



INSTRUMENTS

Powered by Guardhat

Guardhat Mobile App (iOS)

Operator's Manual

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1 Introduction

Welcome! The Guardhat iOS mobile app provides communication and data insights using the iPhones your teams already rely on every day. The iOS app works in conjunction with Guardhat wearable devices, such as the Guardhat Communicator hardhat and Scout wearable device, third-party Guardhat-compatible devices, to offer unmatched worksite safety and communications. When paired with select 3rd party devices, such as gas detectors, dosimeters and more, acting as the gateway to bring additional critical information on workplace environments and worker conditions into the Guardhat Platform for a single view into the real-time operational and safety challenges from the frontlines.

The iOS app provides real-time geolocation information, audiovisual (AV) telecommunications, media capture, and safety features, including lone worker functionality, SOS, fall detection, geofencing proximity detection, and evacuation alerts.

We've built the iOS mobile app to be monitored by the Safety Control Center (SCC), a web-based application you and your team members can access from the Google Chrome™ web browser. The SCC and the iOS app enable you to maintain an open, two-way AV communication channel for critical and noncritical events.

Supervisors, workers, and the SCC admin can contact one another with ease, via cellular or Wi-Fi. or via push-to-talk (PTT), for frontline workers. Just ensure these features are included with you solution, then connect your iPhone to your network to begin using the Guardhat app.

The iOS mobile app is best suited for lone and frontline workers.

The iOS app provides the key features your organization needs:

- 1 A familiar mobile app interface with intuitive design
- 2 Tracking the real-time location of the user via enhanced GPS and/or BLE beacons
- 3 Lone worker functionality, including automated safety checks and alerts transmitted to the SCC
- 4 The ability to pair third-party safety devices, including:
 - a. Headsets
 - b. Gas detection monitors
 - c. New integrations are underway. Contact RKI to request a new integration.
- 5 End-user configurations for fall detection settings
- 6 Feedback and information sharing when in proximity to other Guardhat devices
- 7 Audible alerts for zone (geofence) violations or evacuations, which can be initiated by an SCC operator
- 8 Readings from connected gas detectors or other sensors
- 9 Team A/V calling and PTT
- 10 Offline functionality, ensuring proximity alerts, zone breaches, and more operate when iPhones are not connected

1.1 Common Uses and Benefits

With the Guardhat iOS mobile app, your supervisors are now able to:

- Truly understand the environment and challenges on the job – and adjust plans on the fly – with real-time data and communication.
 - Ensure the safety of lone workers with an automated check-in prompt that triggers SCC alerts if missed.
 - Direct workers to muster points, necessary equipment, or team members. Or help guide emergency response teams to a worker in need.
 - Establish “last-mile connectivity” with all workers and reduce wasted time via extensive telephony and AV communications, plus photo and video recording.
- Integrate safety procedures to reduce the burden on workers and supervisors.

Beyond the basics of location and two-way communication, the iOS mobile app will enforce protocols automatically, vastly reducing manual work and the chance for human error.

- Show immediately when a worker has fallen or needs emergency assistance – and contact nearby workers, supervisors to help or investigate or quickly send emergency response teams to their location.
- Warn employees when they approach a dangerous or unauthorized area via geofences, location data and connected environmental sensors.

With the iOS mobile app and the Guardhat system, safety improvement is immediate. Your team will see benefits right out of the box and over time as high-quality data transforms how work is done.

1.2 The iOS App and the Guardhat System

The iOS mobile app is one component of the Guardhat system, a connected worker platform designed for demanding industrial environments.

Our system is built for improving safety, productivity, and situational awareness of – and for – workers and supervisors in the field. Guardhat wearable devices, infrastructure hardware, software systems, and third-party integrations communicate as shown below.

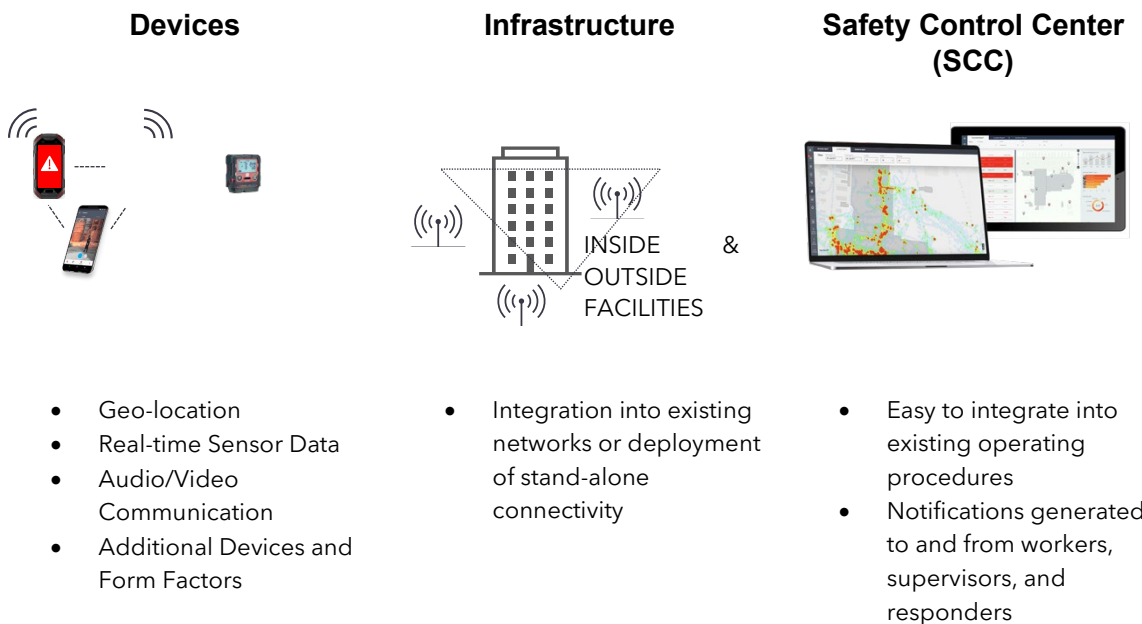


Figure 1: Solutions from Guardhat

1.3 Proper Use in the Field

To ensure supervisors and workers achieve the most use from the iOS app while on the job, encourage them to place the iPhone in a vest front, upper pocket, secured to the outside of a vest or armband. Keep the device near your head to best hear incoming alerts, messages, and requests for communication. **Follow Apple's guidelines for recommended iPhone use.**

1.4 Battery Life Expectancy Using the iOS Mobile App

Heavy audio-visual use within the iOS mobile app can tax your iPhone's battery life. We suggest iOS mobile app users charge their iPhones during breaks and while working in offices or similar environments.

1.5 App System Updates

We continuously enhance the iOS mobile app to provide more features. We recommend you select automatic updates when downloading the app, so system updates happen automatically and do not require any action from your supervisors. If you select manual updates, you will be prompted when app upgrades are available but must choose to download them.

1.6 Privacy

The iOS mobile app relies on up-to-the-second location information to keep people safe and accessible in case of an emergency. While this location data and communication availability are essential in the work site, we advocate for privacy when this information does not directly impact the job. The iOS app and all Guardhat wearable devices include key features to respect workers' privacy:

Locations are never shared in Blackout zones. Workers will not receive text-to-speech, calls, or any form of communication in these zones. In addition, they cannot be tracked in Blackout zones. We encourage you to create Blackout zones for restrooms, shower facilities, break rooms, or other areas where privacy is critical. Please see the SCC manual for direction on creating Blackout zones.

No one except the end-user can turn on the iPhone's camera or microphone. There is no SCC administrator override to access an app user's camera or microphone. Incoming video and audio calls must be accepted by the app user before information is shared with the SCC.

Live communications are not recorded in the Guardhat system. Device to device, device to SCC, SCC to device A/V communications, and PTT communications are not saved in our system. The system does record that the communications took place, as a non-critical alert, but the content of the conversations or videos are not saved by Guardhat.

Data storage and right-to-be-forgotten. The Guardhat Platform retains data for three months. Guardhat can remove worker specific information upon request from designated personnel at client companies. Please reach out to your Guardhat team with requests to remove specific information from your Platform instance.

2 iOS App Features and Options

Each work site, project, and organization are different. The iOS app can adapt to the needs of your workers and management via options you can configure within the SCC, ranging from connectivity and worker safety through notification and alert preferences. Settings are not configurable within the Guardhat iOS app but are visible via the Settings button in the hamburger menu for troubleshooting.

The technical SCC administrator within your organization or RKI can help to adjust settings as required. We're here to review your use case, share what options are available, and adjust settings to meet your needs.

Unless stated otherwise, the configurable settings mentioned in this section will affect all your iOS mobile app users.

2.1 Lone Worker Settings

Lone Worker adds an automated, recurring safety check-in prompt to help ensure workers in isolated areas are safe. By default, Lone Worker is **off**. Within the SCC, you can enable Lone Worker and set the time range for check-in to 5, 10, 15, 20, 25, or 30 minutes. Check the SCC Operator's Manual for details.

2.2 Third-Party Device Integrations

Guardhat integrates with many third-party devices. Contact RKI to discuss which devices you'd like to integrate. [See "Pairing Bluetooth Devices" for more information.](#)

2.3 Notifications and Alerts

2.3.1 Nearby Critical Events for Other Workers

By default, the iOS app will display alerts for critical events of nearby workers. You can disable this setting. The proximity defined as "nearby" is configurable with the SCC under the System Configuration tab. The app will leverage GPS for location tracking, which has a maximum threshold of 200m for determining "nearby" workers.

2.3.2 SOS Settings

By default, SOS is enabled. Contact RKI to disable this setting. If you have standard operating procedures (SOPs) in place for SOS response, we highly recommend leaving the SOS feature on.

2.3.3 Fall Detection Settings and Notifications

By default, the iOS mobile app will detect falls and report them to the SCC and nearby workers. You can choose between 4, 5, 6 and 8 feet for the minimum fall detection distance. If desired, you can disable fall detection.

2.4 Communications and Connectivity

2.4.1 Audio and Visual Call Enablement

By default, non-PTT audio and visual calls are enabled, if you order solutions with this capability. Without this functionality, the SCC cannot place calls to iOS mobile app users. This setting is adjustable from the SCC.

2.4.2 VOIP Calling

Voice Over Internet Protocol (VOIP) allows you to make voice calls in the iOS app over your Wi-Fi or other network connection instead of relying on a cellular radio network. By default, VOIP calling is enabled for all iOS app users. Disabling this feature within the SCC will affect all iOS app users. While enabled by default, VOIP calling will not work for individual users unless settings are configured for that user. This will be done by RKI during SCC setup or upgrades.

