tasks, contacts, and collaborative whiteboards.

### 9. Task Management

Selecting Tasks on the Response dashboard provides the user the streamlined capability to create, manage and delete tasks. Create a Task item by pressing the "Add a To-Do Item" icon at the bottom of the screen. Once created, you can title the task and add specific information. To fulfill a task, click the box on the left of the task to mark complete. Tasks also can be created in Messages as one of the multi-media formats.

### 10. Push-to-Talk

Intrepid Response integrates with the leading PTT solutions. If enabled, selecting the Push-To-Talk tile opens your paired PTT application.





# MOBILE ACTIVATE USER GUIDE



# ACTIVATE MOBILE

1. The Activation status bar indicates your availability for emergency notifications and activation requests. Choose either available or unavailable as your current assignment dictates. Available is highlighted in orange and unavailable is grayed out to increase the visibility of your selection on the Response dashboard.

To receive an activation request on Response, you **MUST** select available.

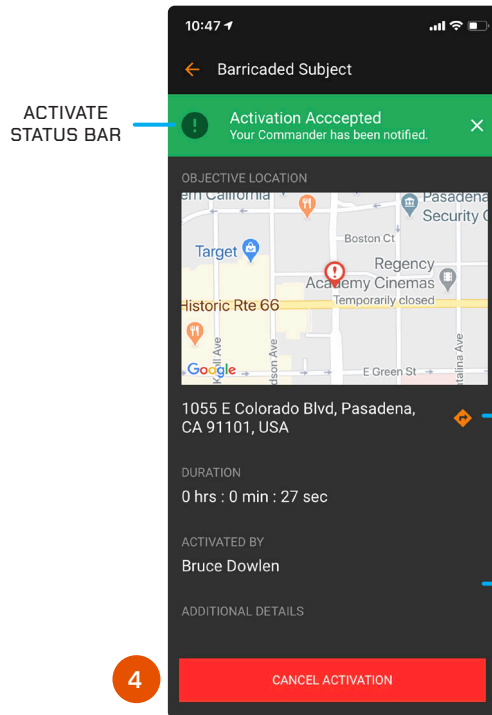
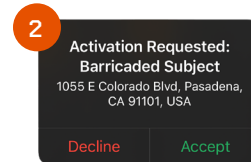
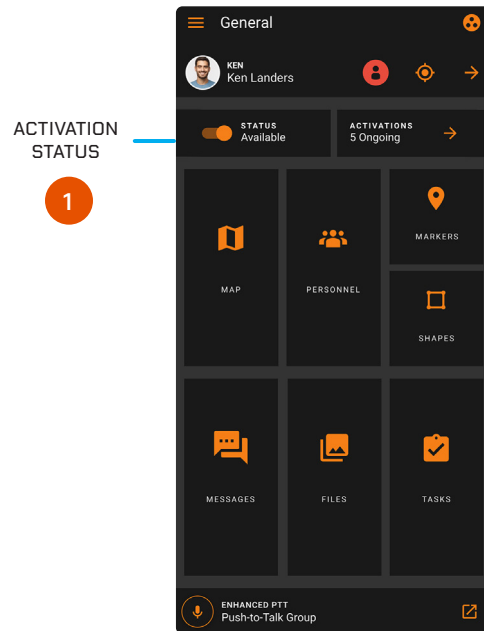
**NOTE:** Upon each distinct user login, your availability will automatically default to Available.

2. Once the activation creator sends an Activation request, you will receive a pop-up notification alerting you to the incident. Depending on your notification settings in the Response Admin web application, you will also receive SMS text message and email notifications. Confirm your disposition for the activation request by choosing either Accept or Decline.

Once the activation is accepted, this will notify your activation creator that you will participate on the response team. If you decline the request, this will notify the activation creator that you will **not** participate on the response team.

3. Upon accepting the activation request, a pop-up will display the exact location of the incident, time the activation was sent, duration of the incident so far, the activation creator name and any additional notes included in the activation. Selecting the directions icon or tapping the address bar of the incident will provide you with turn-by-turn directions to the location.

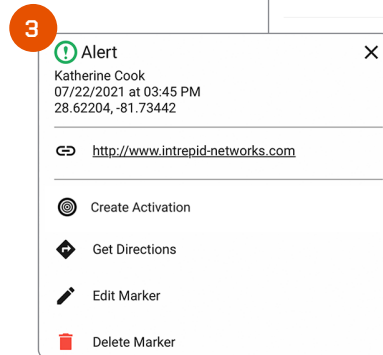
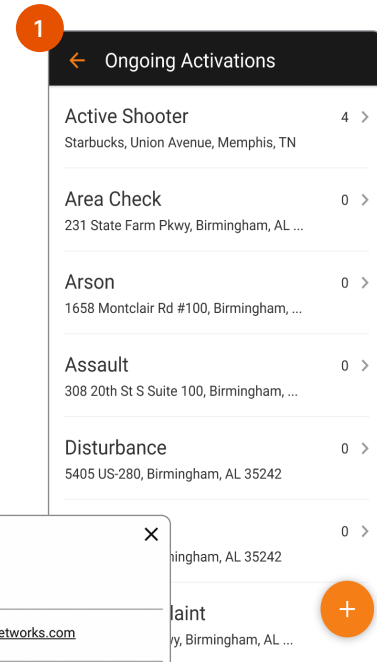
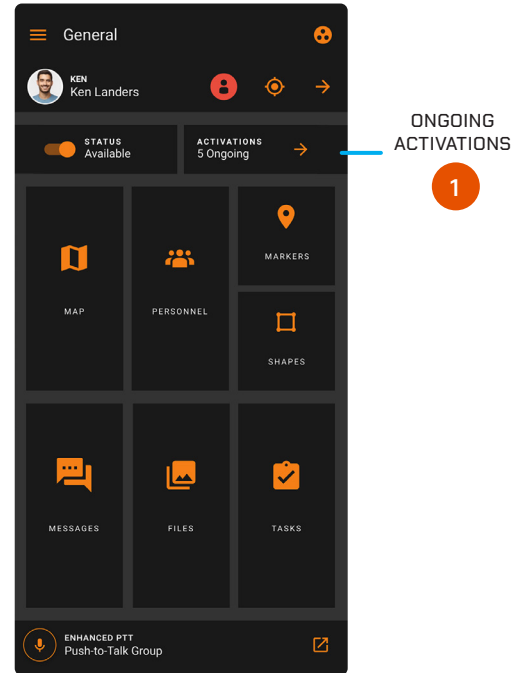
4. You also can cancel the activation after accepting, by pressing the red Decline button at the bottom of the dashboard. A pop-up notification will appear to confirm activation cancellation, select yes or no as desired.



# ACTIVATE MOBILE: CREATE ACTIVATION

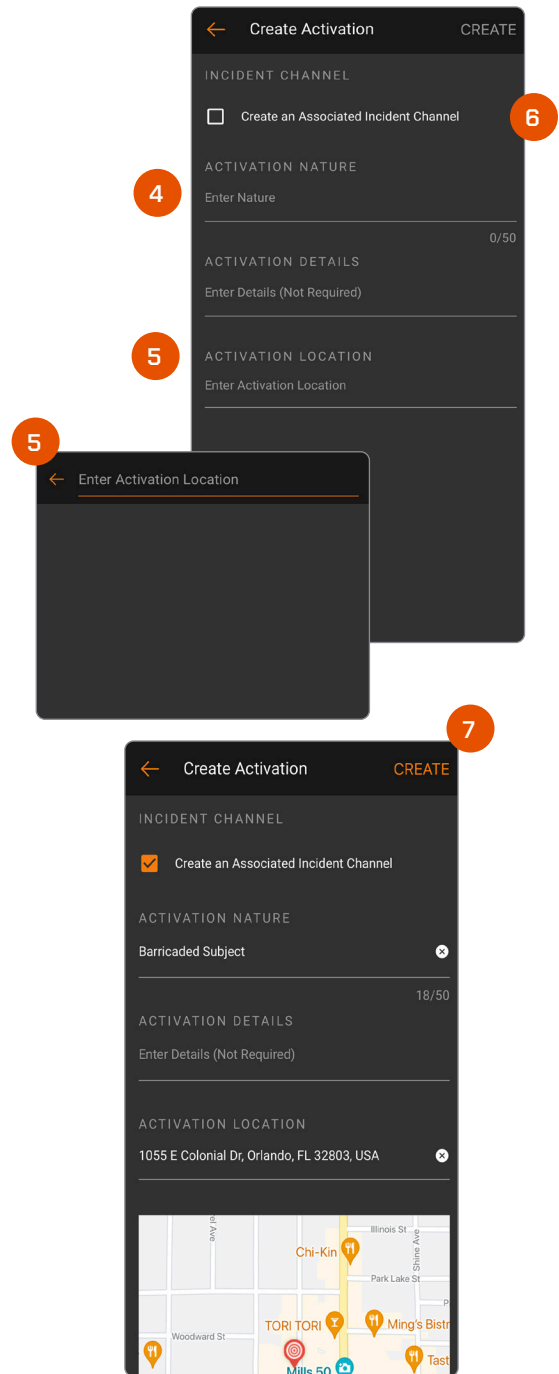
Mobile users have the capability to create activations. Once an activation is created by the user, personnel are then selected to send notifications to request they accept the activation. The user creating the activation is responsible to monitor the status of the activation and 'end' the activation when it is completed.

1. To create an activation from mobile, the user will click on the Ongoing Activations arrow. The 'Ongoing Activations' list will then appear.
2. From the Ongoing Activations, the user will click on the '+' button. The 'Create Activation' form will appear.
3. An Activation can also be created directly from a Marker on the Response Map. Select and expand any Marker that is active on the Map and click 'Create Activation.' Users will be taken to the 'Create Activation' screen on page 12.



