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hC2™ PATROL

USER MANUAL

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hC2™ PATROL

USER MANUAL

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

hC2 PATROL is a tactical tool for the commander and is designed to help speed up the decision-making process. Therefore, all the functionalities in hC2 PATROL have been carefully selected with the objective to speed up the procedures in the **OODA loop** (Observe—Orient—Decide—Act). It is important that users understand that hC2 PATROL is not a tool that will do the job for you, but a tool that will improve your basis for making the right decision faster, at the right time, and more accurately.

hC2 PATROL communicates over tactical radios via Tactical Communication, which is the communication protocol used to exchange data. hC2 PATROL can exchange data with other hC2 PATROL installations, hC2 COMMAND, and hC2 DISMOUNT. Basically, the objective of hC2 PATROL is to convey information either up or down the command chain and to neighbors. So the faster a commander who has hC2 PATROL can send information to his superiors, the faster they can make decisions and act.

You must understand that your use of hC2 PATROL is crucial for the decision-making process, not only for yourself but for the whole chain of command. This fact is the corner stone of the hC2 Suite of products and will add to improved force protection at the end of the day.

It is also important to understand that the functionality in hC2 PATROL has been selected from the concept “need to have” rather than “nice to have”. At all times, your focus should remain in the battlefield and not on a computer screen. Too much and unnecessary functionality would make using hC2 PATROL too complex and take your focus away from your real job, which is commanding your troops in the field.

NOTE

GDPR: hC2 PATROL does not have access to, store, persist or in any other way process personal data on behalf of users.

1.2 GETTING STARTED

A great way to get started using hC2 PATROL is to take a good look at the Quick Reference Card (10515-0479-4000), see [Figure 1-1](#). This will introduce you to the user interface so you can see where features are located and learn what the elements are called.

1.3 WHAT'S NEW IN hC2™ PATROL 3.4

hC2 PATROL 3.4 is a new minor version of the hC2 PATROL product. hC2 PATROL is a command and control solution designed for operational simplicity in order to meet the C2 needs of the dismounted and mounted commander and soldier on the modern battlefield.

hC2 PATROL 3.4 uses the same map engine as hC2 COMMAND 6.16 and hC2 DISMOUNT 3.4 which ensures full symbology and unified symbol interaction throughout the suite.

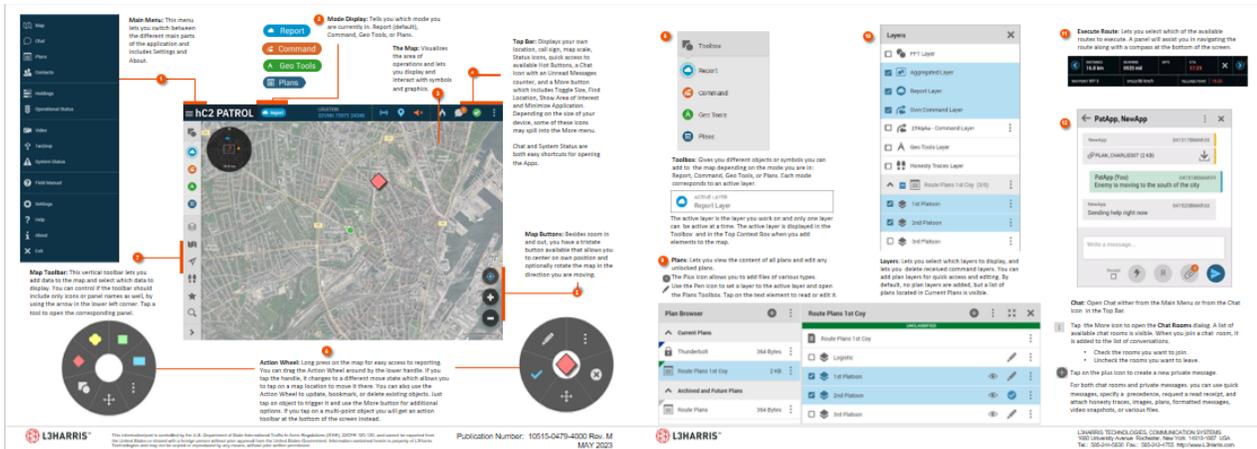


Figure 1-1. hC2 Patrol Quick Reference Card

The features described below constitute the main improvements and changes introduced with this release.

1.3.1 Add Files to Plans

hC2 PATROL 3.4 now provides the user with the option to attach images you, video snapshots, honesty traces, and various files to a plan. This will allow the user to enrich a plan with the latest images of an objective taken by a UAV or share other images or relevant information. The attached files will be distributed as part of the plan to the recipients. Once the receiver starts to download a plan, the attached files will be downloaded as well.

1.3.2 Improved Text Editor

hC2 PATROL 3.4 introduces a new and improved text editor. Optimized for touch interaction, the new text editor provides the user with the necessary tools for easily creating a new text document in a plan. This includes the option to add headings or headlines in a document, text styling, and formatting as well undo or redo changes in the document.

1.3.3 Unified Video App

With the release of hC2 PATROL 3.4, new video formats are supported by the unified in-app video player, as RTMP and Direct Show are added to the list of supported formats. Furthermore, automatic discovery is applicable for Direct Show devices, meaning the application will automatically connect and create a feed when detecting a Direct Show device.

1.3.4 View Snapshots and Locate on Map

hC2 PATROL 3.4 comes with an improved overview of video feeds, video recordings, and video snapshots. A new side panel in the video application allows the user to select between the different elements by tapping, consequently supporting better touch interaction. In addition, a new menu optimized for touch interaction is presented to the user when taking video snapshots. The menu allows the user to either save, attach the snapshot to a chat message or go to the location of the snapshot. The latter requires that metadata is available. If a snapshot contains the relevant metadata and is being shared using chat, the message will include a link to the location of the snapshot.

1.3.5 Broadcast UxV Position as FFT

Previously, when receiving a video feed containing relevant metadata, it was only possible to view the position of the video source on a user's local device. This could be in the form of a UAV track. With hC2 PATROL 3.4, it is now possible to share the position of a video source as a FFT with others in the network. This will allow other users to view a UAV as a track on the FFT Layer, thereby enhancing situational awareness.

1.3.6 Show Symbols on Video

With hC2 PATROL 3.4, a new concept of merging reported symbols and FFTs with the in-app video is introduced. When viewing a live video feed, the user can enable to view single- point symbols on top of the video feed. This means, the user will be able to view reported hostile symbols or FFTs as part of the video, allowing the user to use which improves the situational awareness significantly when viewing video.

1.3.7 Search on Map

hC2 PATROL 3.4 comes with the option to search for objects on the Friendly Force Track Layer, Report Layer and Aggregated Layer. The user can search for call signs, single- point symbols, and tactical graphics on the map without having to pan the map, and the search results are presented in touch friendly list format. When a user selects a search result, the map will automatically focus on the location of the selected symbol or call sign.

1.3.8 Hardened Platform Deployment

hC2 PATROL 3.4 has been optimized to support customers in deploying and operating the software in environments that have strict security policies and regulations.

Due to the strict separation of application and data, running hC2 PATROL from read-only devices or directories is now supported natively. User settings and data are now only written to the designated directories users have access to based on the systems configuration.

Running any of the applications with elevated permissions now is a conscious choice by the administrator and not requested by the application automatically. Functionality that requires elevated permissions, such as installing hC2 PATROL or Tactical Communication directly from the hC2 Management Tool, will only be available if explicitly executed with elevated permissions.

The installation of the hC2 PATROL Launcher application, used for automatically running the application from a USB stick when inserted, is now also a deliberate choice of the administrator. Users are not prompted to install the Launcher anymore. Further changes include the update and replacement of third-party libraries as well as removing the need for execution permissions on command line interpreters.

1.3.9 Copy and Send Location

hC2 PATROL 3.4 makes it possible for a user to copy a location on the map. A new functionality is added to the action wheel, allowing the use to copy any location on the map and paste the location in a chat message or plan. The location will be inserted as a link, so recipients easily can center the map on the location.

1.3.10 Import GPX Traces as Routes

hC2 PATROL 3.4 allows the user to convert GPX traces to routes. The user is able to convert existing or imported GPX traces to a route as either a part of a plan overlay or to a simple route on the local device.

1.3.11 New Icons and Logos

A new program icon and logo are introduced with this release. The new icon and logo are visible to the user upon startup and in the About box in the application.

1.3.12 Add Text Element to a Plan

When creating a plan in hC2 PATROL 3.4, the user now has the option to add additional text elements to a plan. This will allow the user to enrich a plan with the relevant text elements to support an operation.

1.3.13 Rename Text Elements in Plans

With hC2 PATROL 3.4, the name of a text element in a plan is no longer tied to the original plan name. The user now has the option to rename the text element of a plan after a plan has been created as well as naming new text elements which are added as files.