2.4.3 Video Calling

Video calls can take place between iOS app users, the SCC, and other Guardhat devices and apps that support video calls. This feature is enabled by default and operates at the following settings:

- Max video call bitrate: 300 kbps
- Video call framerate: 15 fps
- Video frame width: 480 px
- Video frame height: 640 px

Settings can be adjusted by your Guardhat Customer Success Manager across all users.

2.4.4 Audio Effects

The iOS app includes several audio effects designed to improve voice clarity in loud working conditions. These settings are all enabled by default and can be adjusted by reaching out to RKI.

- Acoustic Echo Cancellation (AEC)
- Automatic Gain Control (AGC)
- Audio Noise Suppression (ANS)
- Comfort Noise Generator (CNG)
- Voice Activity Detection (VAD)

2.4.5 NACK (Data Acknowledgement) Video Feature

NACK (negative acknowledgement) allows the iOS app to reject a video call due to an error. This informs the sender that the receiver – the iOS app – is unable to receive the video currently. By default, this feature is enabled. It can be disabled by RKI.

2.4.6 TTL Settings

TTL (time to live) limits how long the iOS app will attempt to share data with the SCC or nearby Guardhat devices and apps. This helps prevent battery drains when an iOS app user is in a remote area with poor connectivity. A TTL of 10 minutes is enabled by default. The TTL setting can be disabled.

2.4.7 Push-to-talk (PTT) Settings

PTT allows you to use the iOS mobile app like a walkie-talkie or CB radio. Instead of relying on open radio frequencies, the app uses channels on your network to keep PTT discussions private. If workers across multiple geographies have access to the network, they can take advantage of PTT regardless of distance.

By default, PTT functionality is enabled but requires configuration once a user has logged on. Once they have, RKI can configure this setting after setup, upgrade, or if requested. The user will then need to log-out and log-in again, to access PTT channels.

2.5 Media

2.5.1 Audio and Visual Settings

By default, a worker's ability to take photos and record video within the Guardhat iOS mobile app is enabled. This differs from the native iOS camera and video functionality. Users need to grant iOS permissions for video and microphone access.

However, the system cannot under any circumstances activate the iPhone camera or microphone from the SCC without app user consent. The iOS mobile app user controls that access.

2.5.2 Video Recording Settings

By default, the maximum video recording time is 10 minutes to reduce battery drainage. You can change this setting to any time frame via the SCC. Extensive use of video recordings may reduce an iPhone's battery life.

2.5.3 Video Resolution Settings

Video can be recorded in QVGA or 480P resolutions. QVGA is the default setting. If recording times of 15 minutes or more are enabled, select QVGA.

2.6 Gas Detectors

By default, the iOS app is enabled to pair and work with the following gas detector models:

- RKI GX-3R Pro 4- and 5-gas detectors

You can disable gas detector monitoring if desired. [See "Pairing Bluetooth Devices" for more information.](#)

2.7 Server Settings

From the iOS mobile app, users can view server settings and sensor information. **iOS app users cannot modify server settings.** This view is to enable remote troubleshooting. Contact your organization's SCC admin or RKI to make changes if needed.

From the Servers section, iOS app users can view the:

- Host - the Instance URL
- SFTP server
- SFTP port
- Phone server
- My phone serial number
- My user id
- My GUID

3 Getting Started: App Settings

3.1 Downloading the iOS Mobile App

Now that user settings are established, you can begin using the iOS mobile app. But first, if your iPhone does not have the mobile app installed, adding the app to your phone is simple. Follow these steps:

- 1 Open the **App Store** on your iPhone.
- 2 Search for “Guardhat” and tap to install the mobile app.
- 3 Follow the on-screen instructions to complete the installation.

3.2 Accepting App Permission Prompts

When you first begin using the iOS mobile app, your iPhone will ask permission to access and enable a variety of functions. This table illustrates which options to select when you receive these prompts.

APP MESSAGE	ACTION TO TAKE
“Guardhat” would like to find and connect to devices on your local network. Guardhat app needs access to your local networks to connect with safety devices around you.	Tap on the “OK” button. The iOS mobile app requires permission to collect data from authorized safety devices to detect hazardous conditions.
Allow “Guardhat” to use your location? Guard app requires permission to location information for emergency response to safety events and incidents.	Tap on the “Allow Always” button. Location information is critical for iOS mobile app to help remote support respond in case of an emergency even when you are not actively using the app. Note: If “Allow Always” is not an available option, select “Allow While Using the App,” then change to “Always” in Settings > Guardhat > Location.
“Guardhat” Would Like to Use Bluetooth. Guardhat app requires Bluetooth permission to nearby devices.	Tap on the “OK” button. Without Bluetooth access, the IOS mobile app cannot work with hands-free audio devices or collect data from authorized safety devices to detect hazardous conditions.
“Guardhat” Would Like to Send You Notifications. Notifications may include alerts, sounds, and icon badges. These can be configured in Settings.	Tap on the “Allow” button. The app cannot send alerts to check in while using Lone Worker mode without this permission. This setting also enables app users to receive evacuation or nearby worker critical event alerts when they don’t have the app open.
“Guardhat” Would Like to Access the Microphone. Guardhat requires permission for VOIP and PTT safety and convenient features.	Tap on the “OK” button. Without microphone access, the iOS mobile app user cannot make or take audio calls, use PTT functionality, or record audio while filming video.

3.3 Logging in to the iOS Mobile App

Once the mobile app is installed, you're ready to log in. The iOS app will remain logged in until you log out.

Follow these steps to log in:

- 1 Open **the iOS mobile app**.
- 2 Ensure your organization's SCC URL is entered in the "Host" text field.
- 3 **Enter your username** in the "Username" text field.
- 4 **Enter your password** in the "Password" text field.
- 5 Tap on the **"Login" button**.

You may be prompted to allow Face ID for the iOS mobile app access. This convenience will allow you to avoid typing in your login credentials if your iPhone supports facial recognition. Not all iPhones support Face ID.

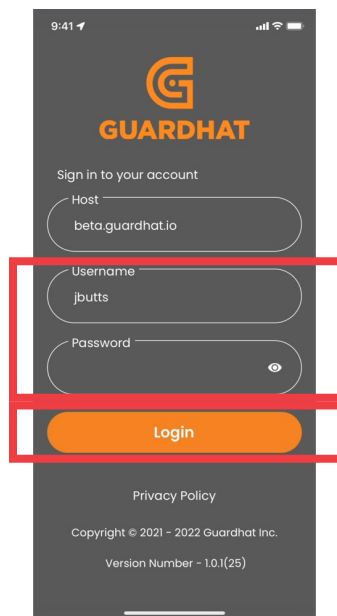


Figure 2: Logging in to the iOS Mobile App

3.4 Logging out of the iOS Mobile App

You may want to log out of the iOS mobile app to ensure unauthorized personnel cannot access your account or at the end of your shift. To log out, follow these steps:

- 1 Open the **iOS mobile app**.
- 2 Tap on the **hamburger menu (three horizontal lines)**.
- 3 Tap on the **"Logout" menu**.
- 4 To complete the log out process, tap on the **"Logout" button**.

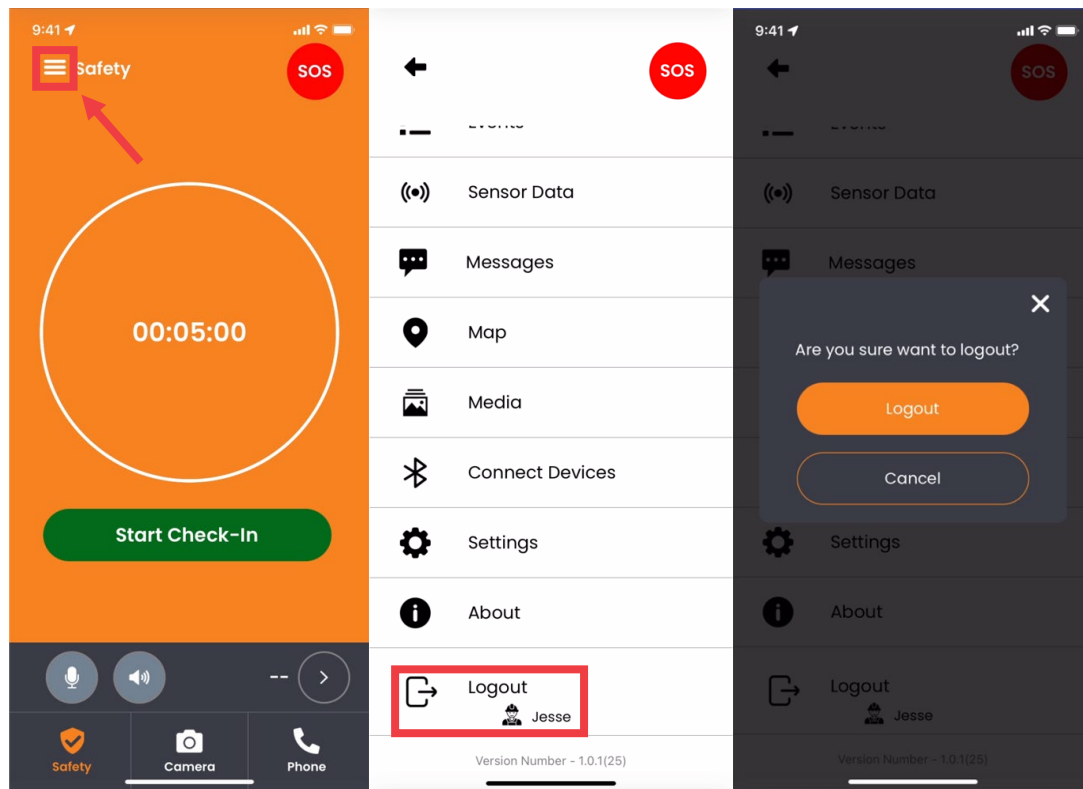


Figure 3: Logging out of the iOS Mobile App

3.5 Pairing Bluetooth Devices (Headsets, Gas Monitors, etc.)

iOS mobile app users can pair a variety of third-party devices within the app. These include headsets, gas detection monitors, and a growing variety of sensors. Please confirm the Bluetooth-enabled device you're considering offers the functionality you need. If you have any questions regarding potential devices, contact RKL.