# ACTIVATE MOBILE: CREATE ACTIVATION CONT.

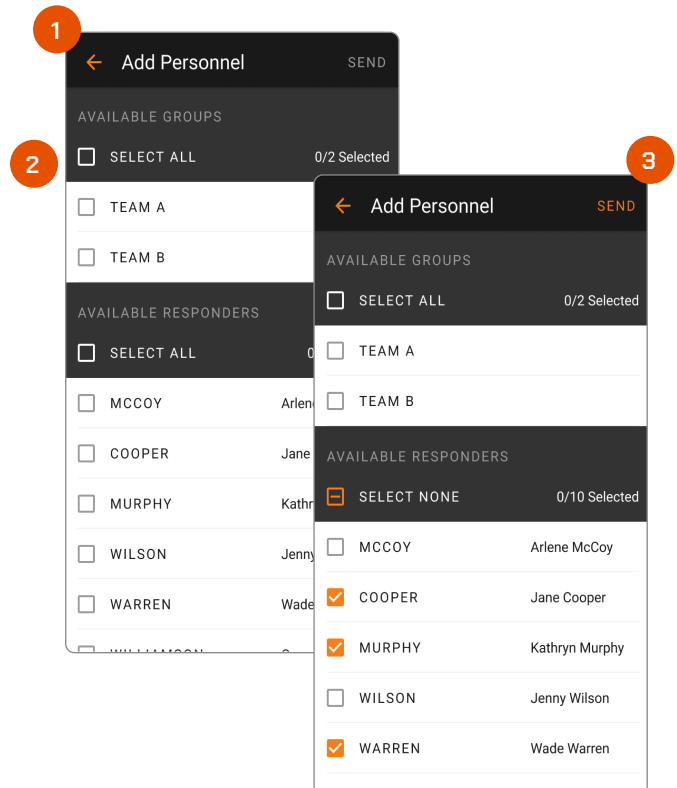
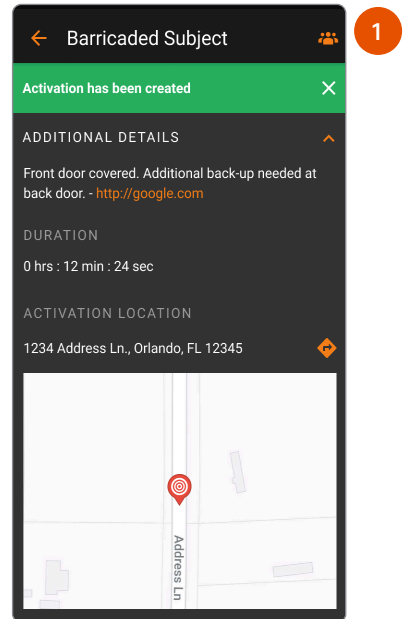
4. The user must, at a minimum, fill in the Activation Nature and the Activation Location fields. Once these fields have been entered, the user will click on the 'Create' in the upper right hand corner of the mobile. Confirmation of the newly created Activation will appear in the green banner at the top of the form.
5. Select the 'Enter Activation Location' text box to add a incident location address. This will take the user to another screen where they can input the incident location and verify it with Google Maps automatically populated address list.
6. The checkbox 'Create an Associated Incident Channel' is an option to create a unique channel which will be used to collect messaging and artifacts for the activation.
7. When the Activation is created, the user will receive a confirmation.



# ACTIVATE MOBILE: ADD PERSONNEL

The next step for the creator of the activation is to assign personnel to the activation.

1. Click on the personnel icon in the upper right corner of the screen. The 'Add Personnel' form will appear.
2. The user can add personnel to the Activation by selecting groups and personnel either by checking 'Select All' or by individually selecting the group(s) or user(s) available to be activated.
3. When the user has made their selection(s), the user will click on the 'Send' in the upper right had corner of the mobile. This will cause notifications to be sent out to the selected users and groups.
4. Notifications are sent to each user that was requested in the 'Add Personnel' form. An SMS message is sent to each user as well. In the Response application the user is immediately presented with the request to accept or decline. Clicking on Accept will take the user to the Activation form they have accepted.



# ACTIVATE MOBILE: MONITOR ACTIVATION

1. The owner of the activation or an administrator can monitor the assignment of personnel to the activation. The mobile application is updated based upon the response from the users that were notified. See which users have accepted, declined, or have yet to respond to the activation request at any time.
2. To remove personnel from the activation, the owner or Admin can remove individual users by clicking on the associated 'x' by the user's name. A verification will then appear to remove the user.

**NOTE:** To ensure that a user can not be removed by mistake, the owner of the activation will need to 'confirm' the removal of that user on an additional pop-up menu.

3. To end an activation, the owner can click on the 'End Activation' button. The user will receive a dialog to confirm that they are ending the Activation. Users can also leave the activation at any time by selecting 'Leave Activation.'

# ACTIVATE MOBILE: NEW CHANNEL

The ability to create an Incident Channel for an Activation is now a selection on the Create Activation form. Selecting this option will create a channel that is named by the Nature of the Activation and the date of the Activation.

When a user accepts the activation, their 'Active' channel will be changed to the Activation's Incident Channel. The purpose of creating this channel is to allow all communications associated with a specific activation to be easy to view and act on.

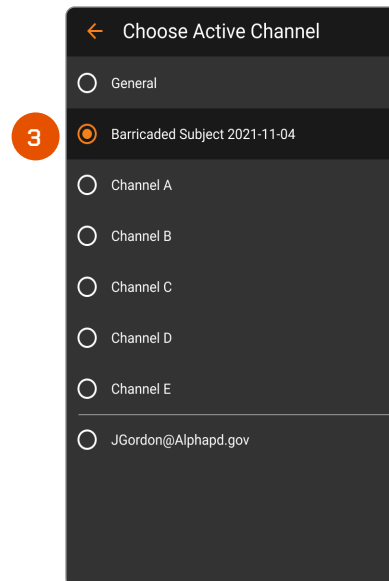
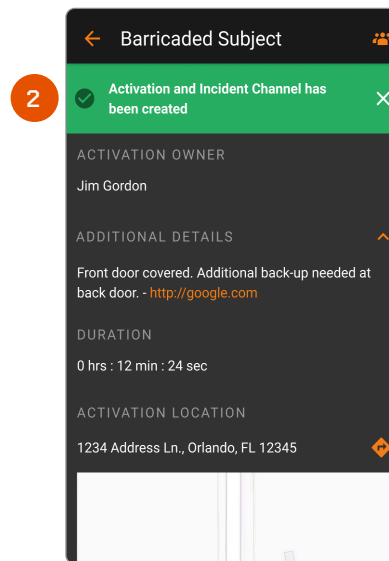
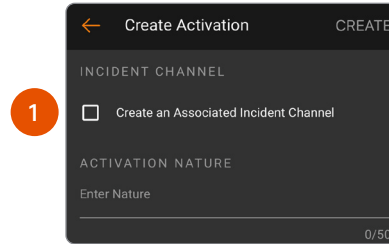
1. Click on the 'Create a Associated Incident Channel' check box to automatically create an incident channel for the new activation.
2. When the user creates an Activation with an associated Incident Channel, the user will be notified that both the Activation and Incident Channel were created.
3. The Active Channels list will also show the newly created incident channel.

**NOTE:** The Associated Incident Channel is made the user's Active Channel when the user creates or accepts the activation request.

When the activation is completed, the user will be associated with the Incident Channel until they choose another active channel or accept another Activation.

**Did You Know:**

Did you know Intrepid APIs support notifying a supervisor of an event so that they can choose to activate resources? If you have an alarm system or a gunshot detection system your vendor can initiate an API to prompt a supervisor in Response to initiate a preloaded activation. Contact you account manger to learn more.



# MOBILE LOCATE USER GUIDE





# LOCATE MOBILE: SELECTING CHANNELS

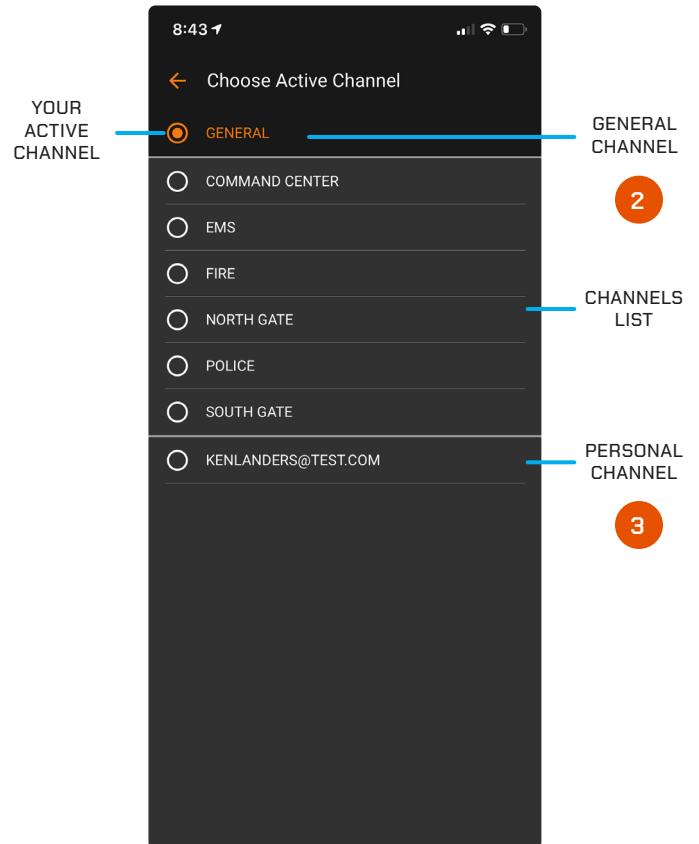
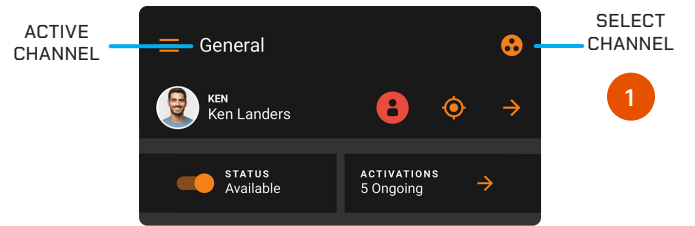
## Channels

Channels segregate information into operational containers and only allow invited users to share and view operational data within unique channels. Channels enable organizations to manage multiple operations, departments, sectors, groups, or investigations simultaneously. Channels are created by your organization administrator.

1. To change your active channel, tap the Select Channel icon at the top right of the application. Choose the desired channel from the list. When connected, Response automatically returns to the main Response dashboard.

**NOTE:** Your location will only be visible on the active channel. Information shared within that channel will be stored in that container and not accessible by other non-active channels.

2. The General channel includes everyone in your organization and is your default channel upon first time login.
3. At the bottom of the channels list view, a Personal channel is always available with your user ID as the channel name. This is your dedicated Personal channel that only contains yourself as a member. Information within this channel is not shared with other users and this container can be utilized as a personal notebook.



# LOCATE MOBILE: PERSONNEL LIST

1. Each user tile displays the team color (left-hand bar color), profile photo, call sign, full name and linear distance of this user to yourself. Select a user tile from the list to view that user's location on the map and also get turn-by-turn directions to the selected user's location.

2. The Personnel list is sorted by linear distance of other users to yourself, with the closest user at the top of the list. The distance is displayed in miles on right-hand side of each user tile.