1.3.14 Add Way Points to a Simple Route

A new element is added to enhance the existing Simple Route functionality. After a simple route has been created on the user's local device, the user can add additional way points if needed.

1.3.15 Show Downloaded Plan Directly in the Plan Browser

When downloading a plan in hC2 PATROL 3.4, the plan will now automatically be downloaded directly to the Plan Browser. This improves the existing workflow and makes it easier to access downloaded plans fast.

1.3.16 Review Date and Succession Date Added to Plan Properties

Two new input fields have been added to plan properties. The user has the option to set a review date in the future for when the classification of a plan should be revised. If a user already knows that a plan's classification can be lowered in the future, the user can set a succession date, at which point the plan's classification will automatically change.

1.3.17 HF Add-on Module – Scheduled Transfers

A new feature for creating scheduled data transfers over HF networks is available with this release. When selecting input for data packages in the HF module, the user is now able to create scheduled data transfers as well. Scheduled data transfers are automatically sent over the HF network and do not require an operator to actively send the messages. When setting up a scheduled data transfer, the user can define when and how often the data transfer should occur.

NOTE

The L3Harris HF Add-on has not been tested by L3Harris with hC2 DISMOUNT.

NOTE

See the Release Notes (10515-0479-4110) for information about deprecated and removed functionality.

1.4 WHAT'S CHANGED OR NEW IN THIS MANUAL

This section is not a complete change log, but a list of the sections that have seen a significant change or improvement since the previous release or new sections that are added. This should help you get started quicker.

- Structured messages have been renamed to formatted messages to keep in line with IRIS Forms which is used for this type of messages.
- New [Symbol Settings](#) are described.
- New options in the [Video](#) topic are described.
- [Search on Map](#) is a new topic.
- New [Plan Properties](#) are described.
- Images and icon buttons are updated, and there are also various minor text fixes.

1.5 USER ASSISTANCE

This user manual will give you more in-depth and background knowledge of the tactical use of hC2 PATROL. It will help you get started using this app, and will show you the way to use various tools and features. There are different ways to navigate through the User Manual, depending on whether you are viewing it on a device or on paper. In both cases you can navigate through the manual using the table of contents found at the beginning of the manual. If you are using the PDF on a device, you can also search for a term to locate the topic you need information on.

L3Harris is always interested in listening to constructive input, so if you have any experience or good improvement suggestions, please do not hesitate to contact your Command and Control point of contact in your organization.

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CHAPTER 2

BASICS

2.1 HC2 PATROL BASICS

This chapter introduces you to the basics in hC2 PATROL. It introduces some of the main features and elements that you will meet using hC2 PATROL. This topic:

- Gives you a brief system overview.
- Describes the user interface.
- Introduces you to map, contacts, settings, toolbox, and other basic concepts.

2.2 SYSTEM OVERVIEW

hC2 PATROL is a tactical tool for the commander and is designed to help speed up the decision-making process. Therefore, all the functionalities in hC2™ PATROL have been carefully selected with the objective to speed up the procedures in the OODA loop (Observe— Orient—Decide—Act). It is important that users understand that hC2™ PATROL is not a tool that will do the job for you, but a tool that will improve your basis for making the right decision faster, at the right time, and more accurately.

hC2™ PATROL is an application for installation on Android devices and fully supports multi-touch gestures as well as hard-button user input.

2.2.1 hC2 Product Suite

hC2 PATROL is part of the hC2 Suite and when deployed in an operational theater, it can be used in conjunction with other tools, and maintains close interaction with hC2 COMMAND. This provides information between commanders in the battlefield and the battle group staff who use hC2 COMMAND or another headquarters system.

2.3 USER INTERFACE

This section gives you an overall introduction to the user interface of hC2 PATROL by describing the elements you will meet and the general structure and settings. It will help you to:

- Understand the overall layout of the user interface of hC2 PATROL and its selection of apps and tools.
- Navigate and find various functions.

2.3.1 Full-Screen Map

As the map part of hC2 PATROL is the central part, notice that a simple tap on the map will momentarily remove all other UI elements (panels, menus etc) allowing you to focus only on the map (Figure 2-1). Tap a second time to return to the previous state.

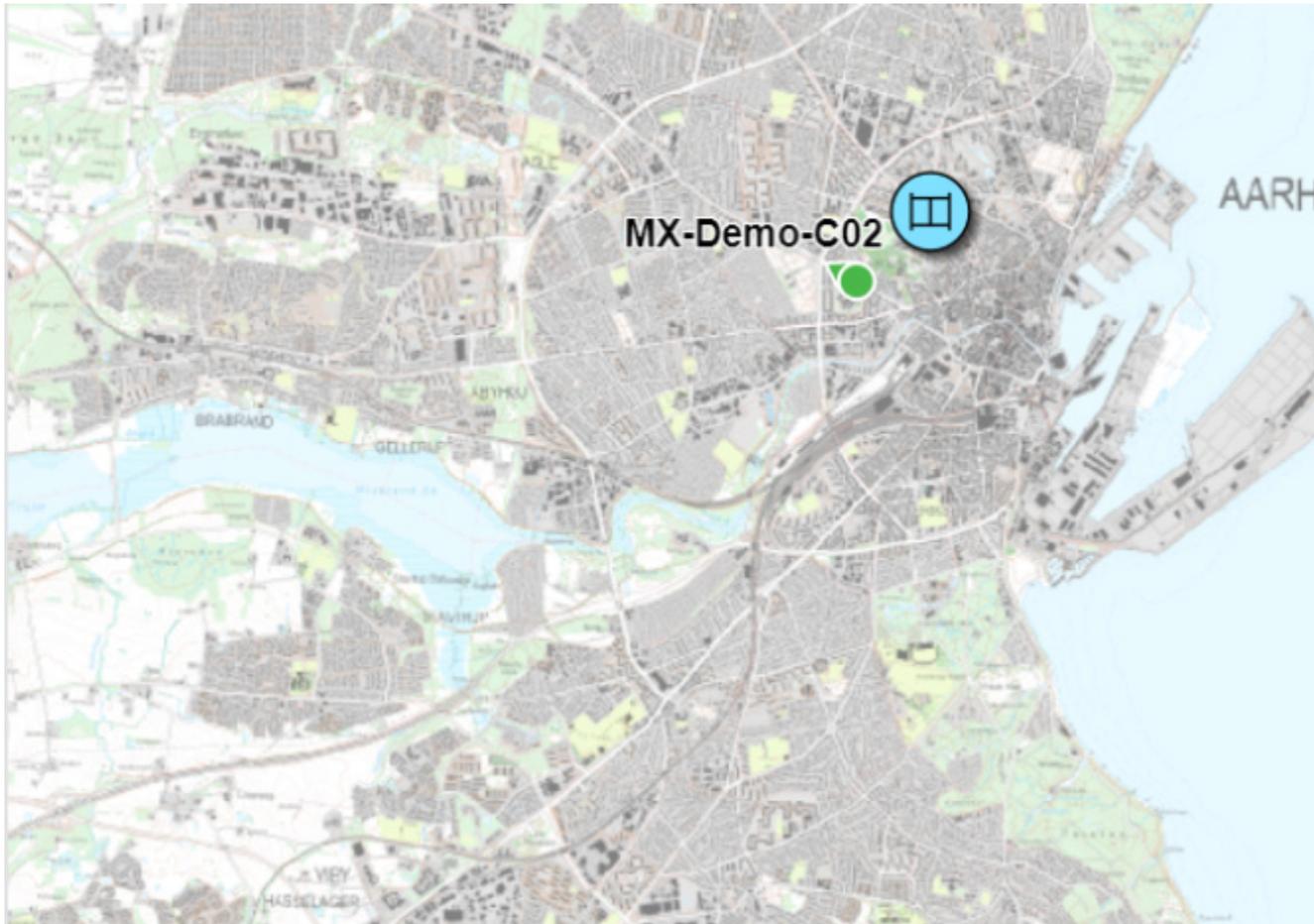


Figure 2-1. Full-Screen Map

2.3.2 Top Bar

The top bar displays information on status and provides easy access to selected functionality.



Figure 2-2. Top Bar Display

The top bar allows you to open the main menu by using the menu icon  on the left.

If the Map app is open, the top bar displays the **active mode** which can be either Report, Command, Geo Tools, or Plans. If another app than the Map app is opened in full screen, the top bar displays the name of the app: Chat, Plans, Contacts, Holdings, Operational Status, Video, TacDrop, System Status, or Settings. If you close any of these apps, it will default back to Map.