To pair a Bluetooth device, follow these steps:

- 1 Review the device manual and follow any steps recommended by the manufacturer before pairing with iOS mobile app.
- 2 Open the iOS mobile app and log in.
- 3 Tap on the **hamburger menu (three horizontal lines)**.
- 4 Tap on the **"Connect Devices" menu**.

NOTE: You may receive a prompt that reads *"Guardhat" Would Like to Access the Camera*. Tap on the **"OK" button**.

5 Power on your Bluetooth device and follow the manufacturer's instructions for pairing.

- 6 Once the device is powered on and ready, you will either:
 - a. Tap on the **"Scan QR Code to select..." button**, or
 - b. Tap on the appropriate device in the **"Available Devices" section**.
- 7 Follow the on-screen prompts to complete setup.

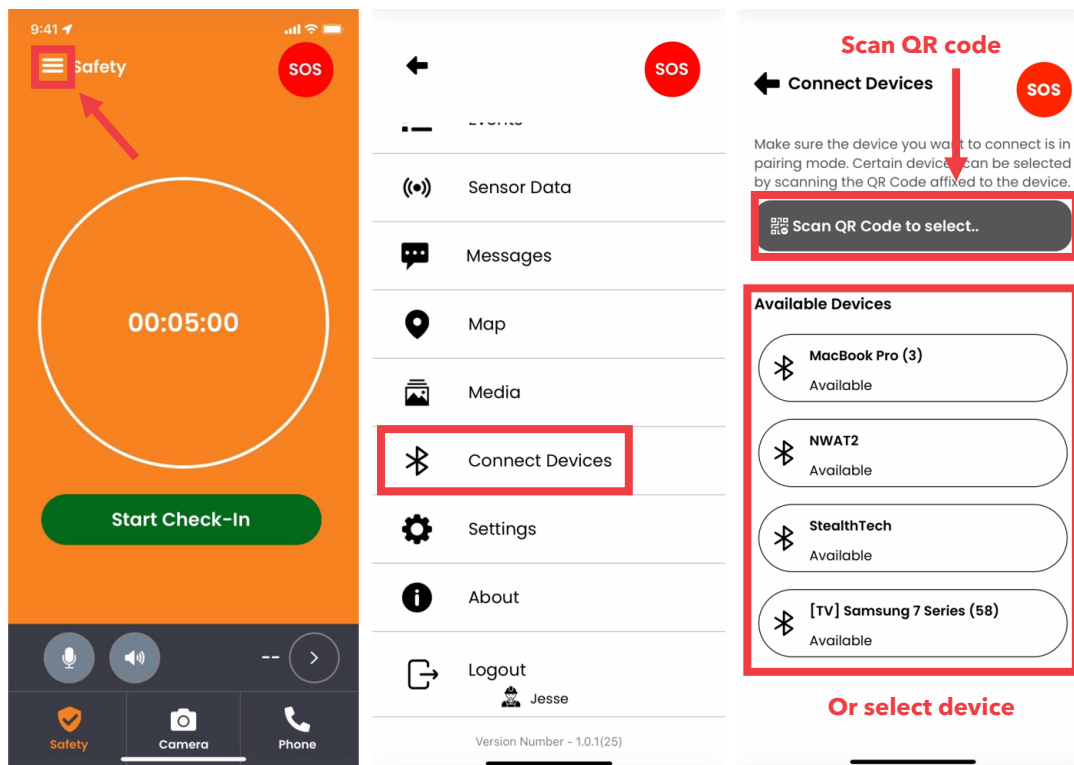


Figure 4: Pairing a Bluetooth Device

3.6 Checking Your Version of iOS Mobile App

If you ever need to verify what version of the iOS mobile app you're using, follow these steps.

- 1 Open the iOS mobile app and log in.
- 2 Tap on the **hamburger menu (three horizontal lines)**.
- 3 Tap on the **"About" menu**.
- 4 Once you have gathered the information you need, tap on the **"Close" button**.

NOTE: If you tap on the "Support" button, the iOS mobile app will open an email to the Guardhat support team. You can provide details about your question or issue here.

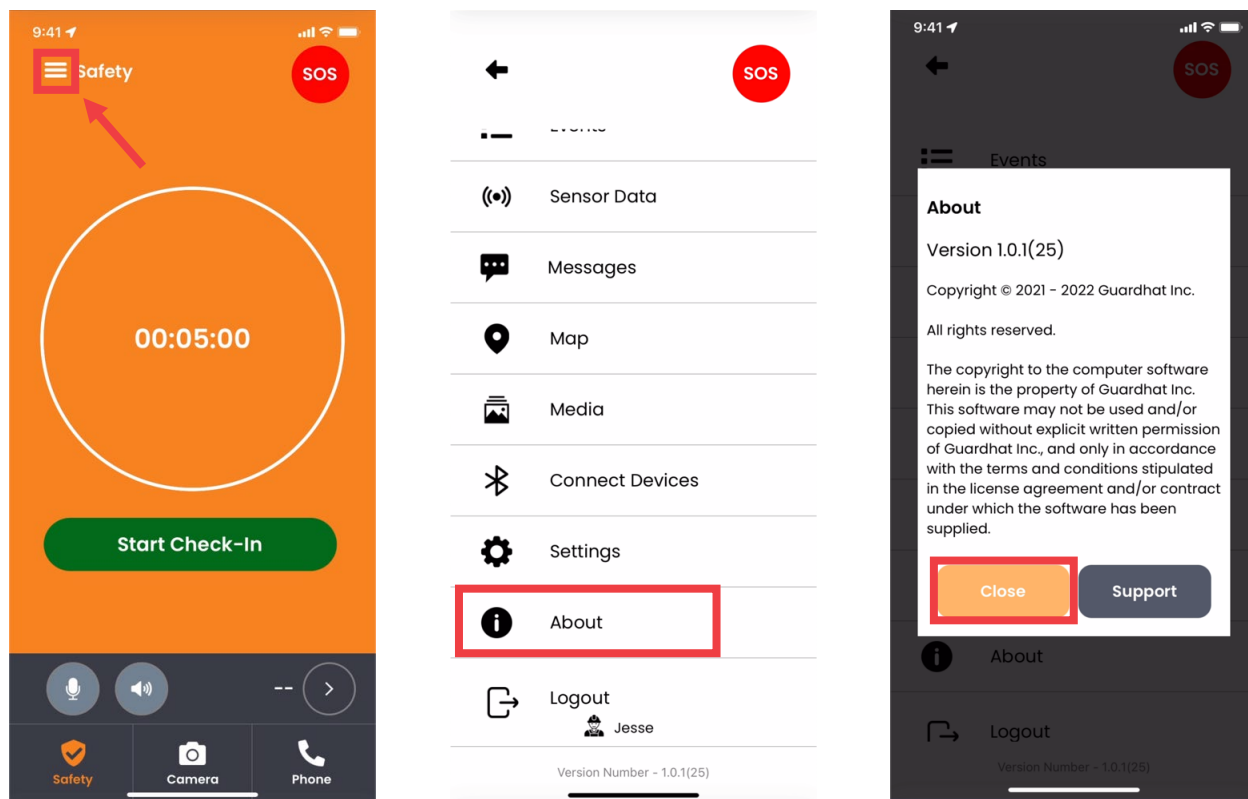


Figure 5: Checking Your Version of the iOS Mobile App

4 Using the iOS Mobile App

4.1 The Screens: Lone Worker (Safety), SOS, Camera, Phone, PTT, Events, Maps, Messages, and More

You can access iOS mobile app screens from the following locations:

- Lone Worker (the default screen - if this capability is enabled), Camera, and Phone are available from the bottom menu.
- The Event screen is the default screen if you do not have Lone Worker enabled.
- SOS is available in the top right of any screen.
- PTT is available from the PTT bar located above the bottom menu.
- Events, Map, and Message are available from the hamburger menu (three horizontal lines) located in the top left of any screen.

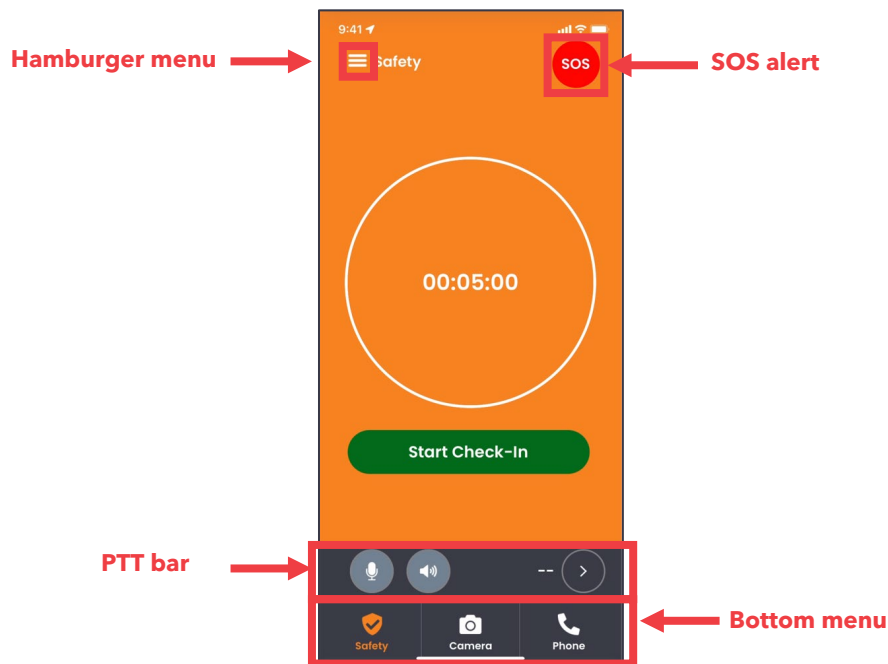


Figure 6: Navigating iOS Mobile App Screens

4.1.1 The Lone Worker/Safety Screen

If you have the Lone Worker solution enabled, the Lone Worker (also labeled “Safety”) screen is the default display once you log in to the iOS mobile app. You will see a bright orange background, timer set to your organization’s preferences (set to a default of five minutes), and a green “Start Check-In” button. If you do not have this feature enabled, you will not have a Safety button in the lower left, and the Events screen will be your home screen.