3. Click the Back Arrow to return to the main Response dashboard.

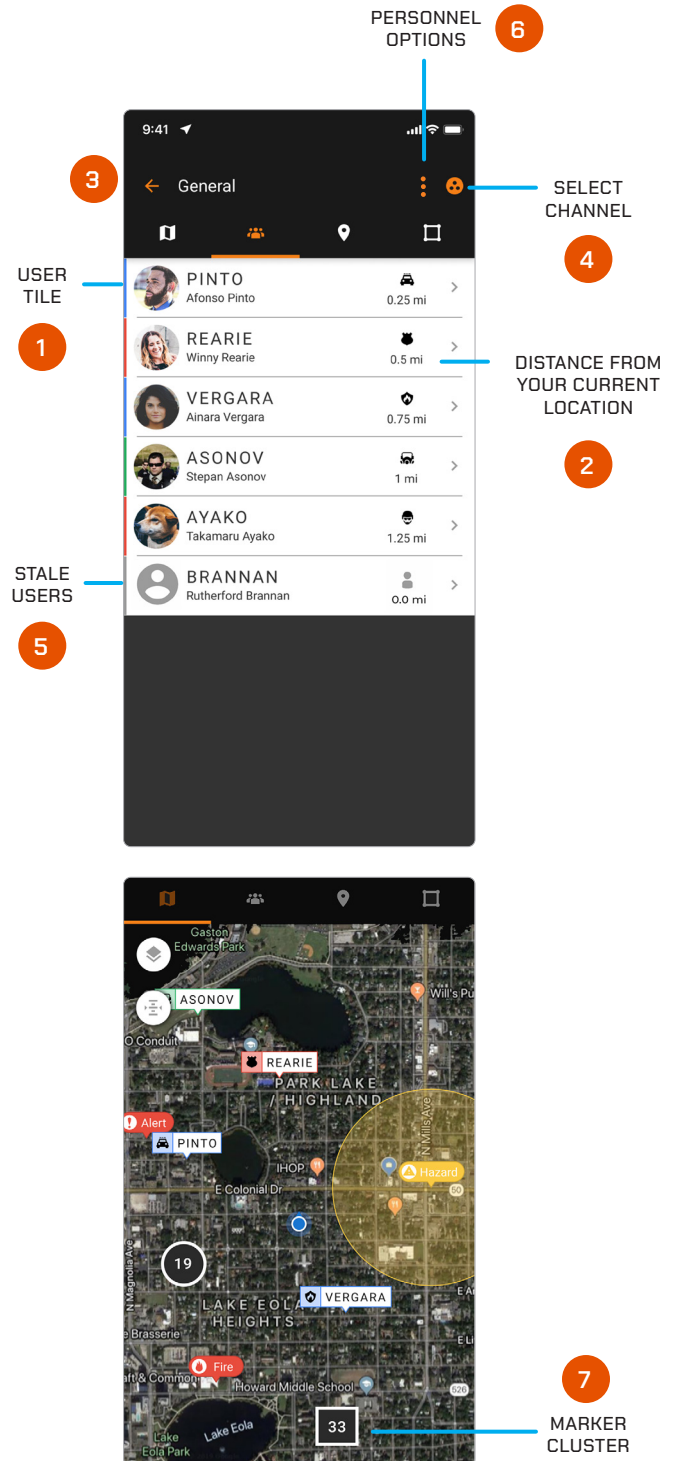
4. Click the Select Channel icon to change the active channel.

5. Stale users will always appear grayed out on both the Personnel List and the Map.

**NOTE:** Stale is a specific Response user state that defines users who have lost connectivity or location for over three minutes but have not logged out of Response.

6. Select the three orange dots on the top right-hand side to open the Personnel Options menu. Additional selections are available here to manage display of assets on the map.

7. When you have multiple personnel and static markers present on the map. When you zoom out on the map all of the markers will "cluster" as a group icon with a number on it representing items in that group. Zoom in and the markers are now visible individually.



# LOCATE MOBILE: MAP

1. Active user icons indicate their live location on the Locate map. Tap to expand the marker for full name, time and date of last activity in channel, plus latitude and longitude. Click the three dots on the right of the marker to get turn-by-turn directions and evoke a PTT call (if enabled) to that individual.

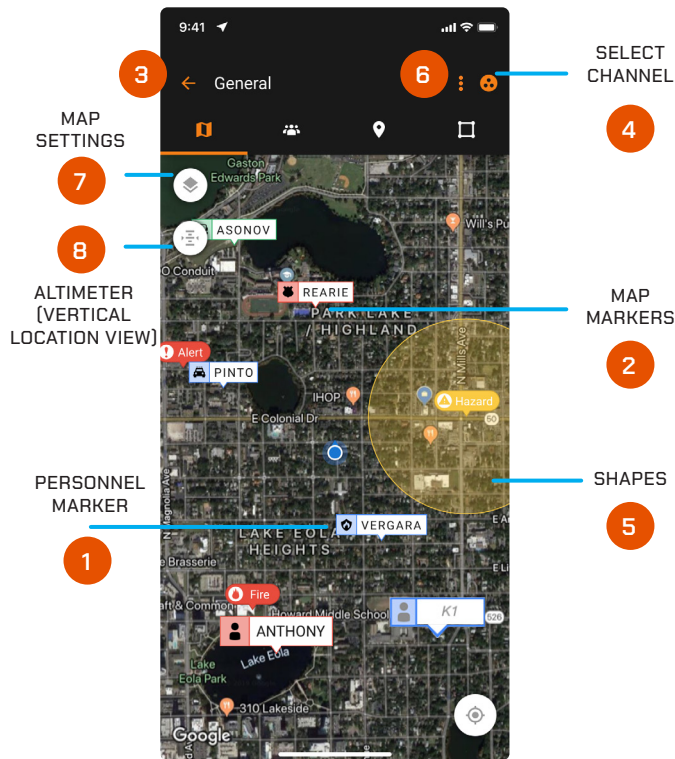
2. Map Markers can be created and placed anywhere on the map to mark locations of interest. Select from a wide array of icons and colors to differentiate the marker against others. Tap to expand the marker for name, URL link, time, and date created, plus latitude and longitude. Tap the three dots on the right of the marker to get turn-by-turn directions to that marker and also access Edit or Delete options.

**NOTE:** Users can only delete markers that they create.

3. Click the Back Arrow to return to the main dashboard.

4. Click the Select Channel Icon to change the active channel.

5. Shapes can be drawn as circles, squares, and freeform shapes to mark areas of interest.



# LOCATE MOBILE: MAP CONT.

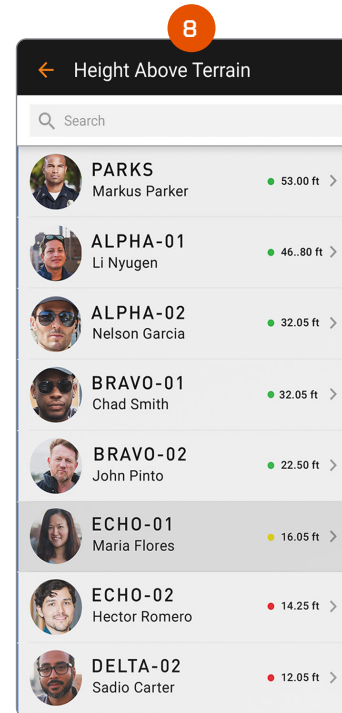
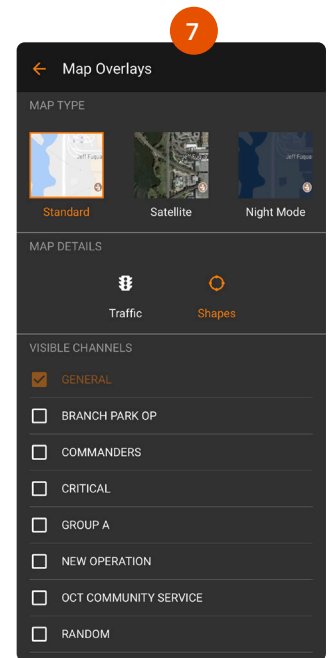
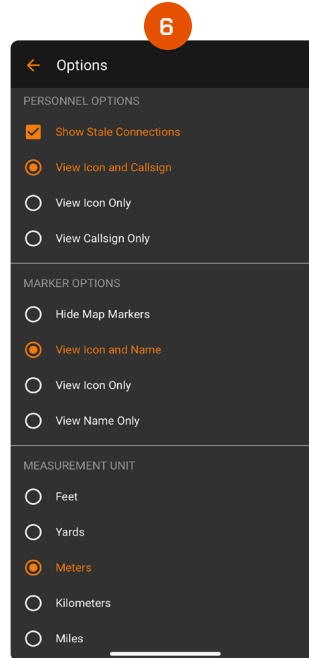
6. Selecting the vertical 3-dot menu button in the upper right-hand corner of this screen allows you to choose various personnel and marker display options. Choose your selection and then click Save.

7. Choosing the map settings icon on the upper-left of the map provides options for the view map type: Standard, Satellite or Night Mode. Select additional map details like traffic, display shapes and overlays of additional channels.

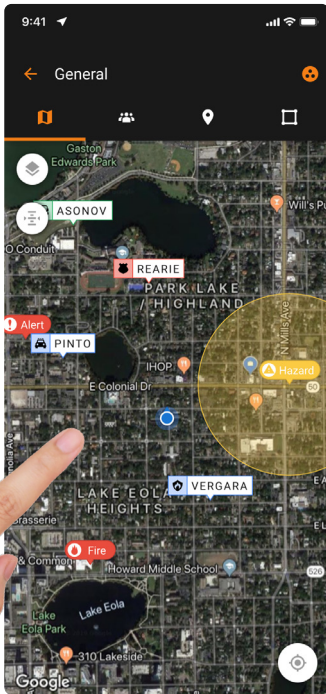
**NOTE:** You can toggle between the map and personnel views with the navigation tabs near the top of each screen.

8. Selecting the Altimeter or HAT(Height Above Terrain) icon brings the user to a detailed list of all users and markers that have their HAT value calibrated. (How to Calibrate your HAT, see pg. 15) Here the user can see the vertical location of all assets on the Locate Map in order from highest to lowest. Selecting a user or marker will automatically take you to their location on the map.

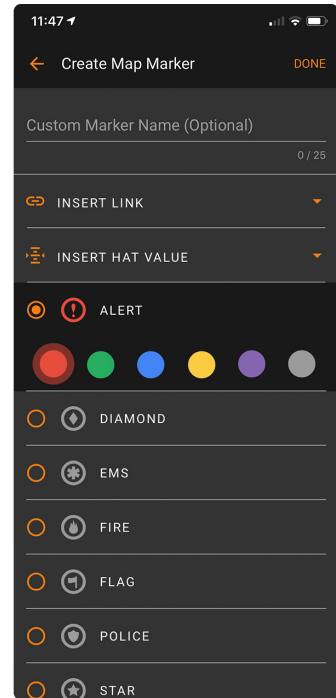
**NOTE:** Grayed out users are stale connections who's location may need to be updated or have since logged out of the app.