The next part of the top bar displays your **Current Location, Call Sign, Map Scale, Time** and a **3D** indicator if you have 3D enabled. The next part shows some detailed system status, and your connection. Then it shows your connection status to the platform, your GPS status, and if sound is on or off. You can mute and unmute sound notifications by clicking the speaker icon.

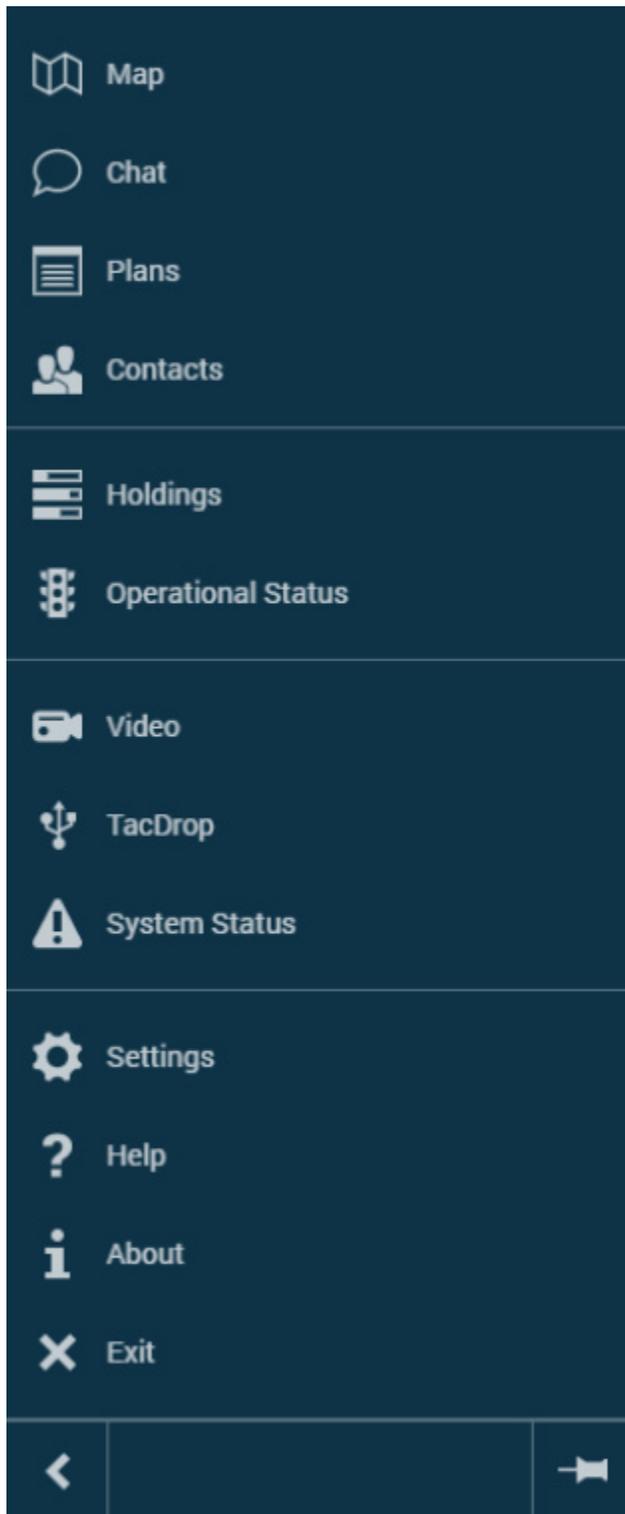
The last part of the top bar also has three icons. The first one  gives you quick access to your available [Hot Buttons](#), the next one is a Chat icon with a counter  showing how many **unread chat messages** you have. Tapping the Chat icon will open [Chat](#) app. The final icon lets you know if you have any errors from System Status that you need to attend to. If you do, the status indicator  will be red. If everything is working, it will be green . Tapping the status icon will open the [System Status](#) app. For both the Chat and the System Status icons it follows that tapping the icon once more will close the respective apps.

Furthest to the right in the top bar, you find the **More** button  which lets you toggle the display size, show Area of Interest, minimize the application, and search for a specific location from a coordinate. If you are using a small device it may also show any of the above mentioned elements which do not fit in the smaller top bar. See [More Button](#) for more information.

NOTE

When hC2 PATROL runs on small devices, the top bar sometimes disappears to give you an extended map display. For example, this is the case when you need to report a symbol on the map, or make a freehand sketch in the command layer.

2.3.3 Main Menu



The main menu gives you access to the various apps along with **Settings**, **About**, and **Exit**.

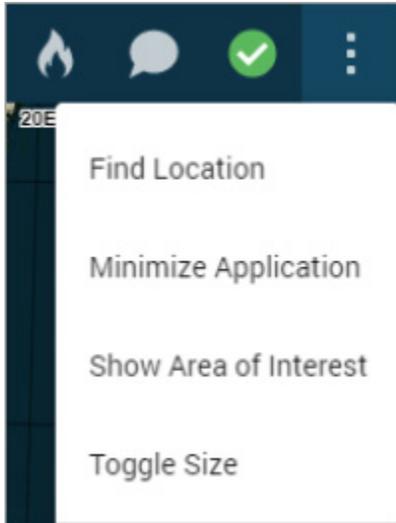
On larger devices, use the pin  at the bottom right of the pane to pin the menu. This will keep the pane folded out so you can read the name of the tools but it will also take up more of your screen. The panel of each tool will open to the right of the pinned navigation pane.

Default is unpinned.

	The Map app is the primary app as it allows you to get the situational picture. See Map for more information.
	The Chat app includes both private messages sent to specified recipients and an open chat room functionality. See Chat for more information.
	The Plans app gives you access to the list of plans and orders that are in the system. See PLANS for more information.
	The Contacts app gives you an overview of your contacts and which contacts you are sending command layers and plans to. See Contacts for more information.
	The Holdings app allows you to report your logistical consumption of e.g. fuel, ammunition, and any other critical logistical item after having been engaged in combat or after any other kind of operation. See Holdings for more information.
	The Operational Status app allows you to set and send your status and see the status from any subordinates that you have. See Operational Status for more information.
	The Video app allows you to pick a predefined video feed or to manually add your own video feed. See Video for more information.
	The System Status app gives you an overview of different statuses in the system. See System Status for more information.
	The TacDrop app gives you the ability to export or import selected data to and from a specified source. See TacDrop for more information.
	The Settings panel lets you set up hC2™ PATROL to your personal preferences. See Settings for more information.
	The Help button opens a User Manual if one is available for your language. You can add a PDF to the docs/<localization> folder in the application folder.

2.3.4 More Button

The More button  in the top bar gives you access to additional functionality, like a shortcut menu.



Find Location opens a dialog where you can enter a coordinate. When you select **Go To**, the map is centered on the location and a marker is visible. The location marker can be changed to a symbol report from the appearing action wheel if needed. If it is not changed into a report, the location marker will automatically disappear after 30 seconds.

Minimize Application allows you to minimize the application if you need to use your device for something else than hC2™ PATROL.

Show Area of Interest zooms and moves map to display your entire area of interest within the viewport. You can specify radius for area of interest in [Settings](#).

Use **Toggle Size** to switch between normal and large size of buttons, input fields etc.

The More button will also contain any top bar elements that cannot display on smaller devices.

2.3.5 Area of Interest Radar

An Area of Interest (AOI) Radar can be displayed in the upper left corner (see [Figure 2-3](#)). It can be toggled on/off in the [Map Settings](#). You can control the size of the radar so it fits to the size of your screen.