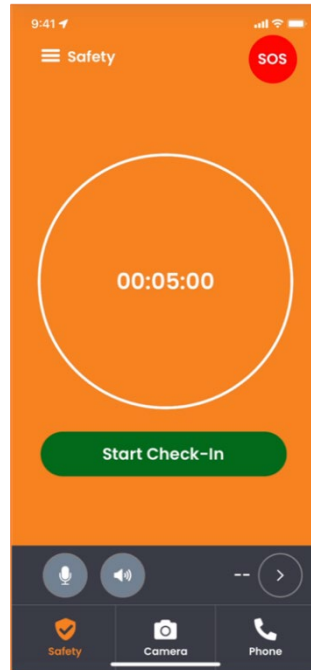


Figure 7: The Lone Worker/Safety Screen

4.1.2 The SOS Screen

The SOS screen allows you to initiate an alert indicating you're in a dangerous situation and help is needed. The alert is shared immediately with the SCC and nearby workers. You can access SOS from the top right of any iOS mobile app screen.

When you press the small, red "SOS" icon, a 10-second countdown will begin immediately. Only the SCC administrator can resolve an active SOS alert. You can continue using the iOS mobile app while the alert is active.



Figure 8: The SOS Screen, Which Begins Countdown Immediately

4.1.3 The Camera Screen

From the Camera screen, you can take photos and record videos.

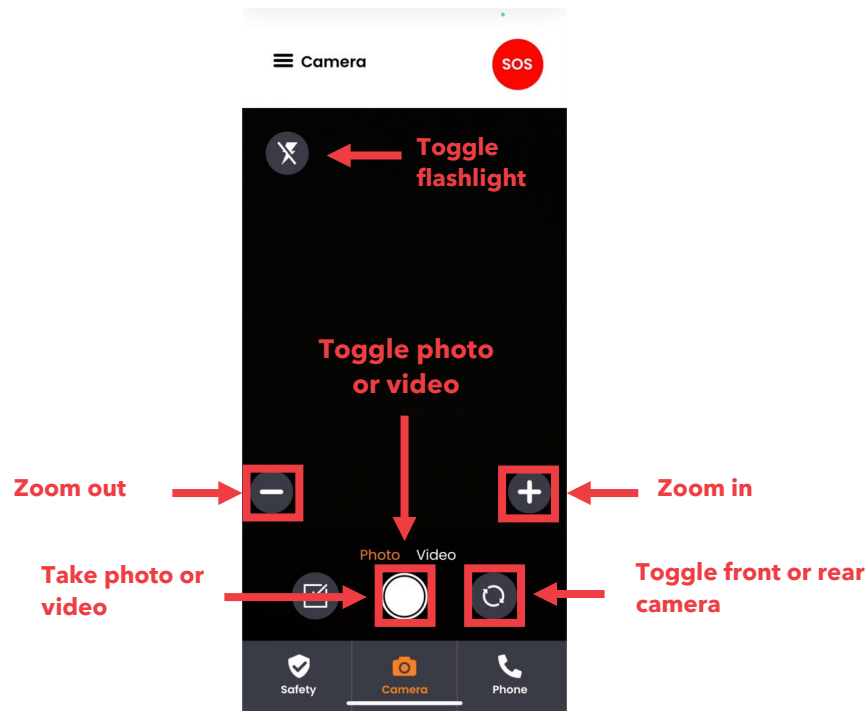


Figure 9: The Camera Screen

All media captured and recorded is automatically transmitted to the SCC and stored locally in the Media section, which is available from the hamburger menu (three horizontal lines). Within the Media section, tap on a photo or video in the History tab to view a larger version or play the recording. You can also tap on the Upload tab to select photos and videos stored in your iPhone's native Photos app and upload them to the SCC.

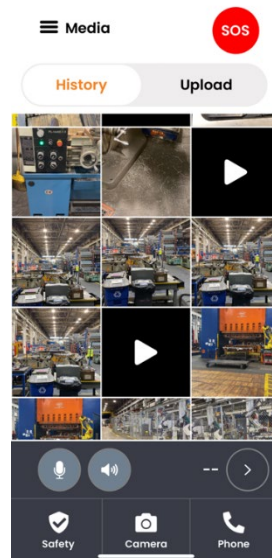


Figure 10: The Media Screen

The size of the file and your network connection determine how quickly an SCC administrator can access your photo or video. For example, a single photo will arrive to the SCC more quickly than a 10-minute video. Local photo and video storage may be limited your iPhone's storage capacity.

Only the iOS mobile app user can capture photos and record videos using the app. SCC administrators cannot activate an iPhone's microphone or camera.

4.1.4 The Phone Screen

The Phone screen contains contacts added by SCC administrators. If your organization chooses to add contacts, you can call other Guardhat users directly. This includes Guardhat users on different devices, such as Scout tags, Communicator hats or integrated 3rd-party smart glasses and others.

You cannot place or receive calls to standard landline or mobile phones within the iOS mobile app. And you cannot add contacts outside your Guardhat network. PTT is available in the bottom of most screens from the PTT bar.

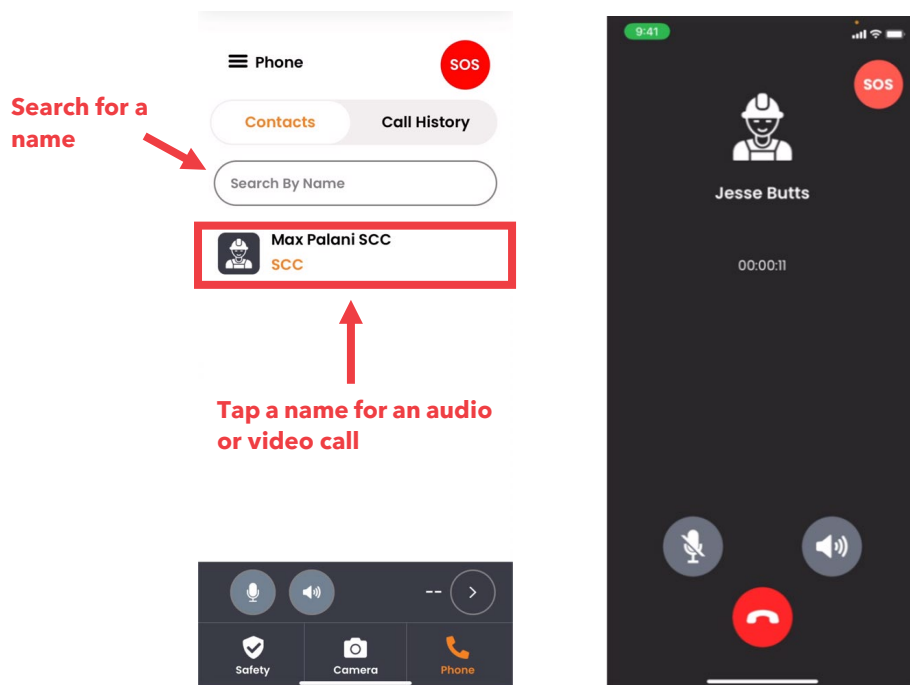


Figure 11: The Phone Screen

4.1.5 The PTT Screen

PTT allows you to use the iOS mobile app like a walkie-talkie or CB radio. Instead of relying on open radio frequencies, the app uses channels on your network to keep PTT discussions private. If workers across multiple geographies have access to the network, they can take advantage of assigned channels in PTT regardless of distance.

You can access PTT from the PTT bar located above the bottom menu. If you would like to add PTT channels, please place a request with your Guardhat Customer Success Manager.

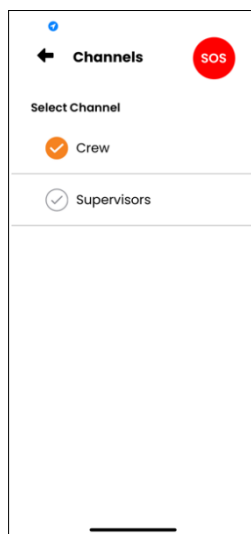


Figure 12: PTT Screen

4.1.6 The Events Screen

The Events screen shows a summary of recent events, such as PTT activity, photos taken, videos recorded, alerts, etc. By default, the Events screen will display active events. Tap on a specific event to view its details.

If you do not have the Lone Worker functionality enabled, this will be your default screen. You can also access the Events screen from the hamburger menu (three horizontal lines) located in the upper left of the app.

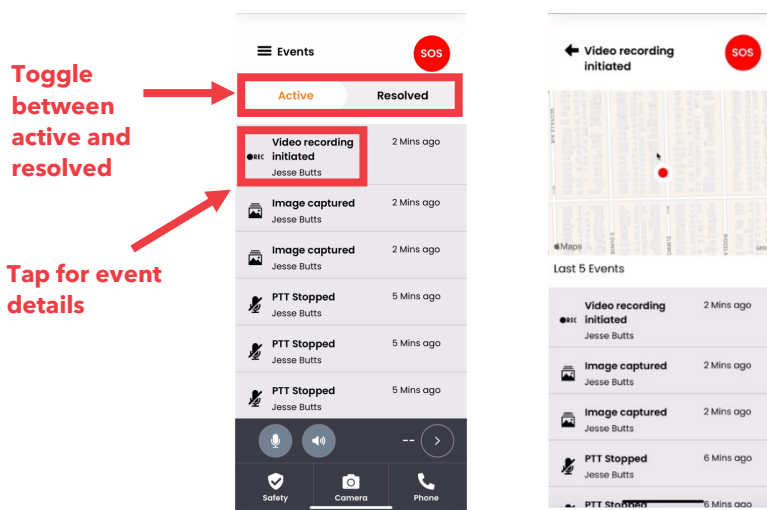


Figure 13: Active Events and Active Events Details Screens

You can tap on the “Resolved” tab to see resolved events. This view displays SOS, evacuation alerts, geofence violations, etc. that no longer require attention. Like the active events, you can tap on a specific resolved event to view its details.

To add a comment to a resolved event, follow these steps:

- 1 Tap on a **Resolved event**.
- 2 Scroll down to the Comments text field.
- 3 Enter your comment.
- 4 Tap on the **“Submit” button**.

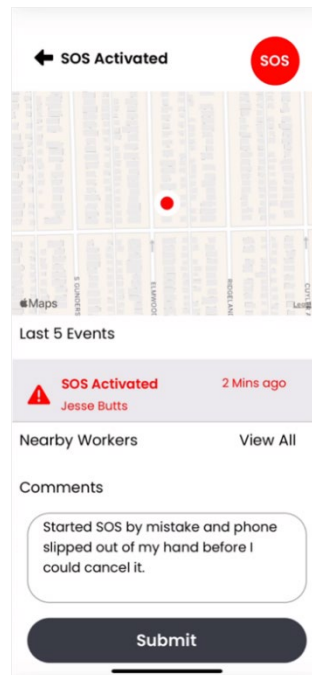


Figure 14: Submitting a Comment for a Resolved Event

4.1.7 The Map Screen

The Map screen displays your location, nearby Zones, and details of your surrounding area via Apple Maps. You will not see the locations of fellow iOS mobile app users or other workers using Guardhat devices.