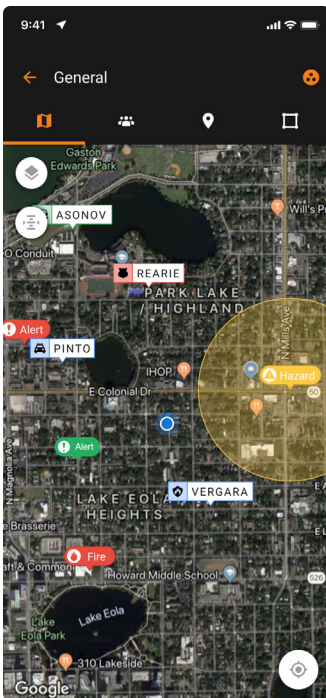
# LOCATE MOBILE: CREATE MAP MARKERS



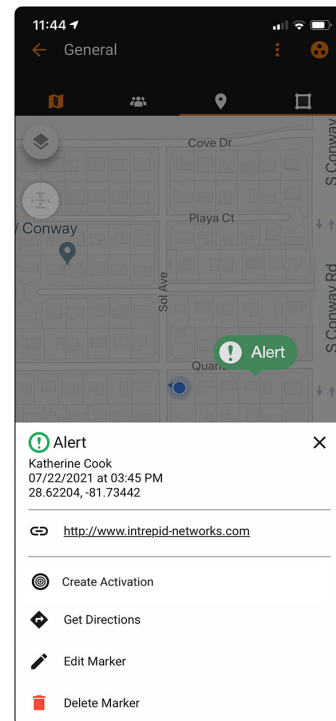
1. From the Map View, touch and hold the Map where you want to place a static location marker.



2. Select the Marker color and icon, optionally choose a custom name, insert a HAT value and/or add a URL link and click Done.



3. Your new Marker is placed on the Locate map.



4. Click the Marker once to view additional marker details on a pop-up. For more options select the three dots on the right to open the marker settings menu. Choose from Create Activation, a URL, turn-by-turn directions, edit and delete marker.

# VERTICAL LOCATION USER GUIDE



# VERTICAL LOCATION: OVERVIEW

The vertical location capability in Response is delivered by NextNav's Pinnacle service. The Response app uses the information from Pinnacle to locally display and share vertical location.

There are two screens within the Response app which are used for vertical location. Both can be accessed from the Response Dashboard.

**1. Dashboard:** Load and log into the Intrepid Response for Firstnet application. The Dashboard will be your main point of navigation through the Intrepid Response Application.

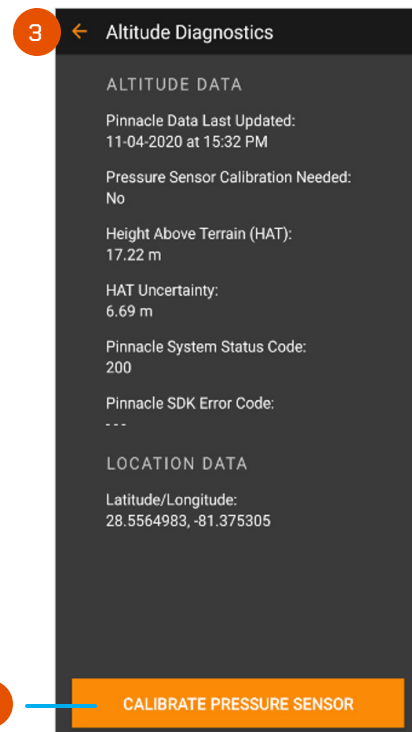
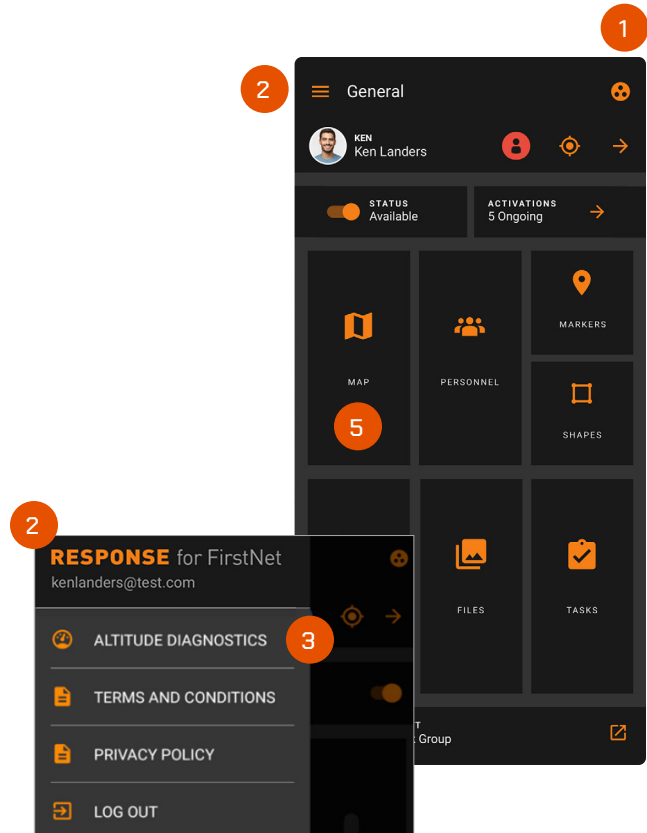
**2. Settings Menu:** Click on the 3 lines in the upper left-hand corner to open a new menu on the left of your screen. Here you will see the Altitude Diagnostics option.

**3. Altitude Diagnostics:** Click the Altitude Diagnostics button to open your Altitude Data menu. Here will be the all the information your device has gathered so far about your altitude and location. Your HAT (or Height Above Terrain) location will be displayed on your user marker on the Google Map Display.

**4. Calibration:** If Calibration is needed, select the Calibrate Pressure Sensor button at the bottom of the Altitude Diagnostics screen.

**5. Map Display:** Select the Map icon on the Dashboard to view live location information for your team directly within the application.

**IMPORTANT:** To ensure optimum indoor vertical location, keep Wi-Fi on.



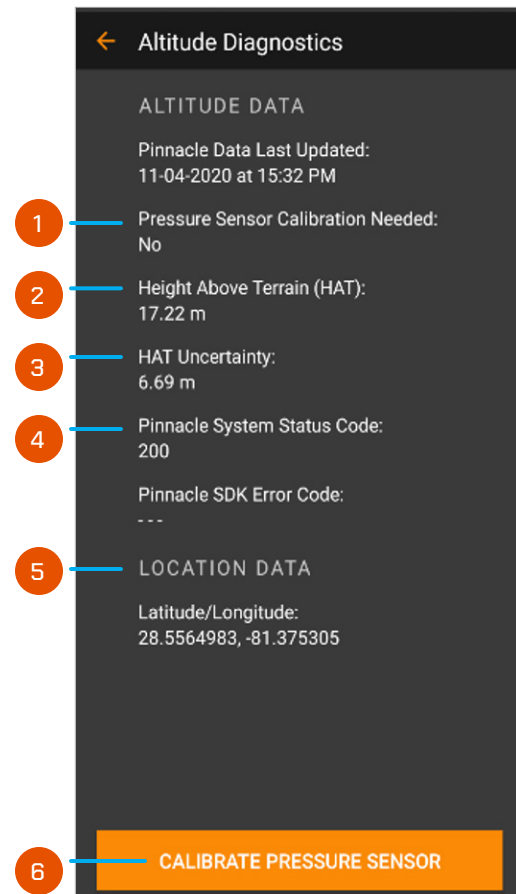
# ALTITUDE DIAGNOSTICS SCREEN

The Altitude Diagnostics screen is accessed through the settings menu in the upper left-hand corner of the Dashboard. Once in the settings menu you'll see an "Altitude Diagnostics" option, which will let you see your own vertical (and horizontal) location, as well as calibrate the device.

In the Settings Menu, tap on the first item – Altitude Diagnostics.

In the altitude diagnostics menu, you'll see several data lines of important information.

1. The "Pressure Sensor Calibration Needed" item will tell you if you need to calibrate the sensor to improve the accuracy of vertical location data.
2. Height Above Terrain (HAT) tells you the altitude of your device in relation to ground level at your location.
3. HAT Uncertainty provides a metric of confidence about the quality of your altitude.
4. Pinnacle status codes
  - A. Pinnacle System Status code: This indicates if the Pinnacle service is working well or if there are any issues.
  - B. Pinnacle SDK Error code : This indicates if there is any device specific issue(s) that prevents the Pinnacle service from delivering vertical location information.
5. Your current latitude and longitude as provided by the Response application are displayed.
6. At the bottom of this menu, you'll see the "Calibrate Pressure Sensor" button, which will walk you through the process of calibrating the barometric pressure sensor in your device. (See below for further details on the calibration process.)

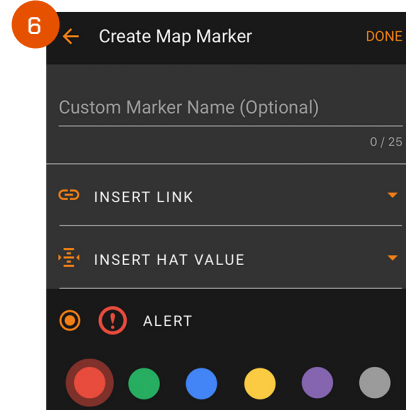
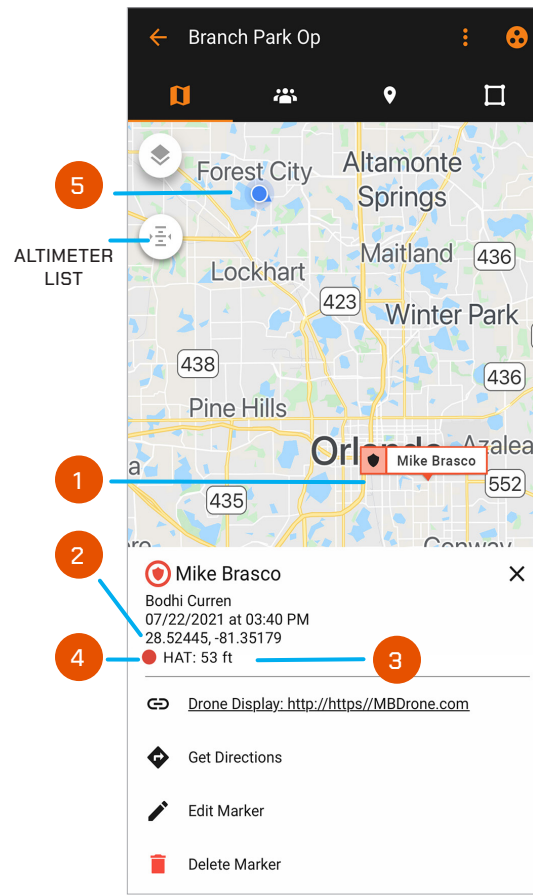




# MAP DISPLAY

The map display can be accessed through the “MAP” button in the middle of the Dashboard. This display will show you the vertical and horizontal location of everyone in your channel. To choose a channel, you must visit the channel menu, which can be accessed through the “Channel” button (the circle with three dots in it) in the upper right-hand corner of the Dashboard.