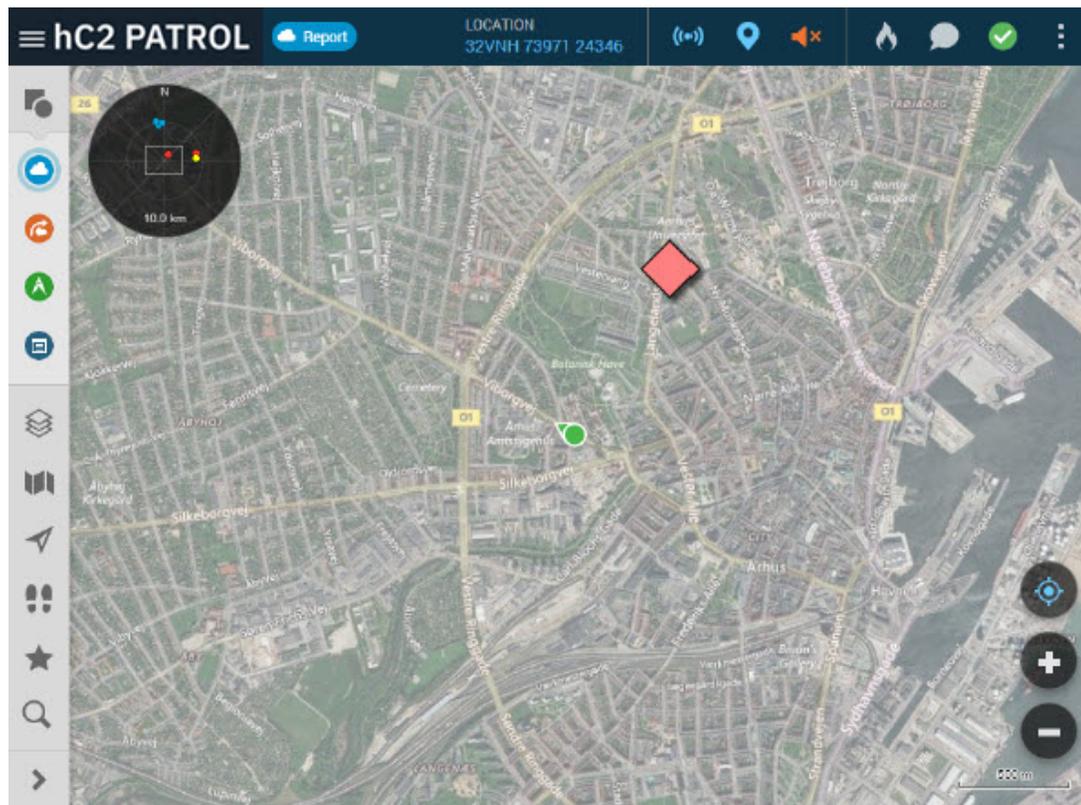
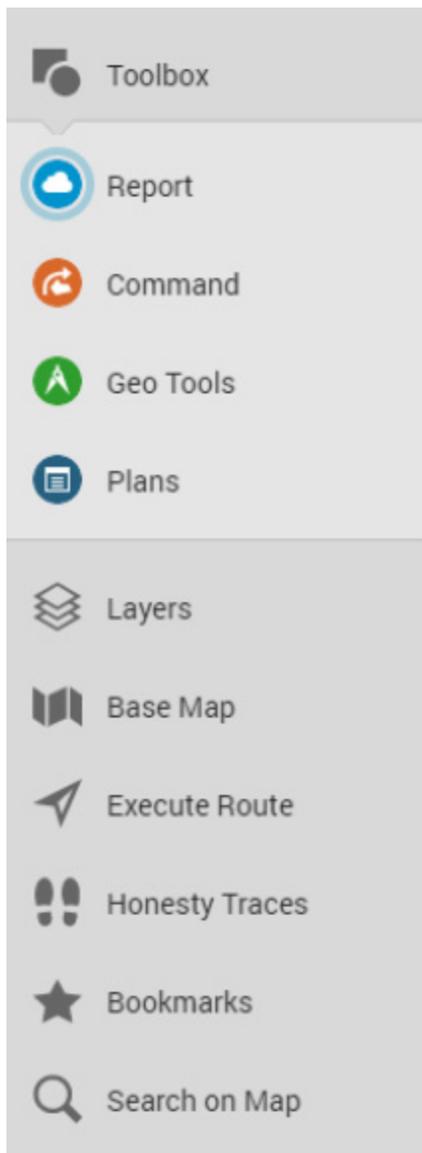


Figure 2-3. Area of Interest Radar

When you use hC2™ PATROL, especially at lower organizational levels, you are usually zoomed in to see terrain details on the map. As your AOI is probably larger than your actual zoom level represents, you can use the AOI Radar. This lets you see what is outside your actual zoom level where reports and tracks are displayed. New symbols light up for a short period of time in the radar. The white rectangle in the middle shows your actual zoom level i.e. the boundaries of your screen. You can set up if you want to receive banner alerts and/or sound notifications when new reports arrive within your defined area of interest, see [Notification Settings](#) for more information. You can set the size of your AOI spanning from 1 to 50 km in [Map Settings](#).

2.3.6 Map Toolbar

The vertical **Map** toolbar gives you access to tools related to your map. It lets you add data to the map and select which data to display. Each tool opens in a separate panel. Click the links below to find a description of the modes you can work in and the additional tools you can work with on the map.



The **Toolbox** comes in four different variants that correspond to four different modes of the application: **Report**, **Command**, **Geo Tools**, and **Plans**. When you select a specific toolbox variant a specific layer is made active, meaning this is the layer your toolbox objects will be drawn on. For example, if you select **Report**, the toolbox will make the Report Layer active and display the objects you can draw and use on the layer. At the same time the Report mode chip is displayed at the top bar of the application.

You use **Report** mode for reporting objects observed in the terrain. Read more about [Report Mode](#).

You use **Command** mode for quickly changing ongoing operations and thereby saving valuable voice time. Read more about [Command Mode](#).

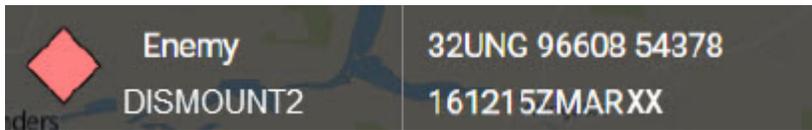
You use **Geo Tools** mode for adding supporting tools to the map for navigation or basic terrain analysis. Read more about [Geo Tools Mode](#).

You use **Plans** mode for creating your own plans. Read more about [Plans Mode](#).

Additional tools (the gray icons) are available at the bottom of the toolbar. For Report mode, you have these tools:

- Use the **Layers** tool for selecting which layers to display on your map. Read more about [Layers](#).
- Use the **Base Map** for changing the map you use, and to change to 3D display. Read more about [Map](#).
- Use **Execute Route** to select which route to execute. Read more about [Execute Route](#).
- Use **Honesty Traces** for displaying available honesty traces on the map. Read more about [Honesty Traces](#).
- Use **Bookmarks** to get the list of bookmarks you have previously created. Read more about [Bookmarks](#).
- **Search on Map** is for finding a specific report, FFT, or other element by searching for name, label, call sign or other element. Reach more about [Search on Map](#).

2.3.7 Object Info Box



The Object Info Box appears at the top of the map when you select an object on the map. It contains a symbol or an icon that represents the selected object as well as up to four pieces of data. When you click or tap anywhere in the Object Info Box it will open the **Report Details** dialog for the selected object.

2.3.8 Map Buttons

These floating buttons on the map let you interact with the map. The design and DNA of the floating buttons are related to the [Action Wheel](#) and the [Action Toolbar](#). When they are visible, they are located in the bottom right corner of your display.



The top button is a Center To button which allows you to keep the map centered on your own moving symbol when you tap it once. If you drag the map in any direction while in locked mode, the Center To button will move into a 'Free' mode where map does not follow your symbol anymore.

The plus and minus buttons are zoom buttons that you can use to zoom in and out on the map.

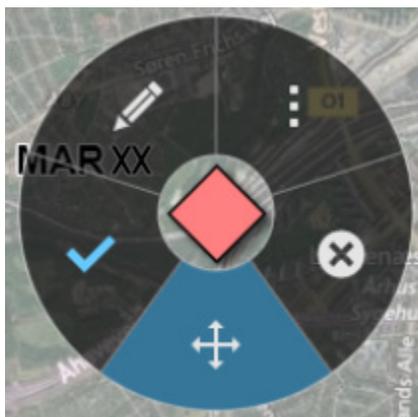


If you tap the Center To button once more it will change the map direction to follow your actual direction. In this case, the icon will change into the rotate icon.



If your direction is not North, the button will change into a compass icon. Tap the compass icon to return to the map orientated towards North.

2.3.9 Action Wheel



A drag handle, , allows you to drag the action wheel to a different location on the map. If you tap it, it changes to a different move state which allows you to tap on a map location to move it there.

The action wheel is a contextual radial menu for reporting or interacting with elements on the map. Depending on the context the action wheel will have a different set of actions for you to use.

The action wheel appears on the map, when you either:

- Click or tap on an existing symbol on the map.

- Long press an empty place on the map (the image below is an example of that).
- Click an empty place on the map after selecting a symbol in the toolbox.



Using the action wheel allows you to quickly make a report on the map or quickly get access to information about an existing object. It also allows you to set the marked location as your own current location if your GPS is currently not working and lets you bookmark the location.

2.3.10 Action Toolbar

When you work with multi-point objects, for example, when working with your Command Layer, you get an action toolbar instead of a wheel. The action toolbar gives you additional functionality on the element you are working with on the map.