You can zoom in and out and change the orientation of the map, by “squeezing” the screen with your thumb and index finger. A small compass in the top right will appear, allowing you to recenter the map to your location.

You can access the Map screen from the hamburger menu (three horizontal lines) located in the upper left of the app.

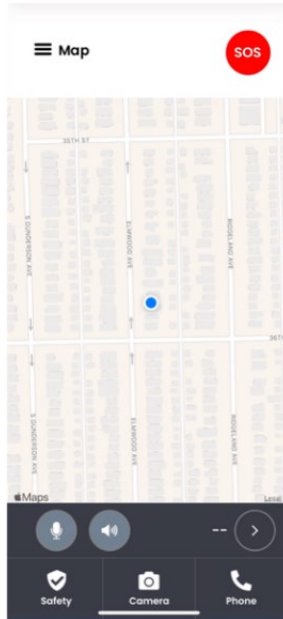


Figure 15: The Map Screen

4.1.8 The Messages Screen

The Messages screen houses text messages sent from the SCC administrator. When you receive a text message, you'll hear the audio alert, "You have a new message."

Within the Messages screen, you can read the message or press the Speaker icon to hear an audio read-out of the message. Previously viewed messages appear in a light grey background. You can access the Messages screen from the hamburger menu (three horizontal lines) located in the upper left of the app.

Only the SCC operator can send text messages. You cannot send text message from the iOS mobile app to other Guardhat users or to the SCC.

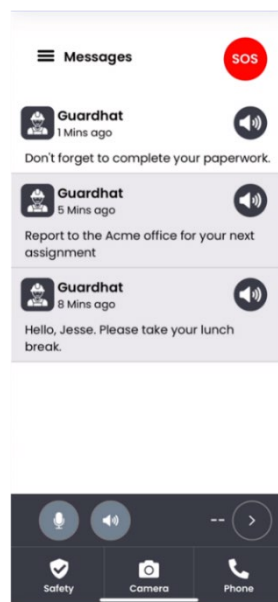


Figure 16: The Messages Screen

4.1.9 The Sensor Data Screen

The Sensor Data screen provides information from any Bluetooth-connected sensor, such as a gas detection monitor. The current readings displayed here can help you make critical decisions about the safety of your work environment and your workers.

You can access the Sensor Data screen from the hamburger menu (three horizontal lines) located in the upper left of the app. [To add a new sensor, read the “Pairing Bluetooth Devices” section.](#)



Figure 17: The Sensor Data Screen

4.1.10 The Settings Screen

The Settings screen displays servers, call information, and configuration settings. You can view the details of each setting. And you can work with your SCC administrator if any settings should be changed.

You can access the Settings screen from the hamburger menu (three horizontal lines) located in the upper left of the app. Tap on the “Servers,” “Call Info,” or “Config” buttons for details.

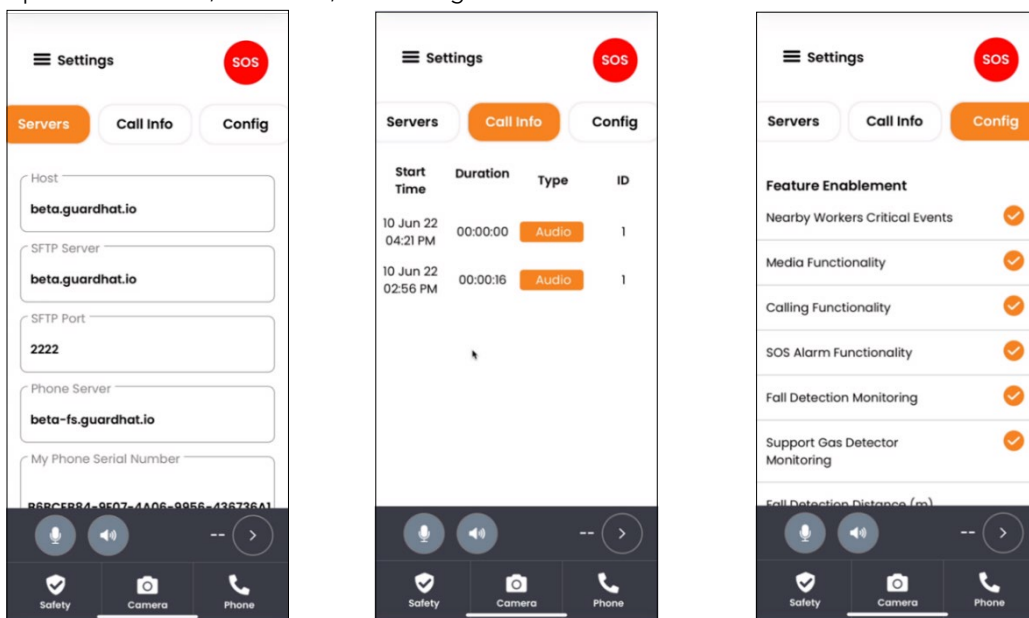


Figure 18: The Settings Screen

4.2 Lone Worker Functionality

If your organization has enabled Lone Worker functionality, it will serve as the default screen on the iOS mobile app. This safety feature keeps workers in isolated conditions in constant contact with the SCC via automated safety checks. If a lone worker is unable to check in, the iOS mobile app will automatically initiate an alert, prompting the SCC operator to act.

Use Lone Worker in situations where an iOS mobile app user cannot maintain regular, in-person contact or visibility with fellow workers or supervisors and would not be able to receive immediate attention if an incident occurred.

4.2.1 Initiating the Check-In Process

If you or a fellow worker are in an isolated environment, Lone Worker provides an automated check-in countdown. This process allows the worker an easy way to provide a safety status update to the SCC, and it ensure the SCC operator does not have to rely on a manual process to contact the worker at regular intervals. While Lone Worker mode is active, the iOS mobile app will appear with the initials "LW" on the SCC map.

Before the countdown expires, the iOS mobile app will provide several notifications and alerts for the user to "check in." **If the user does not check in before the countdown finishes, the iOS mobile app will send an alert to the SCC.** And if the worker is using a different app or the iPhone locked, they will receive two haptic iOS alerts to check in before the countdown finishes.

Follow these steps to start the Lone Worker check-in countdown:

- 1 Open the iOS mobile app and log in.
- 2 Tap on the green "Start Check-in" button on the Lone Worker (Safety) screen. (This is the default screen.)
- 3 Immediately after tapping on the "Start Check-In button," the countdown begins. The default countdown time is set to five minutes.
- 4 You will have two opportunities to tap on the **orange "Check-in now" button**:
 - a. At the one-minute mark, you will hear and see an alert that reads, "One minute remaining to check in."
 - b. At the 30-second mark, you will hear and see an alert that reads, "Missed check-in will be activated in 30 seconds." You cannot use any other Screens or functions within the iOS mobile app when this warning is displayed.
- 5 Once you tap on the "Check-in now" button, the countdown timer will automatically restart.

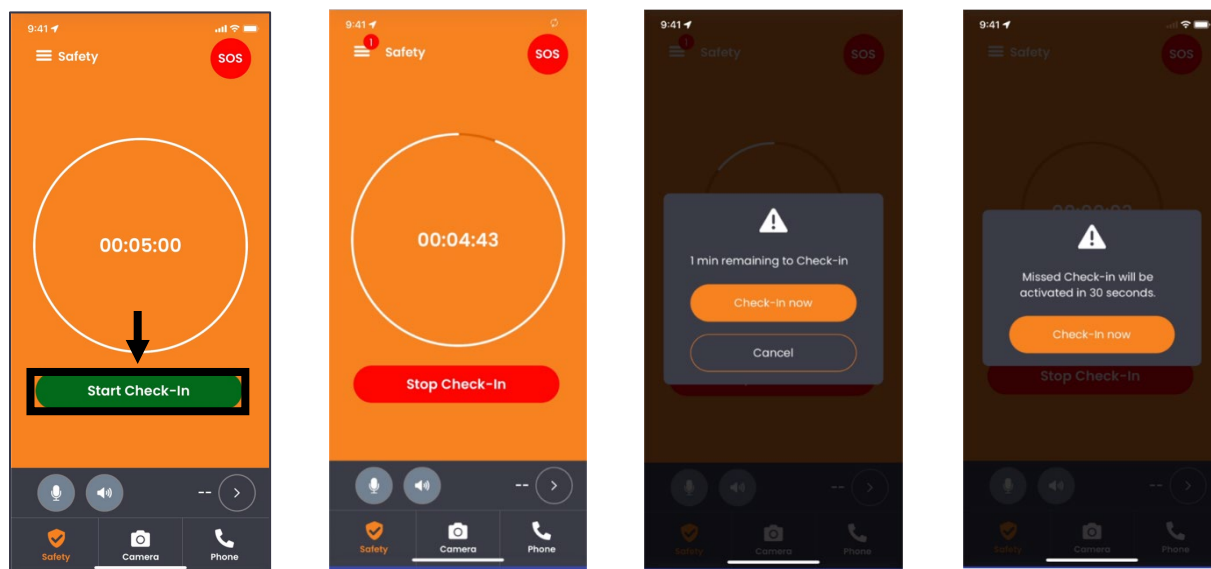


Figure 19: The Lone Worker Process

If you do not tap the “Check-in now” button before the countdown finishes, the SCC will receive an alert, and your organization’s SCC administrator will contact you or send a fellow worker or emergency response personnel to assess the situation.

A new check-in countdown will begin when you miss a check-in.

4.2.2 Ending the Check-In Process

If you or a fellow worker are no longer in an isolated and potentially dangerous situation, you can exit the Lone Worker mode. **We highly recommend you do not turn off Lone Worker mode unless you have received authorization to do so from the SCC operator or your supervisor.**

Follow these steps to stop the check-in countdown and exit Lone Worker mode:

- 1 While the check-in countdown is running, tap on the **red “Stop Check-in” button**.
- 2 Tap on the **“Stop” button**.
- 3 Tap on the **“OK” button**.

The check-in countdown has been canceled, and the SCC administrator will see that you are no longer in Lone Worker mode. You can start a countdown check-in again by tapping on the “Safety” menu button, and then tapping on the “Start Check-In” button.