1. Each person is displayed on the map as a small card with the call sign they have registered with the administrator. If you tap on the small card, the larger information card will appear with the person's location data.
2. The top two measurements on the information card are the person's x/y location, listed as coordinates.
3. The bottom measurement is the person's vertical location, listed as “Height Above Terrain” (HAT), or height above ground level. The measurements are listed in meters by default.
  - A. To change the measurement units, go to the “options” screen, which is located in the three vertical dot icon in the upper right-hand corner of the map display.
  - B. At the bottom of the menu, you'll see options for imperial measurements if this is what you prefer.
    - i. Changing the units affects both horizontal and vertical location measurements.
    - ii. Changing the unit of measurement will apply to everyone displayed on your device only. It will not change the unit of measurement for how you are displayed on other peoples' devices.
4. The dot to the left of the HAT measurement indicates the quality of the height measurement. (See below for additional details.)
5. Your own horizontal location is represented by a blue dot on this screen. To see your own vertical location, go to the altitude diagnostics menu as detailed above.
6. Additionally, a HAT Value can be added to a Map Marker by manually typing in the value when creating a new Marker.



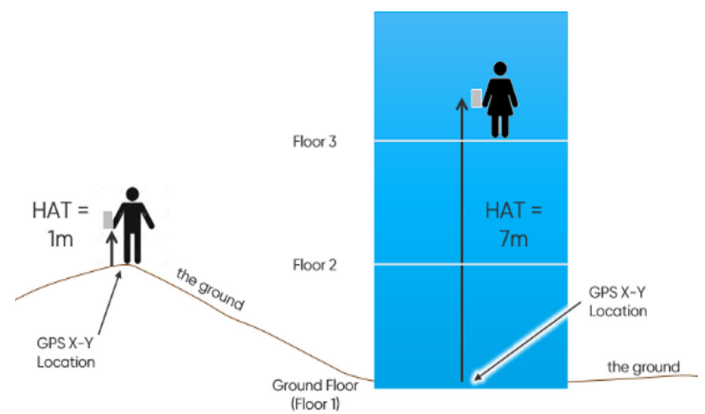
# UNDERSTANDING VERTICAL LOCATION

Most people are accustomed to seeing location data displayed in only two dimensions. It's a habit formed through years of using the flat, 2D maps common in most location-based mobile apps. Adding a vertical dimension into the mix takes some getting used to. Here are some tips to help you understand the context of vertical location as it appears in the Response app.

## The Concept of Height Above Terrain (HAT)

Height Above Terrain is a technical term for how high above the ground the device is located. For example, when altitude is reported as 1m HAT, it means the device is 1m above the ground level at the X-Y location the device reports.

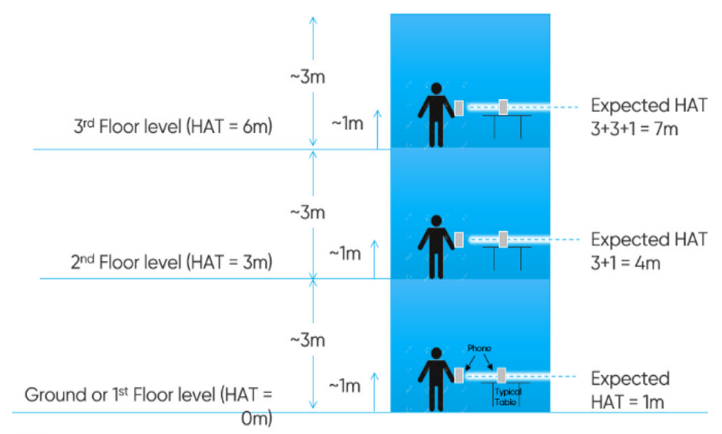
Given that most people typically hold their phone at waist or chest level, for someone standing at ground level looking at their phone, their device would typically report their altitude as 1m HAT.



## How HAT relates to Building Floors

HAT is a measurement of where your device is in relation to the ground. Translating that measurement into the floor of a building depends on the unique characteristics of the building and the terrain around the building.

As a general rule of thumb, most building floors are about three meters high. So if a device is shown with an HAT of seven meters, that will usually indicate the person holding the device is on the third floor. (3m 1st floor + 3m 2nd floor + 1m from the person's feet to their hand)

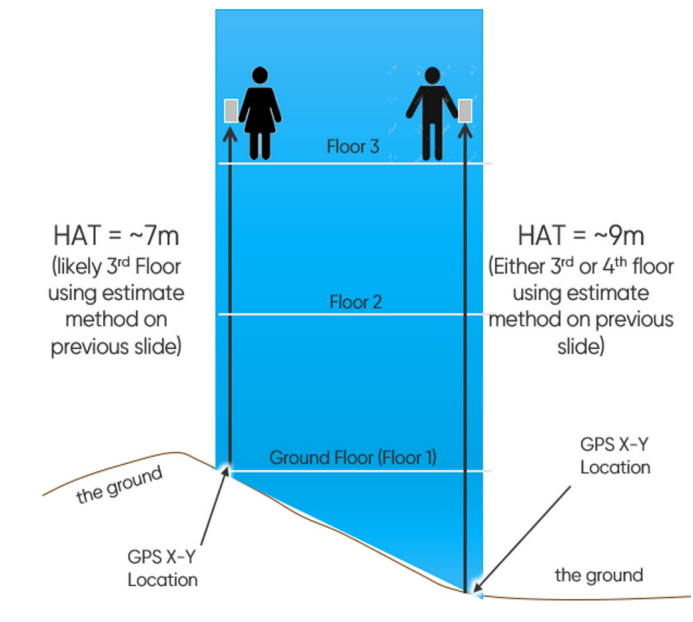


# UNDERSTANDING VERTICAL LOCATION CONT.

Unfortunately, not all buildings have uniform floor heights. Some have higher entry levels or mezzanine floors. Some have large spaces for duct work between floors. Some have entire “mechanical floors”. So the estimating technique described above for floor height is not always accurate.

Buildings built on steep slopes also present a particular challenge for vertical location readings. When the surrounding terrain varies, HAT measurements will follow that variation. In the example shown here, the “ground floor” of a building could be different depending on which side you measure from.

**Bottom line:** HAT provides you with enough information to make an educated assumption about a person’s floor location, but keep in mind that it is not exact given the variables described above.



## Normal Vertical Location Behavior

The HAT measurement displayed in Response is quite accurate but should not be considered exact (much like GPS in a phone is quite accurate but is not considered exact). Again, much like GPS, there is some uncertainty that comes with the altitude calculation based on a number of conditions at the time of the measurement. That uncertainty is displayed in the map view as a red/yellow/green dot as mentioned above. (See below for more details about the uncertainty measurement.)

You’ll see the HAT reading will vary slightly every second or so. This is quite normal and due primarily to natural variations in the barometric sensor in the device and will happen even if the phone is perfectly still. In addition, the stability of the reading can be affected by where and how people hold their phones and other factors.

# CALIBRATION AND VERTICAL LOCATION QUALITY

## Why does your Device need to be calibrated?

Most of today’s smartphones contain tiny barometers which measure atmospheric pressure. These sensors play a critical role in determining your vertical location. Most smartphone barometers are inexpensive and of relatively low quality. As a result, their measurements tend to “drift” over time if they aren’t regularly calibrated against a standard baseline of pressure data.

To a certain extent, the NextNav Pinnacle system which processes your vertical location can correct for the built-in error and “drift” in these sensors. Yet in order to maintain the most accurate, consistent measurements, the application still requires an occasional calibration of the device sensor.

When the sensor “drifts” past a certain threshold, you’ll see a reminder asking you to calibrate. It is important to calibrate as soon as possible when seeing the reminder to ensure optimum vertical location performance. You can also calibrate your device even when there’s no reminder if you feel vertical location accuracy may improve with calibration.

During normal use of Response, the software may automatically calibrate the sensor without your involvement, under the right conditions. However, there will be times when the algorithms do not adequately calibrate the pressure sensor. When this situation occurs, Response will prompt you via a pop-up message to calibrate. This calibration step is a necessary part of delivering accurate, consistent results.

## What if I don’t calibrate the sensor?

Response delivers a vertical location measurement whether your device is calibrated or not. Calibration when requested will greatly increase the accuracy of that measurement.

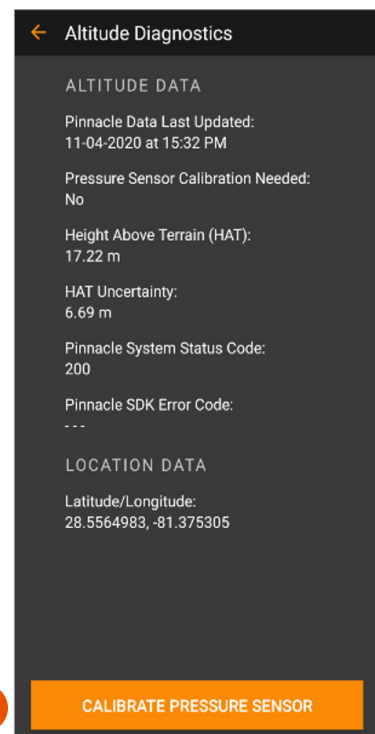
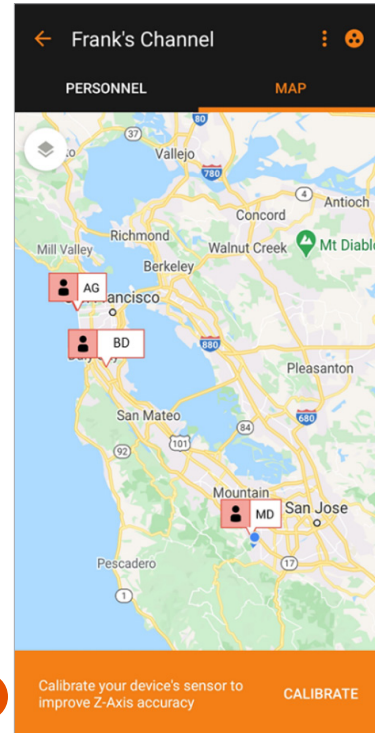
In the illustration on the right, you’ll see two devices – one that has been recently calibrated, and one that has not. In this example, the actual location of the phone is 11m HAT. The calibrated phone HAT reading is 11.5m HAT, whereas the uncalibrated phone HAT reading is 15.6m HAT, with a much larger error because it is not calibrated. Over time, this error will increase to the point that the HAT measurement becomes less meaningful for everyday use.