2.3.10.1 Styling Action Toolbar



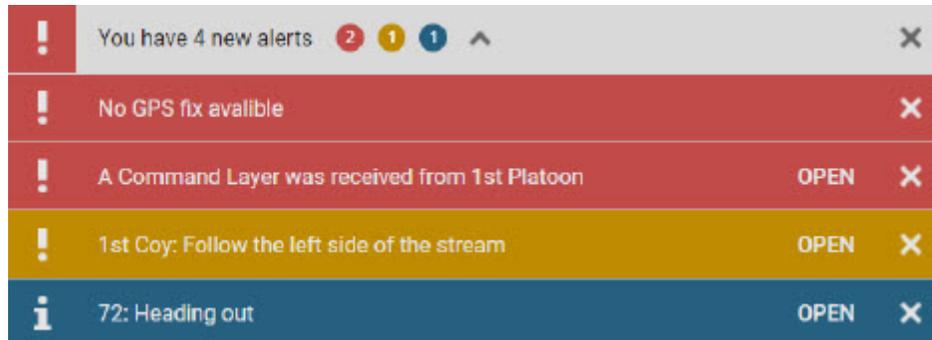
For sketching tools, the Action Toolbar also includes a toggle button to a vertical Styling Toolbar which will allow you to change color, width, type, pattern, text color etc. according to type of sketch tool.

2.3.11 Banner Notifications

To notify you on new events a banner will appear just below the top bar. This can be the arrival of a new message or a notification related to your status. The banners are colored according to the message precedence and the importance of the event: Error (red), Warning (yellow), or Info (blue). Some of the banners are confirmations to a task you have just completed and will disappear after a short period, other banners will remain until you dismiss them or tap OPEN to open the message.



If you have more than one active banner present they will be collapsed into a banner header displaying the number of banners in the different categories. Tap the header to display them individually or dismiss them all at once by tapping the close button (X) in the header.



In [Settings](#) you can configure which events you would like to receive banner notifications for.

2.3.12 Other Buttons

Many of the screens and panels have the following buttons.

	<p>The More button appears in many contexts and is a short cut menu that offers additional functionality.</p>
	<p>The Expand Screen button lets you extend an app to use the full screen.</p>
	<p>The Collapse Screen button lets you dock a full screen app so it can co-exist with the Map app.</p>
	<p>The Back button navigates back to the previous dialog.</p>

2.4 MAP



Your map is the most important element as all the information linked and displayed is related to a map in some way. You will find the various available maps in the **Base Maps** app.

All tactical information is displayed on top of a base map, e.g. a military topographical map or a satellite image. The number of base maps is only restricted by your device's storage capacity, which allows you to select the base map most appropriate for your needs.

Below are some features specific to the map.



2.4.1 3D

Use the toggle switch to activate the 3D view of the map, providing there is a map in your setup that supports 3D.



NOTE

Enabling 3D will prevent you from using most of the functionality as you cannot report, or otherwise interact with symbols on the map while in 3D.

2.4.2 Exaggeration

When you enable 3D, an exaggeration slider will appear so you can control the level of 3D exaggeration.

2.4.3 Dim

You can dim the map to adjust it to dark and light situations. Just slide the blue pointer from minus 10 (very dark) to plus 10 (very light.)

2.5 CONTACTS



Contacts gives you an overview of all the contacts you have and lets you filter and set up to which contacts you want to distribute Plans, Command Layers, and Hot Buttons.

Your Contacts list will be populated with a default set of contacts but you can add any new contacts you need. You can delete the contacts you add whereas you cannot delete the original contacts.

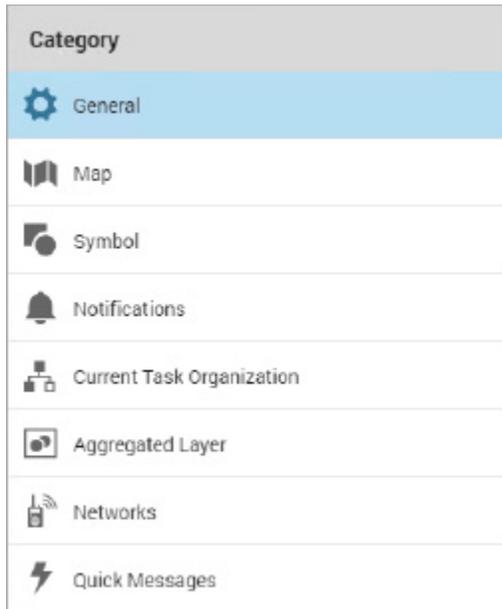
Category	
	All (alphabetical)
	Recent
	Favorites
	Command Layers Recipients
	Plans Recipients
	Chat Rooms
	Hot Buttons

Contacts are divided into the following categories:

	<p>All: This lists all contacts, including the chat rooms you have joined, in alphabetical order. You can search in the list and create new contacts from here.</p>
	<p>Recent: This lists the last 20 contacts you have communicated with.</p>
	<p>Favorites: This lists the contacts you have marked as Favorites. Click the More button on a contact and select Add to Favorites. The contact will display a ★ next to the name to indicate that it is one of the Favorites.</p>
	<p>Command Layer Recipients: This lists the contacts you have marked as Command Layer Recipients. Use the More menu for any contact and select the Add to Command Layer Recipients menu item. The contact will display a  next to the name to indicate that it is one of the Command Layer Recipients.</p> <p>NOTE: When you send or forward a command layer, the contacts specified as Command Layer Recipients will be preselected but they can be dynamically altered by selecting and/or deselecting contacts in the Send dialog.</p>
	<p>Plan Recipients: This lists the contacts you have marked as Plan Recipients. Click the More button  on a contact and select Add to Plan Recipients. The contact will display a  next to the name to indicate that it is one of the Plan Recipients.</p> <p>NOTE: When you send a plan, the contacts specified as Plan Recipients will be preselected but they can be dynamically altered by selecting and/or deselecting contacts in the Send dialog.</p>
	<p>Chat Rooms: This lists the Chat Rooms that you have currently joined.</p>
	<p>Hot Buttons: This lists the contacts that you or your administrator has marked as receivers of any hot button messages that you may have. For any contact you can tap on the More button and select Change Hot Button Recipients. This will allow you to add or remove this contact to any of the hot buttons.</p>

2.6 SETTINGS

You can use the **Settings** panel to set up your personal preferences.

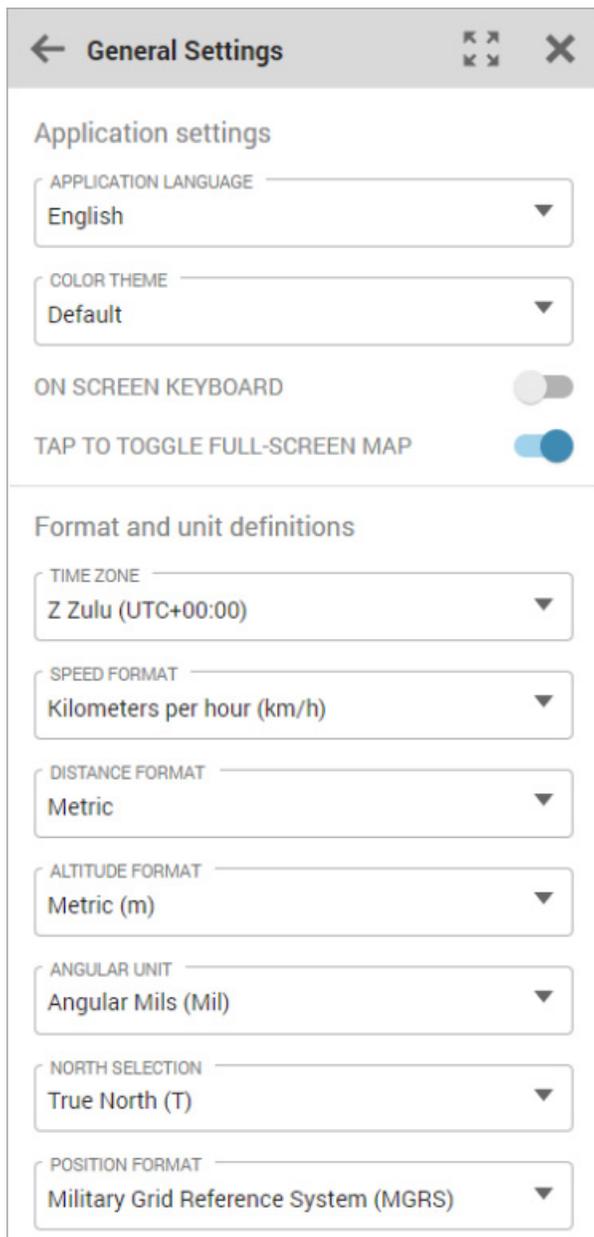


There are [General Settings](#), [Map Settings](#), [Symbol Settings](#), [Notification Settings](#), [Current Task Organization Settings](#), [Aggregated Layer Settings](#), [Network Settings](#) and [Quick Message Settings](#).

2.6.1 General Settings



The general settings let you customize some application settings and format definitions. Click the arrow on the right to see the options.