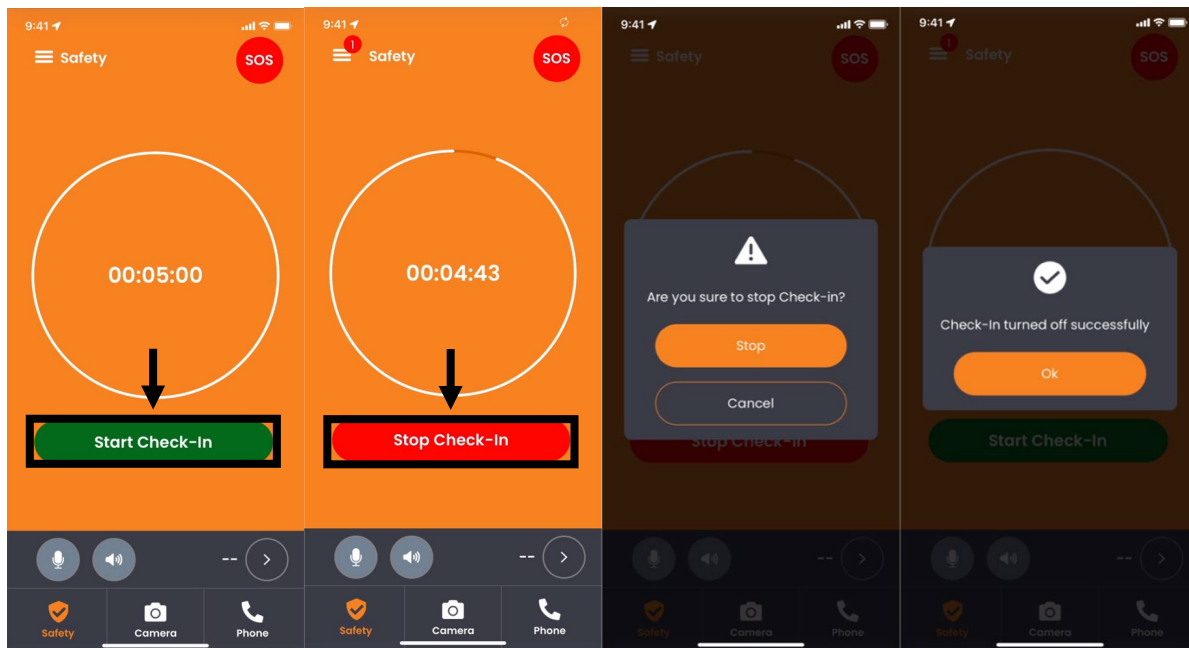


Figure 20: Ending the Lone Worker Process

4.3 Communication Functionality

The iOS mobile app enables workers, supervisors, and the SCC to stay in contact with ease.

4.3.1 Making Audio and Video Phone Calls

iOS mobile app phone calls can be audio or video. You can call fellow iOS mobile app users, the SCC, or other authorized, compatible devices in your Phone directory. Conference calls are currently unavailable.

If no contacts are listed in your iOS mobile app, you cannot place calls. However, the SCC operator can call you.

To maintain your privacy, mobile iOS Phone calls cannot be initiated without your approval.

To place a call, follow these steps:

- 1 Tap on the **"Phone" icon** located in the bottom menu.
- 2 Search for and/or **select the contact** you wish to call.
- 3 Tap on the **"Audio Call" or "Video Call" link**.
- 4 Once finished, press the red receiver icon to end the call.

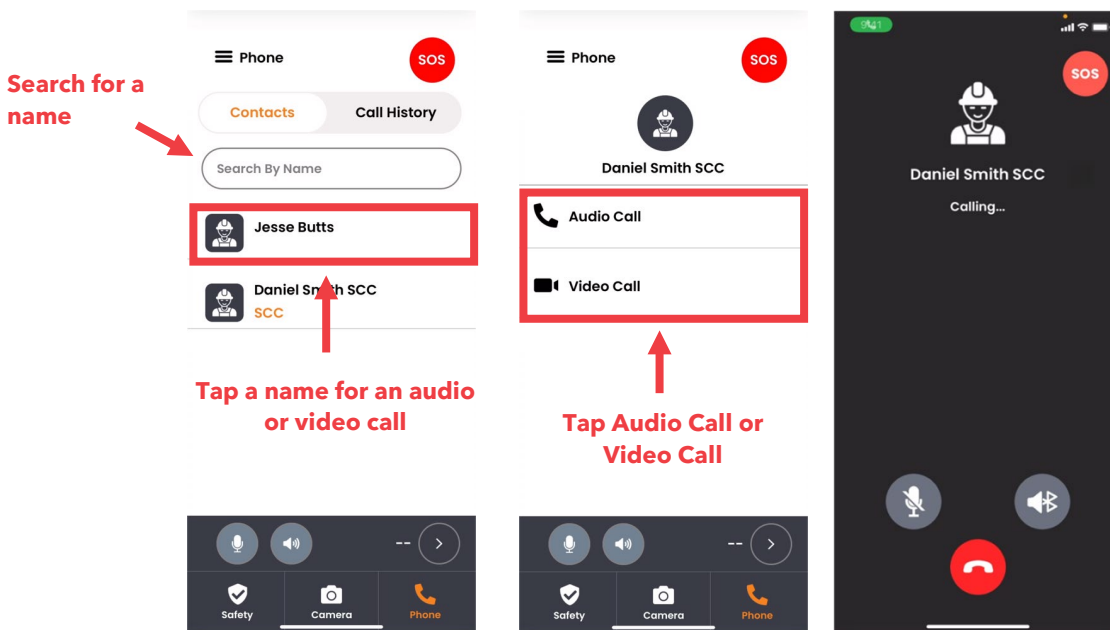


Figure 21: Making an Audio or Video Call

Within audio and video calls, you can tap on the Bluetooth icon to connect a headset or other listening device.

NOTE: You may be prompted to provide access to your iPhone's microphone and/or camera.

By default, video calls use your iPhone's rear-facing camera. Tap on the camera icon to toggle camera views. You can disable and re-enable your video feed by tapping on the icon containing a camcorder with a line through it.

4.3.2 Receiving Audio and Video Phone Calls

To receive a Phone call from the SCC or a fellow worker, simply tap on "Accept." Tap on "Decline" to reject the call.

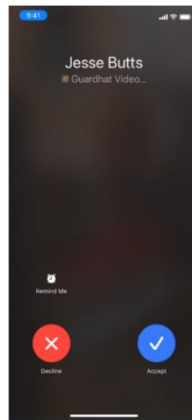


Figure 22: Incoming Call Request

The same Bluetooth, camera toggle, and video feed options are available in calls you receive.

The SCC may send you a request for an audio or video callback at your convenience. Simply tap on the "Ok" button to call back the SCC immediately. Or you can tap on the "Cancel" button to remove the prompt and call the SCC at your convenience.

4.3.3 PTT Calls and Offline Messages

PTT allows you to use the iOS mobile app like a walkie-talkie or CB radio. Instead of relying on open radio frequencies, the app uses channels on your network to keep PTT discussions private. If workers across multiple geographies have access to the network, they can take advantage of assigned PTT channels regardless of distance.

If PTT is active, you will automatically hear conversations. To switch PTT channels, follow these steps:

- 1 Tap on the **right-facing caret icon in the PTT** bar located near the bottom of any screen.
- 2 Tap on **desired channel** you wish to switch to.

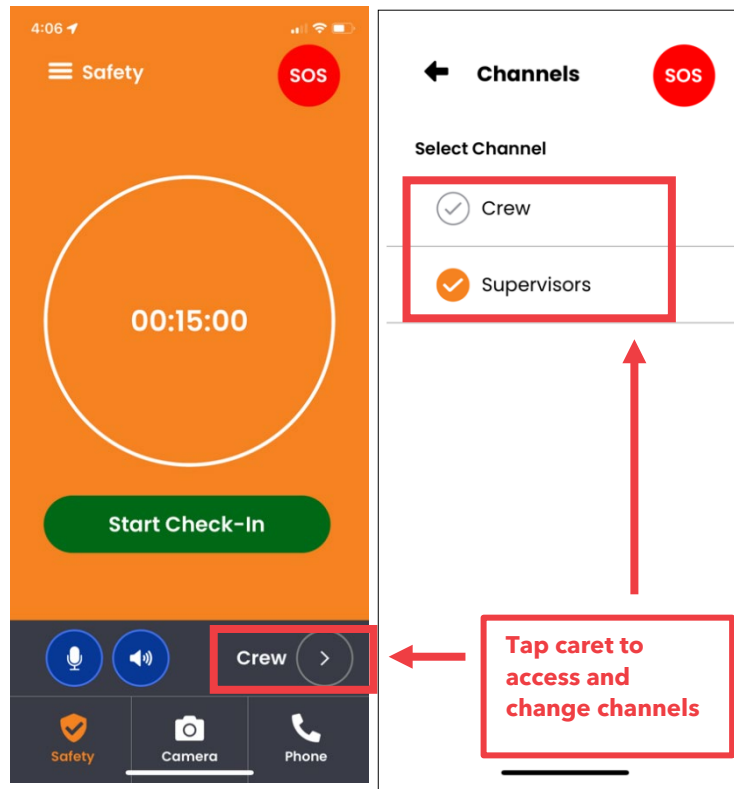


Figure 23: Accessing PTT Channels

If you don't want to hear discussions over PTT, **tap on the speaker icon to mute conversations**. You can tap on the speaker icon once more to resume hearing PTT conversations.

You can talk over PTT easily. Simply follow these steps:

- Press and hold the **microphone icon**.
- Once you've finished speaking, release the microphone icon.

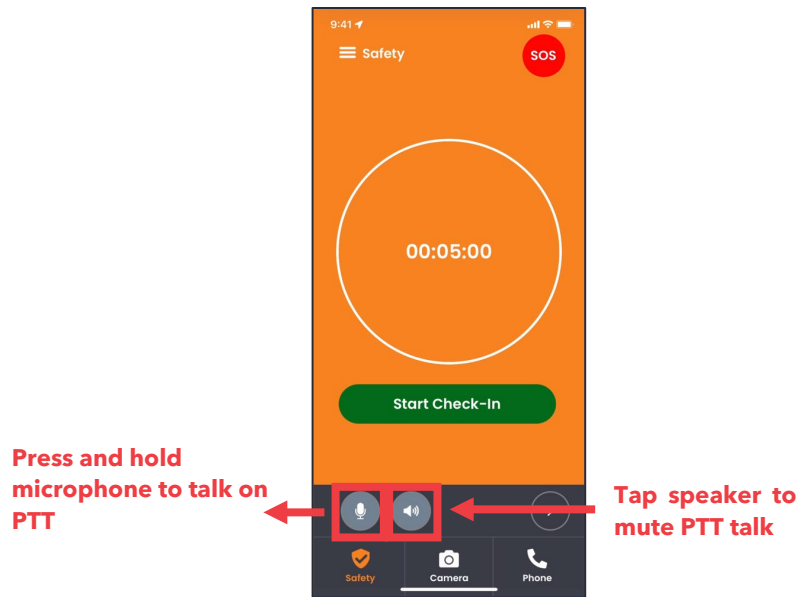


Figure 24: Talking and Muting PTT Conversations

PTT requires always-on network connection. When your iPhone is offline or you've closed the iOS mobile app, you will not receive or be able to transmit PTT messages. However, you can enable offline messages, which will play once you've regained your network connection or re-open the iOS mobile app. Because workers often use PTT as "live" radios, most customers do not enable offline messages.