With Calibration, Accurate HAT	Without Calibration, Inaccurate HAT
<p>← Altitude Diagnostics</p> <p>ALTITUDE DATA</p> <p>Pinnacle Data Last Updated: 11-04-2020 at 15:32 PM</p> <p>Pressure Sensor Calibration Needed: No</p> <p>Height Above Terrain (HAT): 11.5m</p> <p>HAT Uncertainty: 6.69 m</p> <p>Pinnacle System Status Code: 200</p> <p>Pinnacle SDK Error Code: ---</p> <p>LOCATION DATA</p> <p>Latitude/Longitude: 28.5564983, -81.375305</p> <p style="text-align: center; background-color: #FF9800; color: white; padding: 5px;">CALIBRATE PRESSURE SENSOR</p>	<p>← Altitude Diagnostics</p> <p>ALTITUDE DATA</p> <p>Pinnacle Data Last Updated: 11-04-2020 at 15:32 PM</p> <p>Pressure Sensor Calibration Needed: Yes</p> <p>Height Above Terrain (HAT): <b>15.6m</b></p> <p>HAT Uncertainty: <b>12.2m</b></p> <p>Pinnacle System Status Code: 200</p> <p>Pinnacle SDK Error Code: ---</p> <p>LOCATION DATA</p> <p>Latitude/Longitude: 28.5564983, -81.375305</p> <p style="text-align: center; background-color: #FF9800; color: white; padding: 5px;">CALIBRATE PRESSURE SENSOR</p>

# HOW TO CALIBRATE THE SENSOR IN YOUR DEVICE

**1.** Response will prompt you to calibrate while you are using the app. For example, you will see a message pop up like the one shown at right. To calibrate, simply touch the “calibrate” button in the right half of this message.

**2.** If you dismiss the automated Response message and chose to calibrate at a more convenient time, you can navigate to the altitude diagnostics screen. On that screen, to calibrate your device, simply tap the “calibrate pressure sensor” button at the bottom of the screen. You will likely see an improvement in vertical accuracy immediately after you calibrate, and we recommend you do not delay calibrating when prompted if vertical location accuracy is important to you at that time.



# HOW TO CALIBRATE THE SENSOR IN YOUR DEVICE CONT.

For maximum accuracy, it's important to provide the sensor with ideal conditions to form a proper baseline. Here are the critical steps you can take to ensure proper calibration:

**1.** Start by finding the proper place to calibrate your device. You must be outside. You should stand at least ten feet or more from any building, structure, or overhang. The ideal place is a flat, open area where nothing is above you. Since wind changes the atmospheric pressure around you in unpredictable ways, the ideal place for calibration is a calm area where there is little or no wind.

**2.** The app will then prompt you to confirm your horizontal location. The app will approximate your current location based on x-y data from your device, and display that location as a blue dot. That blue dot is only for reference to help orient you to approximately where you are standing. You are then asked to place the pin exactly where you are standing by dragging the pin to your actual current location on the map. The pin cannot be placed on a building footprint, or the calibration will fail.

**3.** When the device is calibrating, it's important to remain as still as possible. This allows the sensor to create a baseline measurement with a minimum of variation.



# HOW TO CALIBRATE THE SENSOR IN YOUR DEVICE CONT.

## Calibration Messages

When the calibration process is complete, you'll see one of four messages.

### “Thank you for optimizing your device altitude”

- This message indicates **Calibration PASSED**
- Your device is calibrated and ready to use

### “Unable to successfully Calibrate” – “Please try a different place”

- This message indicates **Calibration FAILED**
- If your pin was placed on a building, or the terrain you're on is too steep, or you're outside of the vertical location service area, you'll see this message. Try moving to a flatter place, and make sure to place the pin in the open area where you're standing. You may also want to check that you are in the service area.

### “Unable to successfully Calibrate” – “Network connection not available”

- This message indicates **Calibration FAILED**
- You'll see this message if there's no data connection from your device to a cellular or data network. Try checking your LTE and data connections.

### “Unable to successfully Calibrate” – “Pressure sensor data not stable”

- This message indicates **Calibration FAILED**
- You'll see this message if the phone was moved around too much during the calibration process, or if wind resulted in too much change in the sensor readings. Try moving to a place where there's no wind and hold the device as steady as you can.

# VERTICAL LOCATION UNCERTAINTY

The term **“location uncertainty”** is used to describe statistical confidence for any vertical location measurement.

An uncertainty measurement is derived by combining the error contribution from different elements of the system used to calculate vertical location. These include the phone’s barometer calibration status, measurement quality, location of the phone, altitude station network measurement quality and other factors.

In many 2D mapping applications, the size of the “blue dot” which shows your location is a visual indicator of uncertainty. The larger the blue dot, the lower confidence that your exact location is being displayed. The uncertainty measurement for vertical location is indicated in Response by a red/yellow/green dot shown on the user card displayed in the map view.

## General Overview:

Here is a general overview of what the different color dots mean when it comes to uncertainty of a person’s vertical location being viewed on the map (remember, you are viewing the uncertainty of their vertical location, not your own):

**Green dot:** “Good” location confidence (about one floor)

**Yellow dot:** “Okay” location confidence (1-2 floors)

**Red dot:** “Poor” location confidence (2+ floors)

On the altitude diagnostics screen, the uncertainty of your own vertical location can be observed. Here, instead of being displayed as a colored dot, an absolute number is used for your own uncertainty.

Since the altitude uncertainty measurement comes from a combination of factors that are unique to each phone, it will vary from device to device. Two devices placed side-by-side may have very different uncertainty measurements associated with them. How recently the phone was calibrated affects the measurement uncertainty. In some cases, changing weather conditions or micro-climates will prompt greater uncertainty. In others, the brand of barometer used in a particular phone may involve more frequent “drift” in measurements. Hilly terrain can also prompt uncertainty, as the system finds it difficult to measure where “ground level” truly lies.



# STATUS CODES

Below are the status and error codes associated with Response that may appear on the Altitude diagnostic screen in the fields described earlier.

Normal operation is identified as shown:

```
Pinnacle System Status Code:
200

Pinnacle SDK Error Code:
---
```

**Pinnacle Service Area Coverage Map:** <https://nn-att-coverage.s3.us-east-2.amazonaws.com/att2.html>

A Status Code of **600** means you're not in a service area, and a **200** means things are operating as expected, and if you are having difficulty and getting a different code, then to please provide that info to support at [support@intrepid-networks.com](mailto:support@intrepid-networks.com) so we can better support you.

## Pinnacle System Status Codes:

These appear in the Altitude Diagnostics tab, in the fifth item from the top. If you reach out for customer support, you may get asked which of these status codes is present.

Code	Description
200	System is normal
400	Cloud server error
600	X-Y location is outside Pinnacle service area
610	Pinnacle assistance data is not available
620	Pinnacle calibration data is not available
630	Combination of 610 and 620 Codes
640	Pinnacle calibration data is stale

## Pinnacle SDK Error Code:

The Pinnacle SDK Error Codes appear in the Altitude Diagnostics tab, in the fifth item from the top, below the Pinnacle System Status code field. If you reach out for customer support, you may get asked if there is a Pinnacle SDK Error Code reading. The SDK Error Code will be a 3-digit number in the form of "8xx" or "4xx."

# MOBILE CONNECT USER GUIDE



# INTRODUCTION: CONNECT

## Channels

Channels segregate information into operational containers and only allow invited users to share and view operational data within unique channels. Channels enable organizations to manage multiple operations, departments, sectors, groups or investigations simultaneously. Channels are created by your organization administrator.

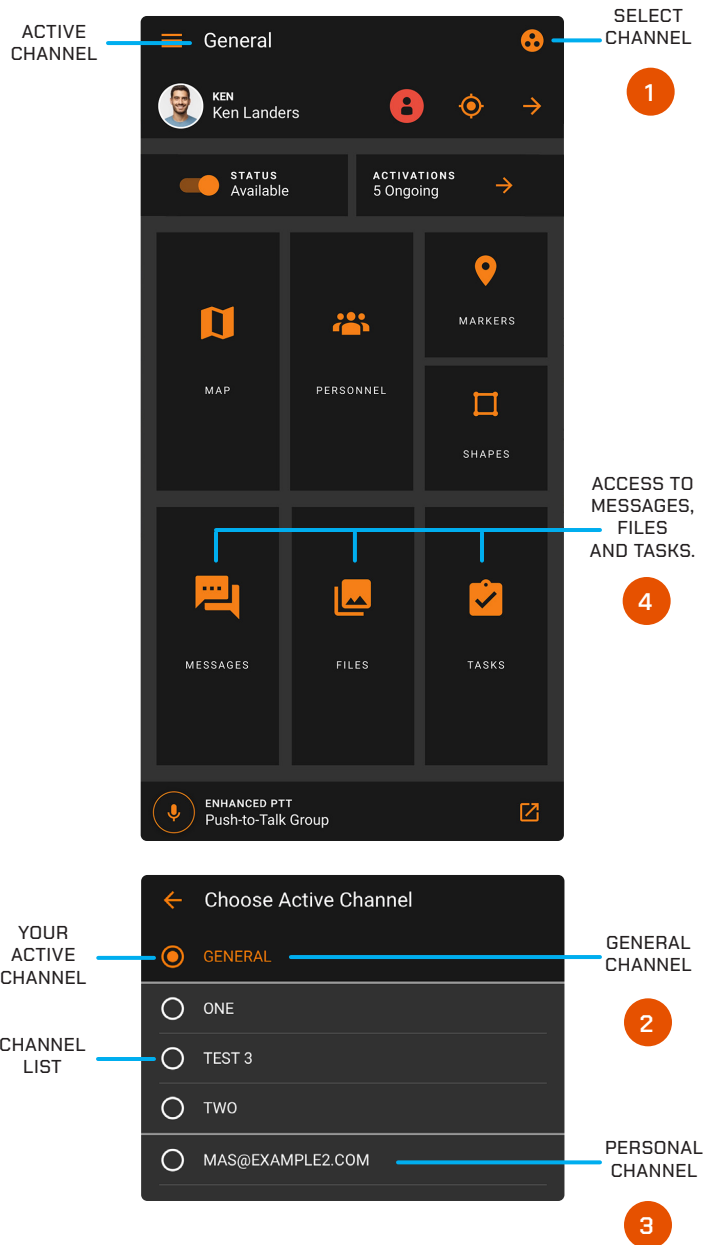
1. To change your active channel, tap the Select Channel icon at the top right of the application. Choose the desired channel from the list. When connected, Response automatically returns to the main Response dashboard.

**NOTE:** Your location will only be visible on the active channel. Information shared within that channel will be stored in that container and not accessible by other non-active channels.

2. The General channel includes everyone in your organization and is your default channel upon first time login.
3. At the bottom of the channels list view, a Personal channel is always available with your user ID as the channel name. This is your dedicated Personal channel that only contains yourself as a member. Information within this channel is not shared with other users and can be utilized as a personal notebook.

### 4. Accessing Primary Connect Features

All the primary features of Intrepid Connect (Messages, Files and Tasks) can be accessed directly from the Response dashboard by choosing either Messages, Files or Tasks.