Application Language: Lets you change the language of the user interface and is only relevant if your system is localized to other languages. If there are other available languages, you can select them here.

Color Theme: Lets you choose between the default color theme or a dark color theme.

On-Screen Keyboard: Lets you turn the on-screen keyboard on and off.

Time Zone: Lets you choose Local Time or a specific time zone.

Speed Format: Lets you choose between kilometers per hour, miles per hour, or knots.

Distance Format: Lets you choose between metric, imperial - statute mile or nautical mile.

Altitude Format: Lets you choose between metric or imperial - statute mile.

Angular Unit: Lets you choose between angular mils or degrees.

North Selection: Lets you choose between True North, Magnetic North, or Grid North.

Position Format: Lets you choose between MGRS, UTM, Lat/Lon, and British National Grid.

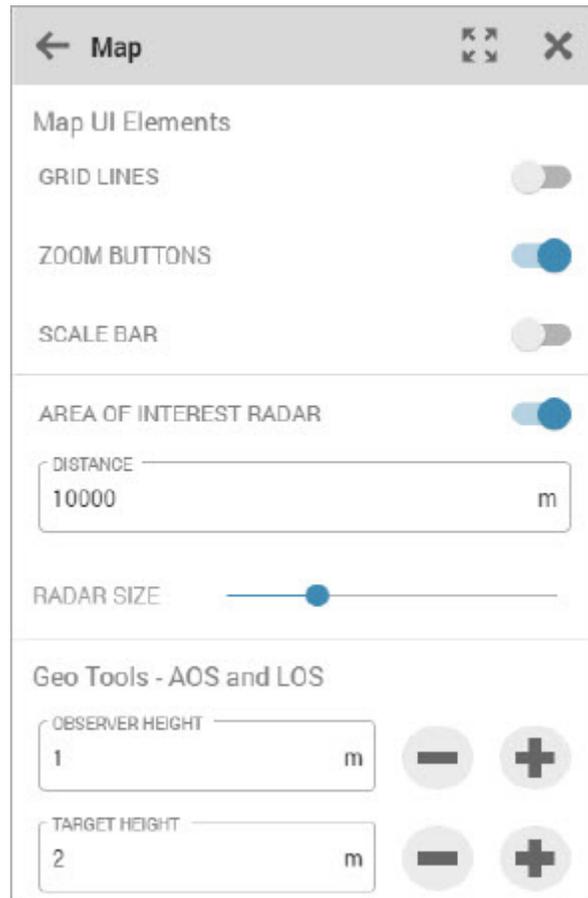
Remember to click **Save** to save your changes.



2.6.2 Map Settings



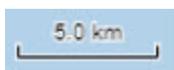
When you have a small screen, it is handy to be able to remove items from the display. The map settings let you customize what to show on the map.



Grid Lines: Use the toggle switch to either show or hide grids on the map.

Zoom Buttons: Use the slide toggle to either show or hide the [Map Buttons](#).

Scale Bar: Use the slide toggle to either show or hide the scale bar on the map.



The scale bar displays the scale used on the map. When visible it is located in the bottom right corner of your display.

Area of Interest Radar: Use the toggle switch to either show or hide the radar. Set the radius for your Area of Interest. Use the **Radar Size** slider to define the size of the radar so it fits with the size of your screen.

Geo Tools: AoS and LOS: Lets you set the default **Observer Height** and **Target Height** for when you create Area of Sight and Line of Sight objects in geo tools.

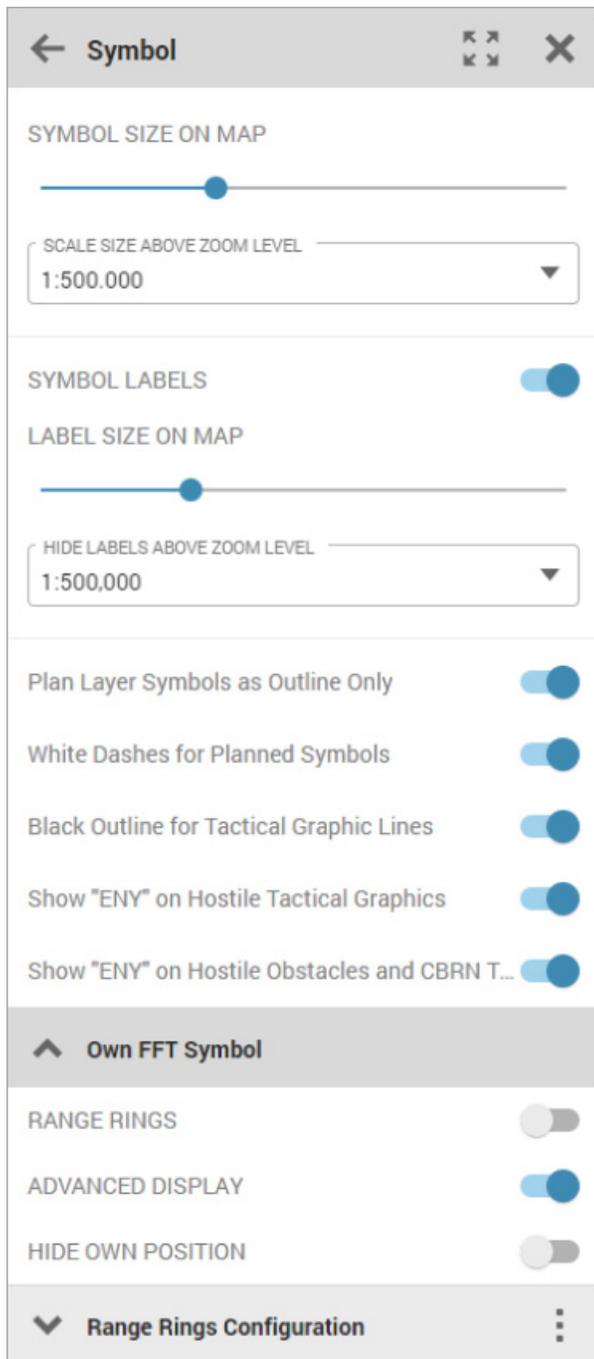
Remember to click **Save** to save your changes.



2.6.3 Symbol Settings



The symbol settings let you customize which symbols to show on the map.



Size on Map: Use the slider to define the size of symbols on the map scale.

Scale Size Above Zoom Level: Lets you decide when to start scaling size or if it should never scale.

Symbol Labels: Use the slide toggle to either display symbols labels or not.

Label Size on Map: Use the slider to define the size of the labels on the map.

Hide Labels Above Zoom Level: Lets you decide at what zoom level you no longer want to see labels or if you always want to see labels.

Plan Layer Symbols as Outline Only: Use the slide toggle to either display symbols on a plan layer as outline only or filled.

White Dashes for Planned Symbols: Use the slide toggle to either show planned symbols with white dashes or without.

Black Outline for Tactical Graphic Lines: Use the slide toggle to show tactical graphic lines with or without a black outline.

Show “ENY” on Hostile Symbols: Use the slide toggle to display ENY on hostile symbols.

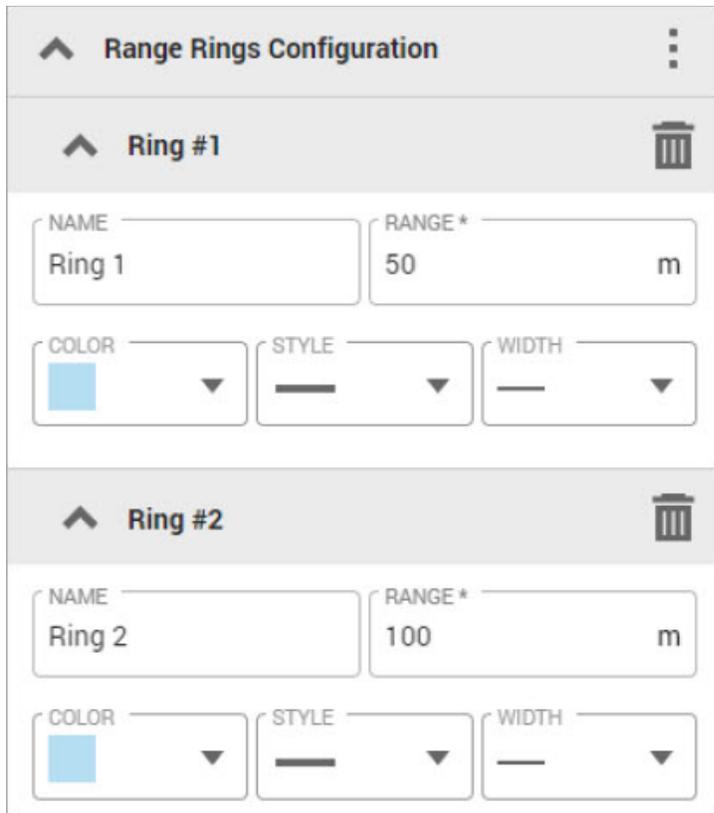
Show “ENY” on Obstacles and CBRN Symbols: Use slide toggle to display ENY on obstacles and CBRN symbols.