4.4 Media Functionality

The iOS mobile app allows you to take front- and rear-facing photos and videos that are automatically uploaded to the SCC. You can also upload photos and videos stored in your iPhone's native Photos app.

4.4.1 Taking Photos

You can take front- or rear-facing photos that are automatically transmitted to the SCC and stored locally in the Media section.

To take a photo, follow these steps:

- 1 Tap on the **"Camera" icon** located in the bottom menu.
- 2 Ensure the **"Photo" link is selected** (it will appear in orange).
- 3 Tap on the **white circle with arrows icon** to toggle between the front and rear cameras.
- 4 As you frame your photo, you can:
 - a. Tap on the **"-" icon** to zoom out and the **"+" icon** to zoom in.
 - b. Tap on the lightning bolt icon in the upper left to turn the flashlight on or off.
 - c. Tap on the downward left arrow icon to hide the top and bottom menu for a larger view of what you're trying to capture. Tap on the upward right arrow to restore these menus.

- 5 Once you've lined up your shot, tap on the **solid white circle icon to take the photo**.

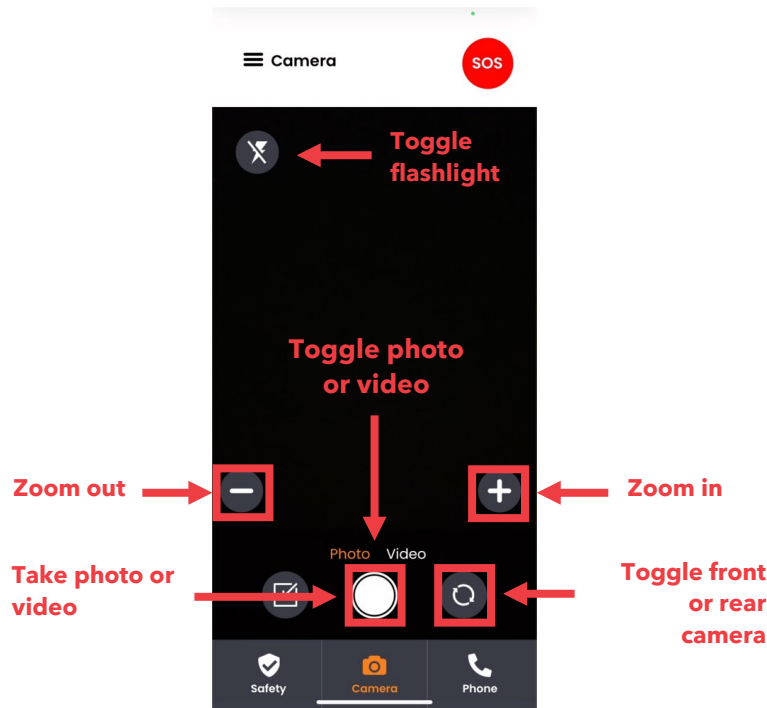


Figure 25: Taking a Photo

Your photo will automatically upload to the SCC and be available in the Media section, which is accessible from the hamburger menu (three vertical lines) in the top left.

4.4.2 Recording Video

You can record videos in a few simple steps. Once a video is recorded, it is automatically transmitted to the SCC and stored in the Media section. Videos have no time limits or size restrictions, but longer videos require additional time to share with the SCC and more storage space on your iPhone.

To record a video, follow these steps:

- 1 Tap on the **"Camera" icon** located in the bottom menu.
- 2 Tap on the **"Video" link** (it will appear in orange).
- 3 Tap on the **white circle with arrows icon** to toggle between the front and rear cameras.
- 4 As you frame your photo, you can:
 - a. Tap on the **"-" icon** to zoom out and the **"+" icon** to zoom in.
 - b. Tap on the lightning bolt icon in the upper left to turn the flashlight on or off.
 - c. Tap on the downward left arrow icon to hide the top and bottom menu for a larger view of what you're trying to capture. Tap on the upward right arrow to restore these menus.
- 5 Once you've lined up your shot, tap on the **solid red circle icon to begin recording**.
- 6 When you're finished, tap on the **red stop icon to end the recording**.

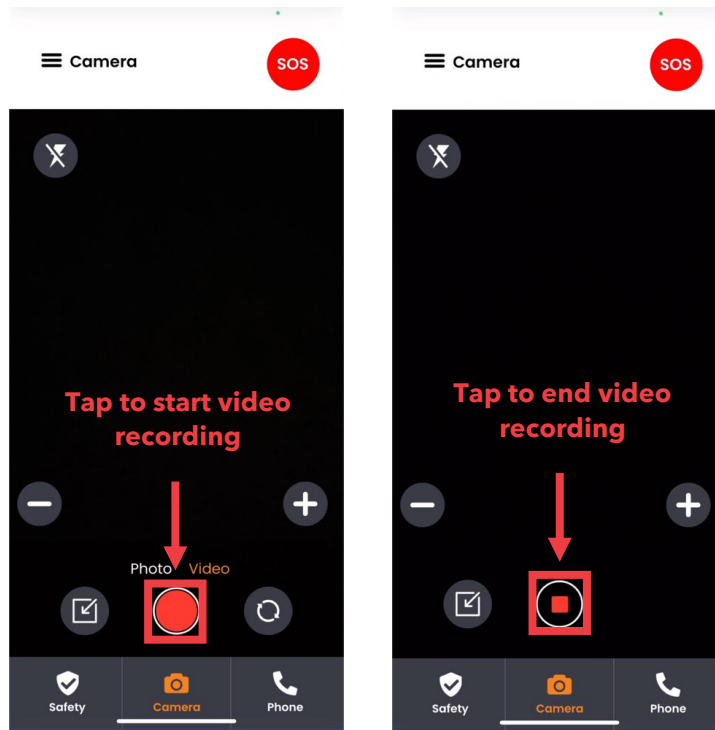


Figure 26: Recording a Video

Like photos, videos will be automatically uploaded to the SCC and available in the Media section, which is accessible from the hamburger menu (three vertical lines) in the top left.

4.4.3 Accessing Your Photos and Videos

To view photos or videos you've taken, follow these steps:

- 1 From any screen, tap on the hamburger icon (three vertical lines) and select the "Media" link.
- 2 Ensure the **"History"** link is selected (it will appear in orange).
- 3 **Tap on the photo or video you'd like to see** in more detail. Videos will play back automatically.
- 4 Tap on the **X icon** to return to the History and view other media.

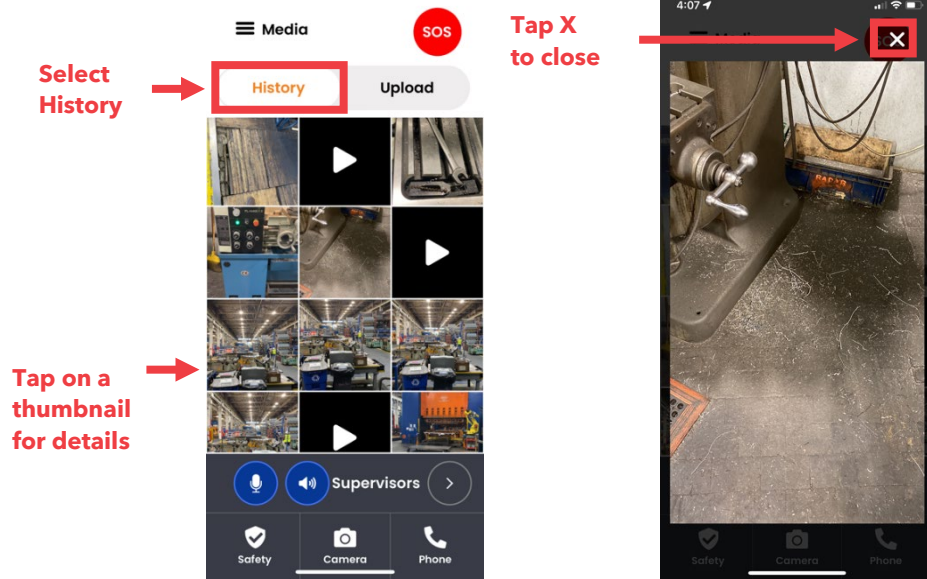


Figure 27: Accessing Videos and Photos

4.4.4 Uploading Media from iPhone Photos to the SCC

With the iOS mobile app, you can send photos and videos stored in your iPhone's native Photo app to the SCC. To upload your iPhone media to the SCC, follow these steps:

- 1 From any screen, tap on the hamburger icon (three vertical lines) and select the **"Media"** link.
- 2 Tap on the **"Upload"** link (it will appear in orange).
- 3 **Tap on the photo or video you'd like to upload** to the SCC.
- 4 Tap on the **"OK"** button.
- 5 The photo will be sent to the SCC.

Currently, you cannot select multiple photos or videos when uploading media.