# CONNECT: MESSAGES

## How to Use Connect Messages

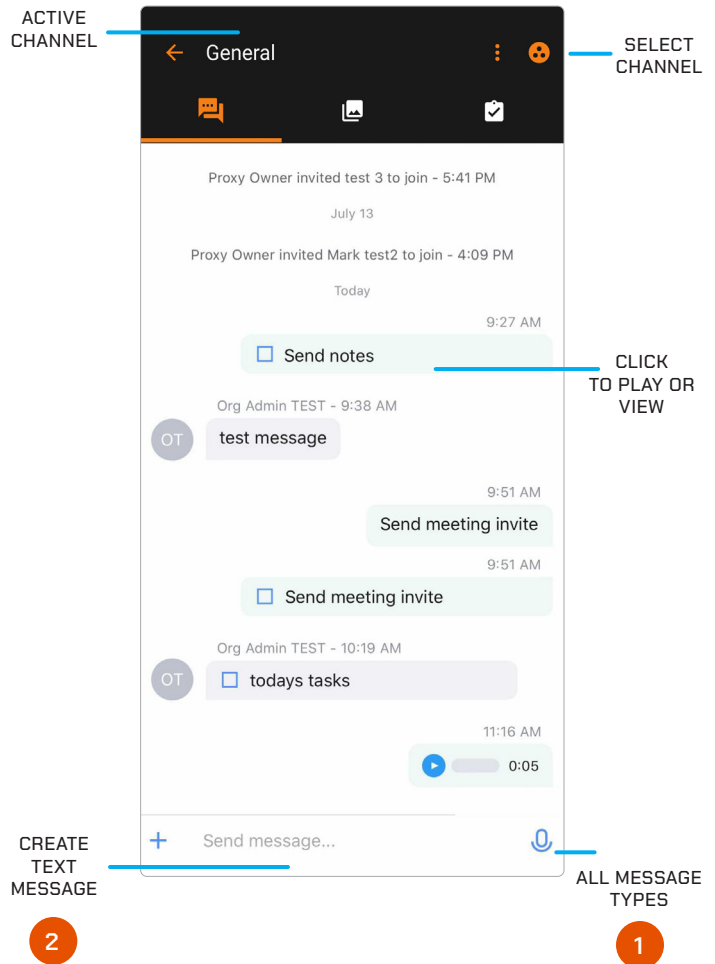
In Messages, users have many formats to share information within the active channel. These include text messages, voice messages, photos, short videos, documents, contacts, white boards and tasks. Users can also annotate drawings or embed multi-media on many of these individual message elements.

### 1. Voice Messages

To post a voice message, users must tap and hold the microphone icon displayed on the text entry box's bottom right. Once recorded, users can release the icon to share the recording in the active channel or cancel it by swiping the icon to the left. Once shared, the voice message will display a 'Play' icon along with the message's time duration; to playback, choose the play icon on the voice message.

### 2. Text Messages

To post a text message, tap the message bar that displays "Send message..." at the bottom of the screen to engage the text box. Type the desired text in the box and select return to share the text message in the active channel.

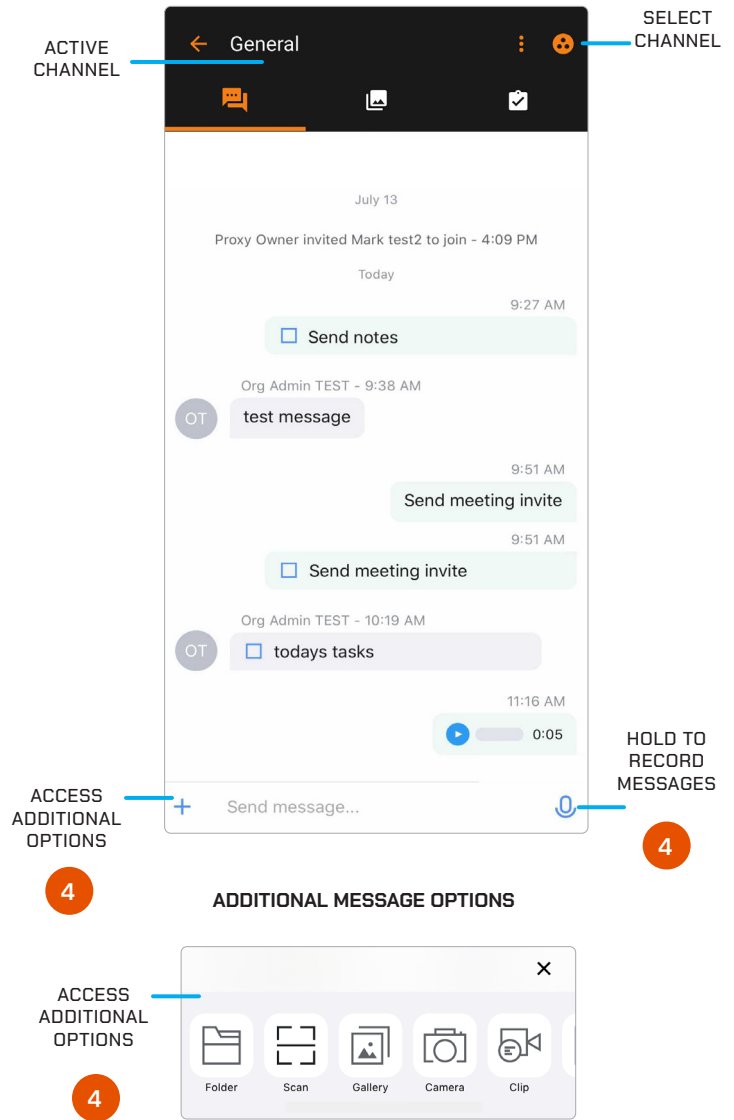


# CONNECT: MESSAGES CONT.

## 4. Additional Message Options Navigation Menu

To share other kinds of multi-media messages and perform more complex message operations, choose the plus “+” icon in the bottom left corner. These additional options include:

- Gallery** – Opens a view of all photos and videos available in the active channel.
- Camera** – Activates your device camera for direct photo or video capture.
- Local Storage** – Accesses your personal device storage for multi-media files that can be shared to the active channel.
- Clip** – Shortcut to create instant videos.
- Note** – Create notes or comments that are not text messages.
- Annotation** – A simple editing tool that allows users to annotate photos or files with additional information.
- Whiteboard** – An electronic version of a traditional physical whiteboard. Add a multi-media file for white board annotation such as a floor plan or external map.
- To-Do** – Creates a task that can be shared within the active channel.
- Contacts** – Shares contacts directly from your device including Name, Number and Address if this information is available.
- Binders** – Share information from the active channels to other channels.



# CONNECT: FILES

The Files capability accesses only the multi-media files available in the active channel for easier viewing, organization and management of this data.

## 1. How to use Connect Files

Access the '+ Add' feature at the bottom-left of the Files screen to add multi-media files. The same multi-media options available in Messages (see page 18) are also available in Files. Additionally select any multi-media file for further annotation. Once a file has been selected, available tools are located at the bottom section of the screen that allow you to add comments, drawings, text or record a short video clip.

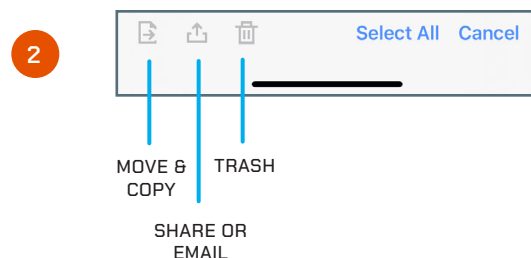
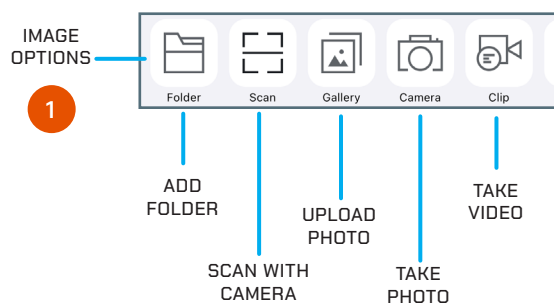
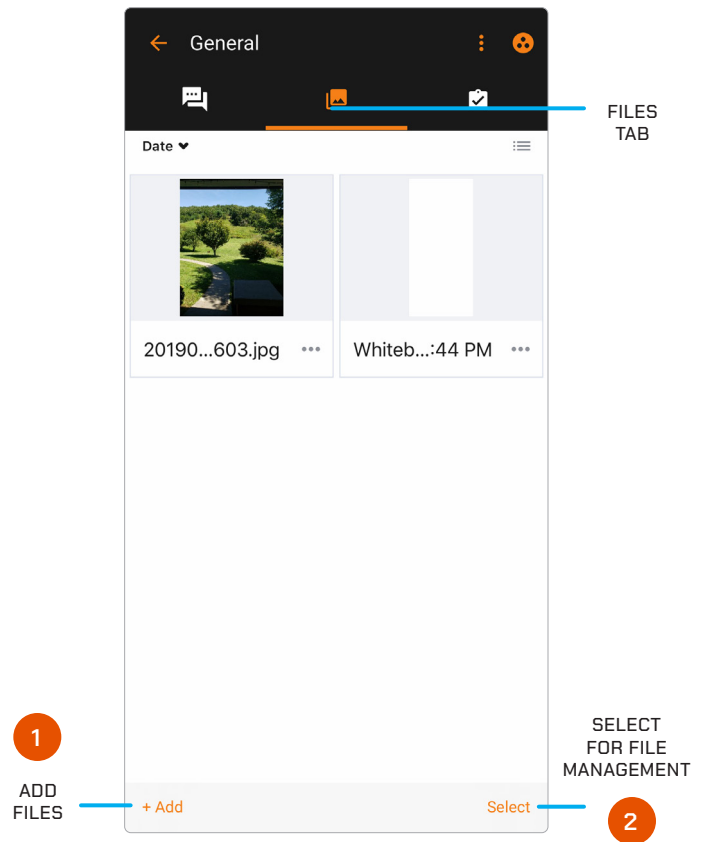
## 2. File Management

Use this feature to manage all your multi-media files. The three options are further described below:

**Move & Copy** – Allows file transfer between different channels or folders.

**Share** – Creates a public link that can be readily shared and accessed.

**Trash** – Deletes the currently selected file(s).



# CONNECT: TASKS

Tasks is a feature in Connect that provides a quick way to create a unique team task list for each channel in Response.

## 1. How to use Tasks

To add new tasks, select the text box and enter the title or objective, then tap the Send icon to the right of the text box. To access organizational and sort functions, select the Organize Task List icon in the left of the text box. Get detailed information about any task by selecting a specific task from the list.