Range Rings: Use the slide toggle to either show or hide range rings on the map. When you show range rings, blue range rings are added to your symbol on the map, allowing you to quickly determine the range to symbols or objects which are reported or appear on the map within your close proximity. If you zoom above 1:50000 level on the map, the range rings automatically disappear. By using [Notification](#)

[Settings](#) you can also choose to be alerted if objects appear within your range rings.

Advanced Display: Use the slide toggle to use advanced display or not. You can display chassis, turret direction, and commanders view for your symbol if this has been set up.

Hide Own Position: Use the slide toggle to either show or hide your own position on the map. When you toggle the slide toggle to hide your own position, your symbol on the map turns orange to make it clear to you that you are not sharing your position with anyone else at the moment.



The screenshot displays the 'Range Rings Configuration' screen. At the top, there is a header 'Range Rings Configuration' with an expand/collapse arrow and a menu icon. Below this, there are two sections for individual rings:

- Ring #1:**
 - Name: Ring 1
 - Range: 50 m
 - Color: Blue
 - Style: Solid line
 - Width: Medium
- Ring #2:**
 - Name: Ring 2
 - Range: 100 m
 - Color: Blue
 - Style: Solid line
 - Width: Medium

In **Range Rings Configuration** you can change the display of the range rings and add/remove rings if needed.

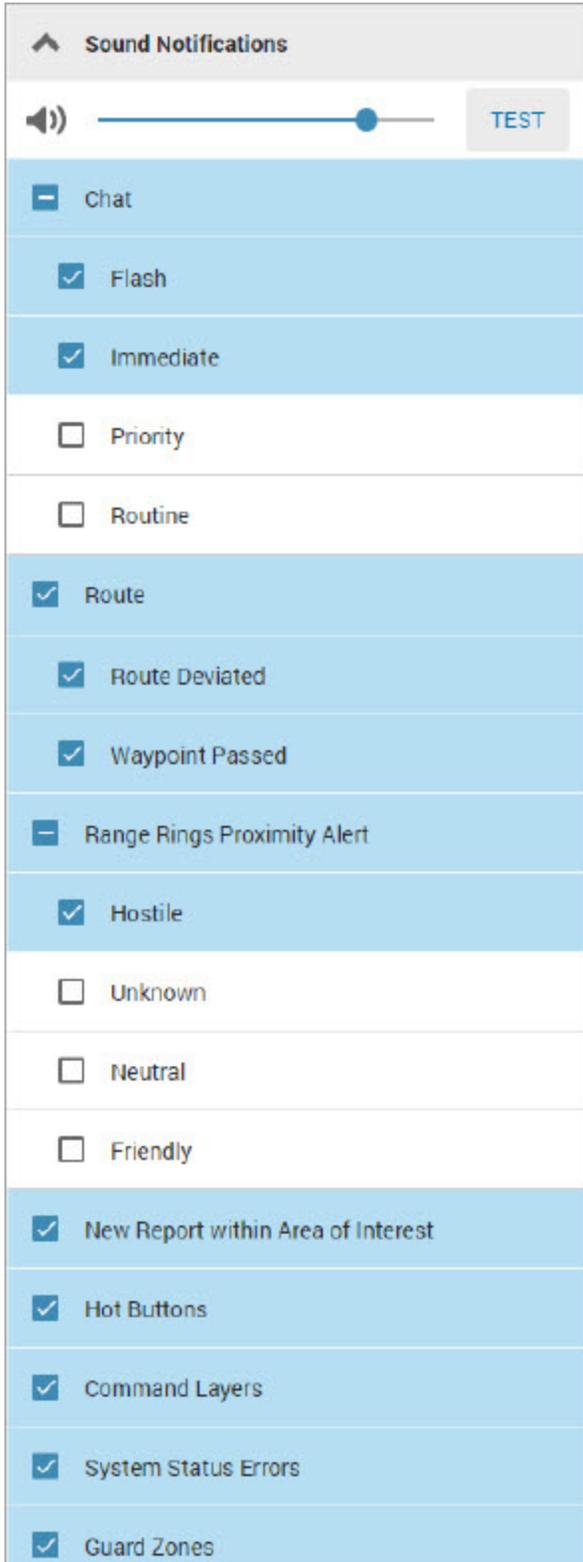
Remember to click **Save** to save your changes.



2.6.4 Notification Settings



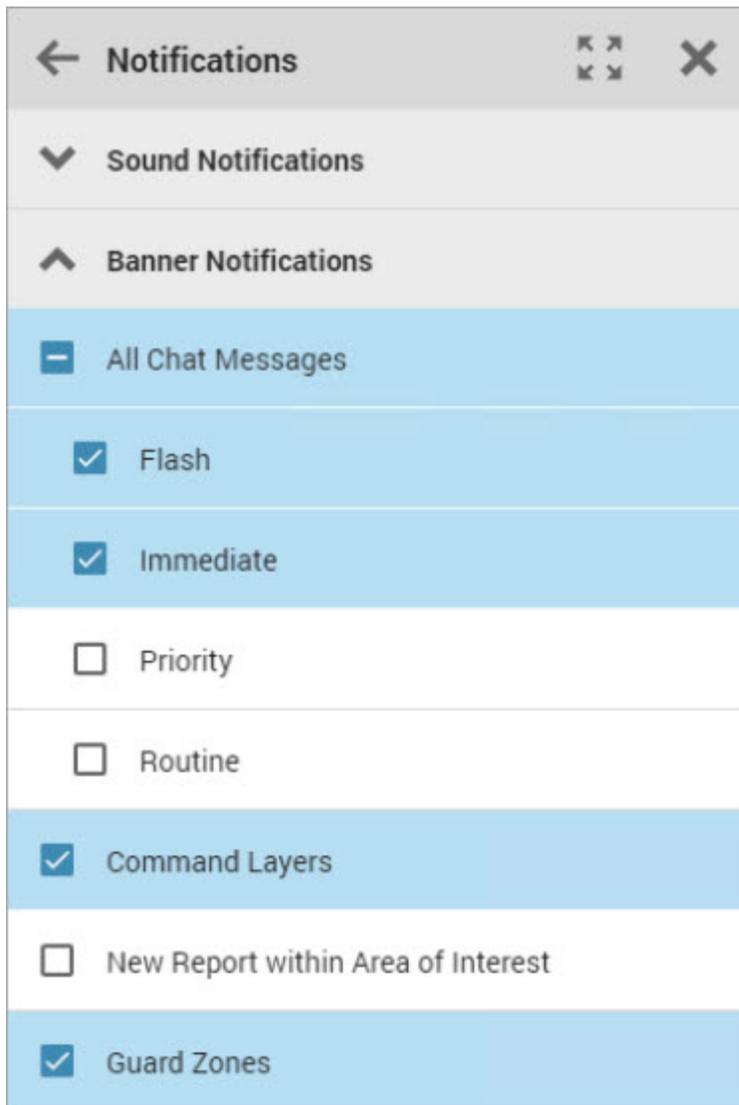
Notification settings let you customize which events you want to receive notification sounds and banners for. Toggle the different events on and off by tabbing on them individually.



Here you can set the sound notifications on elements, chat, route, range rings, hot buttons, etc. (the dialog is larger than this image shows).

You can use the slider at the top to adjust the volume. Use the [Top Bar](#) to mute sound notifications.

Note that you specify the radius for Area of Interest in the [Map Settings](#).



Here you can set the banner notifications on elements, for example, chat messages, command layers, and reports.

See [Banner Notifications](#) for more information.