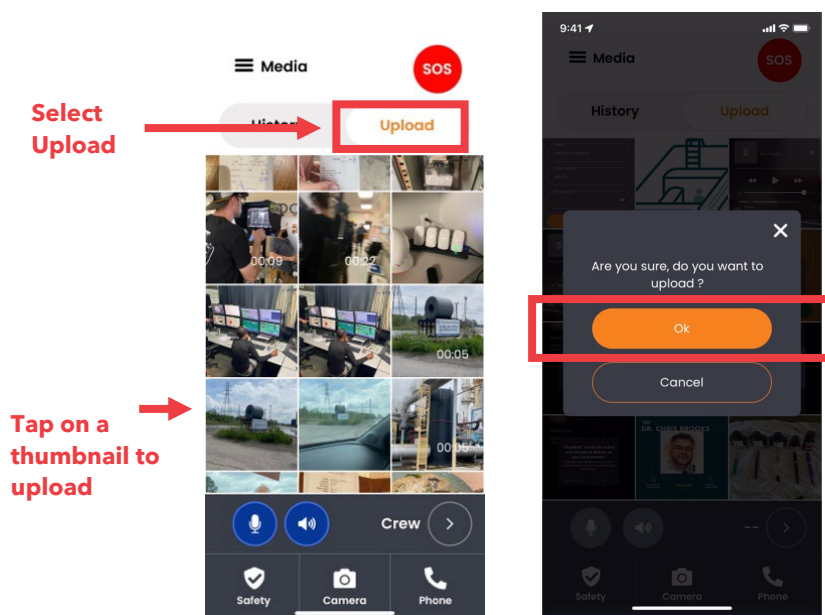


Figure 28: Uploading Videos and Photos

4.5 iOS Alert and Notification Functions

Safety alerts will appear on the iPhone mobile app and be read aloud. The SCC operator can resolve alerts once necessary steps are completed, such as:

- Evacuating an area
- Leaving a violated zone (geofence)
- Recovering from a fall

Proximity-related alerts are resolved automatically by:

- Moving away from potentially dangerous equipment or machines
- Moving more than 6 feet from a fellow worker

The SOS is the sole alert initiated by an iOS mobile app user. Fall detection, geofence violations, and nearby critical worker alerts will appear based on the user's movement and location. **Only an SCC administrator can initiate and cancel an evacuation alert.**

4.5.1 Activating and Canceling an SOS

The SOS alert is intended to indicate urgent help is needed. The alert is shared immediately with the SCC and nearby workers. Only the SCC administrator can resolve the alert once the situation is safe.

Once an SOS alert is initiated, an AV countdown from 10 to 1 starts. This delay offers a 10-second window for you to cancel the alert in case it started by accident. After the countdown passes 1, the SOS alert will be sent to the SCC.

To initiate an SOS alert, follow these steps:

- 1 Tap on the **red SOS icon** located in the top right of any screen.
- 2 **A countdown from 10 to 1 will begin immediately.** You may cancel the SOS by tapping on the flashing “Cancel SOS” button before the countdown arrives at 1.
- 3 **After 10 seconds, the SOS alert will begin.** The SCC will be notified immediately.

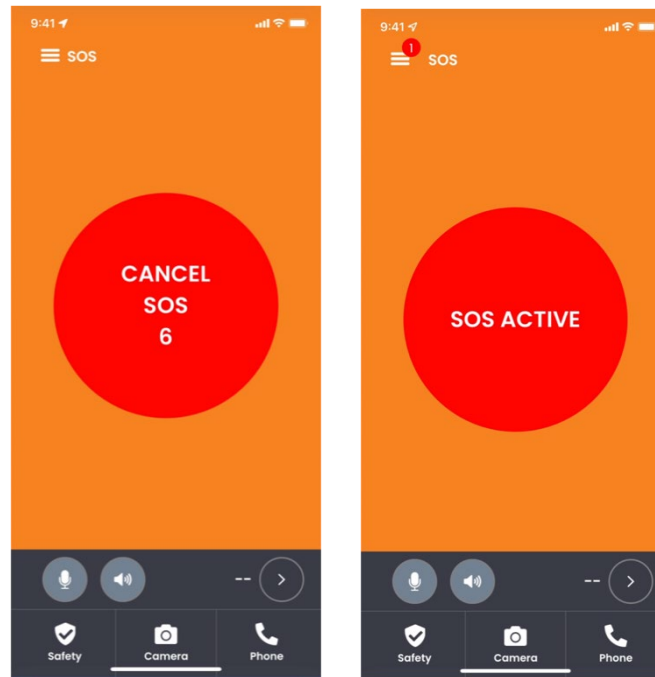


Figure 29: The SOS Screen, Which Begins Countdown Immediately

4.5.2 Nearby Worker Critical Alerts

In the event of a worker safety incident, nearby workers' mobile apps and Guardhat devices will alert them that a fellow worker is in distress. The SCC operator can call nearby workers to assess the situation and provide guidance or contact emergency response teams or services.

We highly recommend creating protocols for nearby worker critical alerts that enable supervisors to assist and assess the situation. Also consider training your workers in procedures for helping fellow workers with SOS alerts.

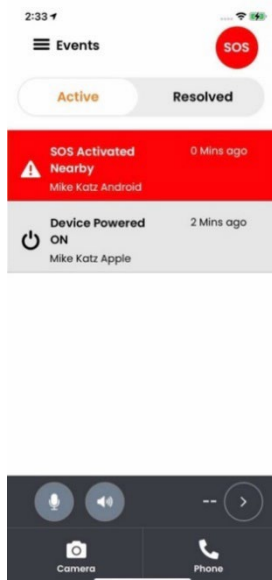


Figure 30: Nearby Worker Alert

4.5.3 Fall Detection

Once the iOS mobile app detects a fall, the alert is automatically initiated and transmitted to the SCC. The fall must exceed the threshold specified in the mobile app settings – typically a distance of 5 feet or more.

The iOS mobile app will play an audio alert, such as “Fall detected,” and show “Fall detected” in the Events screen. Once the SCC operator resolves the alert, the “Fall detected” notice will no longer appear in the iOS mobile app as an active event.

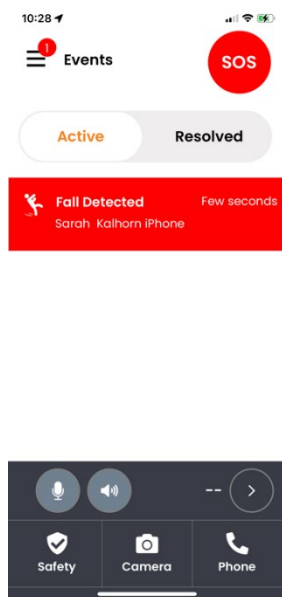


Figure 31: Fall Detection Alert

4.5.4 Evacuation Alerts

The SCC operator can initiate an evacuation alert when supervisors and workers need to leave an area immediately. The evacuation alert can span the entire work site or any part of it. The iOS mobile app and all Guardhat devices will receive the alert.

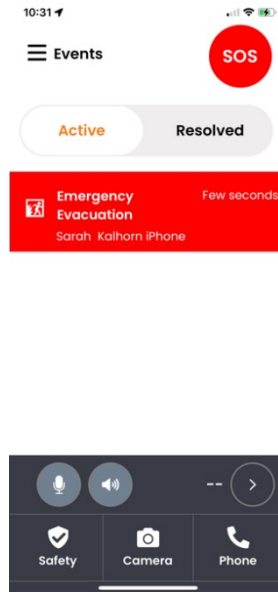


Figure 32: Active Evacuation Alert

Once the SCC operator initiates the evacuation alert, you will hear a standard message, such as “Emergency evacuation. Please leave the area.”

Supervisors and workers should relocate to a safe zone or muster point. Once the Guardhat system detects that your location is no longer within the evacuation area, you will hear a standard message, such as “Outside of evacuation zone,” or if a muster or safe zone is also set up within the Guardhat system, you will hear a notice when you enter that zone.

4.5.5 Zone (Geofence) Breach Alerts

Zones are areas within a perimeter where you SCC administrator can establish geofences with that restrict or permit access. These zones can allow specific workers at specific times, or they can restrict access based on requirements you choose.

A geofence breach occurs when an unauthorized iOS mobile app user enters a restricted zone. You will receive audio warnings when approaching a restricted zone. If you ignore these warnings, the iOS mobile app will display and read aloud a “Geofence violation” alert and share this message with the SCC. Once you leave the restricted zone and enter an approved area, the app will read aloud, “You have exited the geofence.”

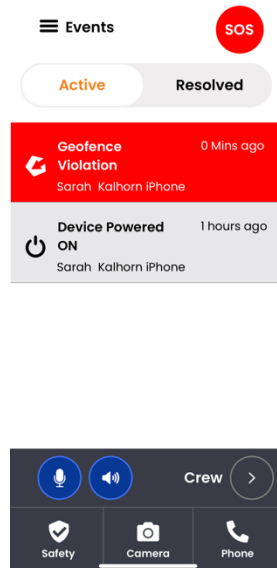


Figure 33: Geofence Violation Alert

The iOS mobile app receives all zone information every time the app is activated and connects to the Guardhat system. If your iPhone goes offline, it retains the most recent zone information and will continue to provide geofence violation alerts.

Zones can also be viewed in the “Map” section within your hamburger menu. Zones defined and color coded as follows:

- Geofence (orange) - A flexible zone option that lets you set start and ending times for when workers are permitted, as well as which type of workers are permitted in this zone.
- Blackout (dark grey) - This zone does not monitor workers when they enter it. This option is most often used in areas where workers’ privacy outweighs their exact location, such as locker rooms or break areas.
- Evacuation (red) - No workers are permitted in this type of zone. You can establish an Evacuation zone at any time, including in an emergency situation when a normally permitted zone must be evacuated.
- PPE Compliance (Communicator Only, blue)- You can select compliance parameters, such as proper hard hat use, gas monitors, or fall-protection harness. This zone only works for those wearing a Guardhat Communicator smart hardhat.

Display-only geofences: **Work** (yellow), **Risk** (light grey), **Danger** (red) and **Safe** (green):

These Geofences work to highlight sections of the map for the SCC admin to VIEW-ONLY. No alerts are issued for entry into these zones, and they do not appear in zone reports and within the iOS app. Rules-based alerts are currently being considered. If you have use-cases for these or other zones, please submit them to RKI or to apps.team@rkiistruments.com.

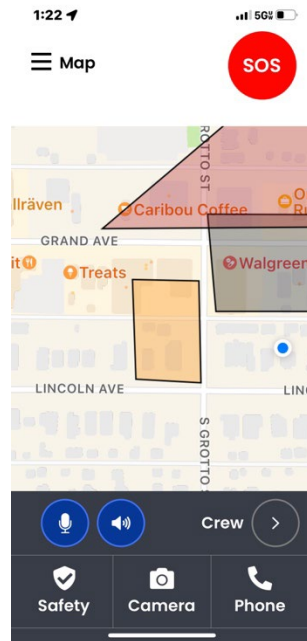


Figure 34: Geofence, evacuation and work zones as displayed on the iOS app Map feature

5 Troubleshooting

If you run into bigger issues, reach out to us at:

RKI Instruments, Inc.
33248 Central Ave.
Union City, CA 94587
apps.team@rkiinstruments.com
www.rkiinstruments.com

Thank you for reading this manual and using the iOS mobile app!