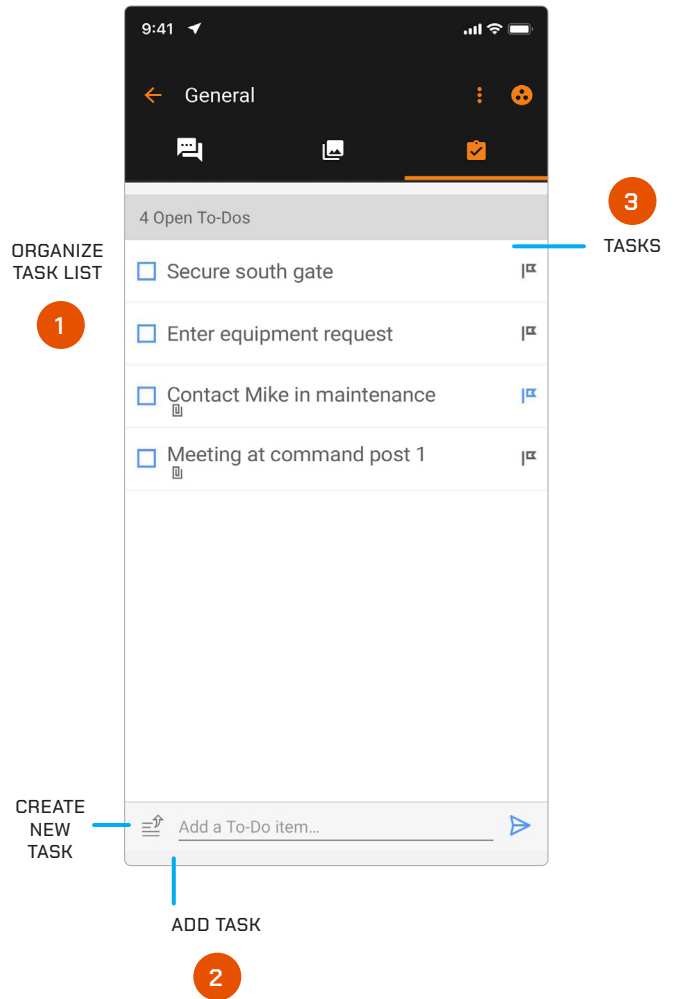
## 2. Managing Task and Task Options

Response operators have multiple management options once a Task is created in Connect. A user has the capability to modify and edit tasks with the following options:

- Title
- Description
- Mark as Important
- Date Assignment
- User Assignment
- Reminder Set Up

## 3. Task Communication

By selecting a task, additional details can be added by any user in the activate channel with the 'Comments' function. Users can add a comment by selecting the text box at the bottom of the screen to share a voice or text comment related to the selected task. Additionally, users can attach additional multimedia files by choosing the attachment icon in the same area.



# CONNECT: TASKS CONT.

## 4. Additional Sharing Options

Clicking on a Task enables edit mode which displays the attachment icon in the bottom-left of the screen. Using this option, the user will be presented with additional options for adding attachments to the tasks.

**Gallery** – Opens a view of all photos and videos available in the active channel.

**Camera** – Activate your device camera for direct photo or video capture.

**Local Storage** – Accesses your personal device storage for multi-media files that can be shared to the active channel.

**Clip** – Shortcut to create instant videos.

**Note** – Create notes or comments that are not text messages.

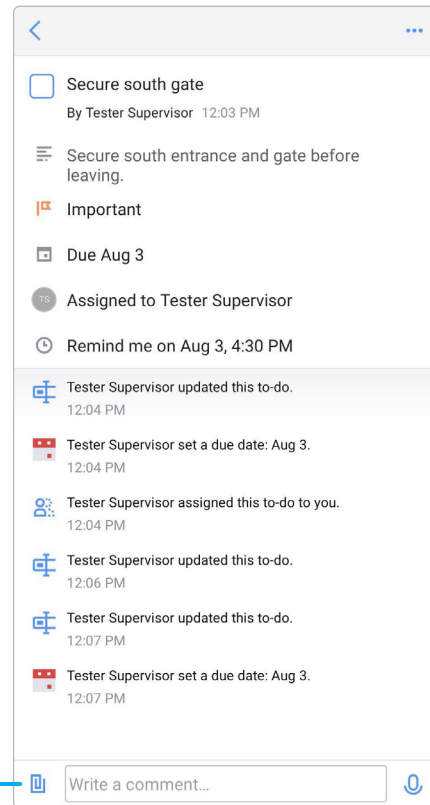
**Whiteboard** – An electronic version of a traditional physical whiteboard. Add a multi-media file for white board annotation such as a floor plan or external map.

## 5. Task List Sharing

**To-Do** – Creates a task that can be shared within the active channel.

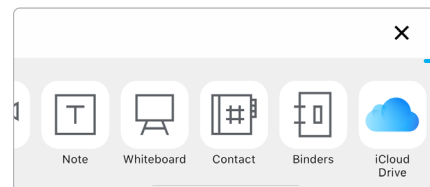
**Contacts** – Shares contacts directly from the device including Name, Number and Address if this information is available.

**Binders** – Share information from the active channels to other channels.



ATTACHMENT ICON

### ADDITIONAL FILE UPLOAD OPTIONS



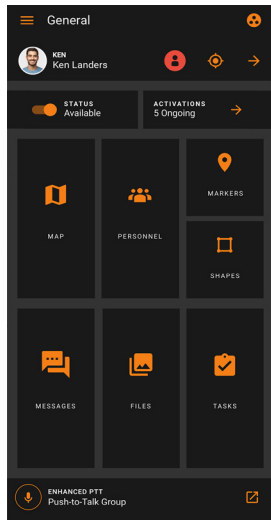
ADD MULTI-MEDIA OR INFORMATION



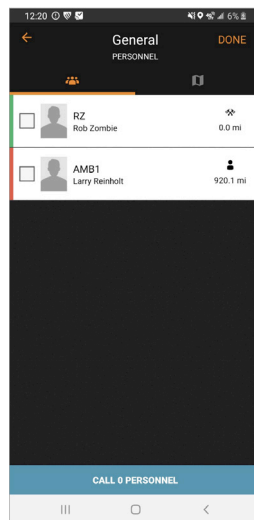
# MOBILE PUSH-TO-TALK USER GUIDE



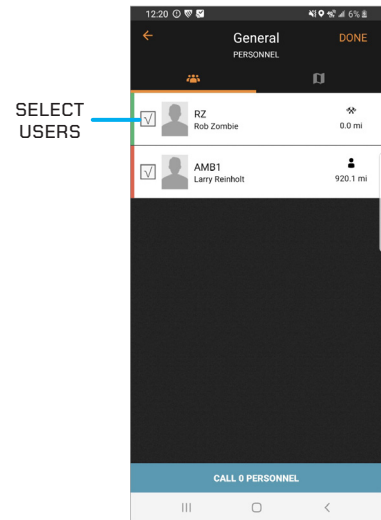
# ENHANCED PUSH-TO-TALK INTEGRATION



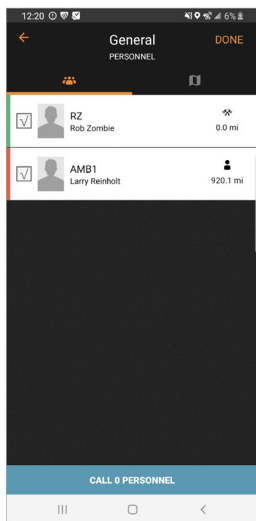
1. Click Push-to-Talk icon on the Response Dashboard to open the E-PTT Push-To-Talk application.



2. From the personnel view, select the checked box.

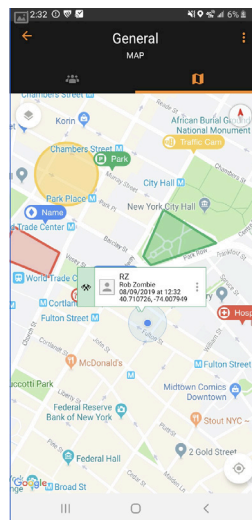


3. Select the user(s) that you need to call.

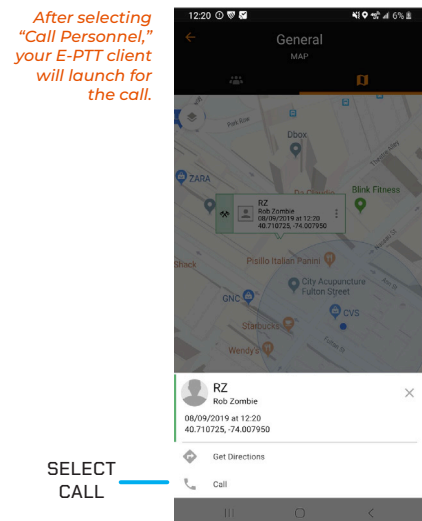


*After selecting "Call Personnel," your E-PTT client will launch for the call.*

4. Press "Call Personnel".



5. From the Map view, select an individual you want to initiate a PTT call with. An information box will expand.



6. Touch the users' expanded information box, and a menu will open at the bottom of the screen. Select "Call" to initiate a PTT call to that individual.

# PUSH-TO-TALK TROUBLE SHOOTING

If the PTT button is absent on the Response dashboard, check that the user has an active PTT subscription in Intrepid Administration.

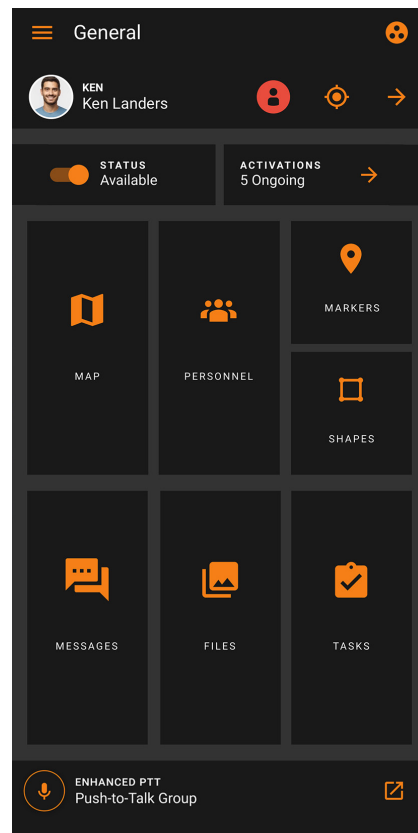
If the PTT button is present but disabled (gray), check that the PTT client is installed on the same device as Response.

If a user cannot be called from Response, ensure that the correct PTT phone number is populated in the user profile within the Response Admin web application by your administrator(s).

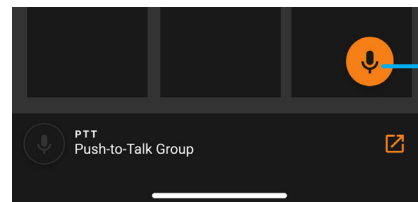
If you do not see an option to be called from within Response, ensure that your personal user profile has a phone number populated within the Response Admin web application by your Response administrator(s).

For non-Response PTT application troubleshooting please refer to the corresponding non-Intrepid user guide.

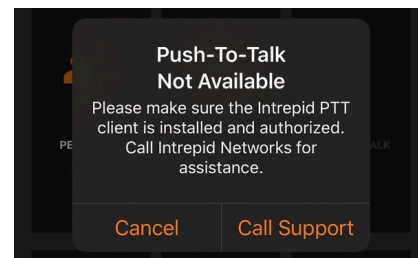
**NOTE:** Moveable PTT Button usable to navigate the app without the PTT call screen blocking user's view.



PUSH-TO-TALK



FLOATING PUSH-TO-TALK BUTTON



Sample Error Screen