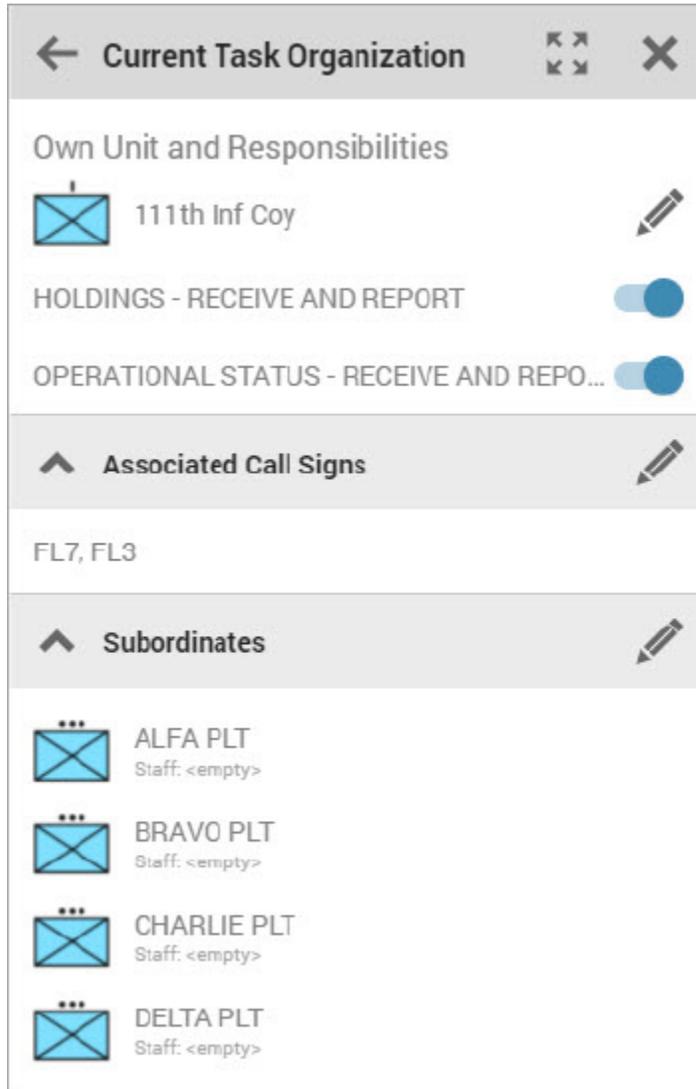
2.6.5 Current Task Organization Settings

 The current task organization can be dynamically changed over time by adding or removing subordinates from the list of units in the available ORBAT. This corresponds to attaching and detaching units. The Current Task Organization settings let you specify your own unit from the deployed ORBAT, your associated call sign(s), and your subordinates.

Once you select your own unit, your subordinates are automatically added. You can add more manually by using the edit pen  for the subordinates section for both units and call signs. You can also add associated call signs to list additional call signs who are part of the unit, for example, a second in command who will be in charge of reporting holdings and/or operational status.

NOTE

[Holdings](#), [Operational Status](#), and [Aggregated Layer](#) require that the Current Task Organization is defined.



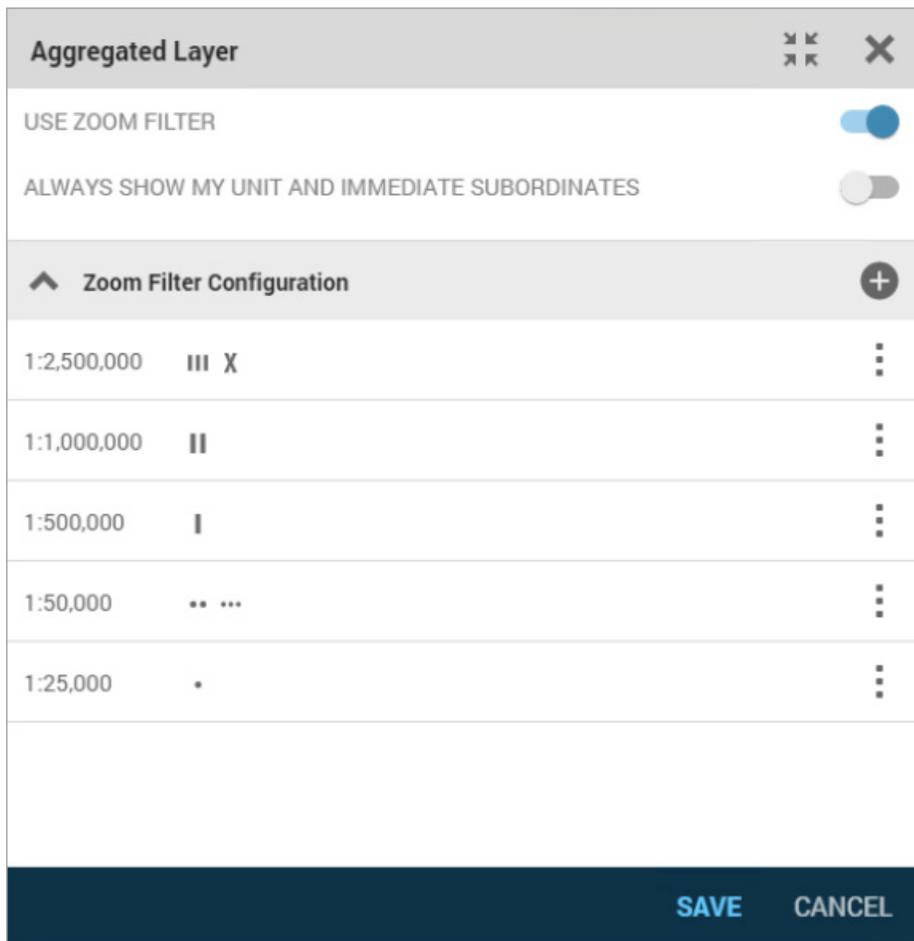
Use the pen  to edit any of the categories. Your own unit is used for both holdings, operational status, and the display of aggregated layer.

Toggle the **Holdings** and **Operational Status** on if you are responsible for receiving or reporting any of these.

2.6.6 Aggregated Layer Settings



This is where you enable or disable the Aggregated Layer Zoom filter. See [Aggregated Layer](#) for more information. If it is disabled all aggregated units will display on all zoom levels.



If you have enabled zoom filters you can decide if your own unit and immediate subordinates should always display, even if your current zoom level would otherwise have filtered them out. By default, five filters are defined, but you can change them to fit the your specific needs.

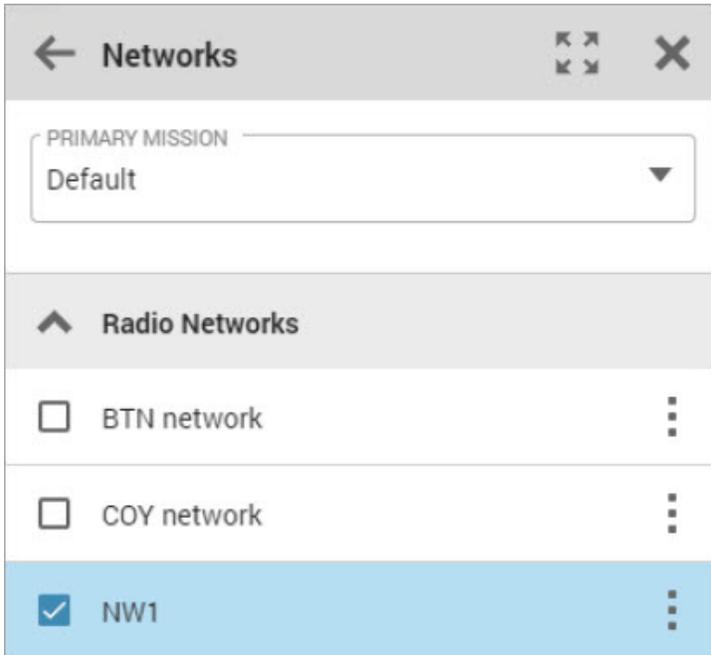
NOTE

When zoom filter is enabled, echelons of division and higher will not be displayed in the aggregated layer.

2.6.7 Network Settings



The Network settings let you change your primary mission (the primary mission is the mission you report on), if you have more than one available mission. These settings also let you select and deselect individual networks according to your needs.



If you have administrative rights set up as part of the deployment you can even change the settings for the networks by using the More button.

Configure Network 'NW1' ✕

BANDWIDTH
10000000

SUBNET MASK
10.5.0.1/24

PORT
23456

^ Broadcasting Missions

- Default
- B
- C
- D
- E
- F
- G
- H
- I

SAVE CANCEL

With administrative rights set up as part of the deployment you may also clear the data on the network. You can do this from the more button  in the top of the Network Settings. You can clear data on the network for individual missions or for all missions at once.

Clear Network Data ✕

^ All Missions

<input type="checkbox"/>	 Report Layer	Different Across Missions
<input checked="" type="checkbox"/>	 FFT Layer	212000AJAN22
<input type="checkbox"/>	 Current Task Org	Never

^ Alpha

<input type="checkbox"/>	 Report Layer	212000AJAN22
<input checked="" type="checkbox"/>	 FFT Layer	212000AJAN22
<input type="checkbox"/>	 Current Task Org	Never

^ Delta

<input type="checkbox"/>	 Report Layer	212000AJAN22
<input type="checkbox"/>	 FFT Layer	212000AJAN22
<input type="checkbox"/>	 Current Task Org	Never

^ Gamma

<input type="checkbox"/>	 Report Layer	191502AMAR15
<input type="checkbox"/>	 FFT Layer	212000AJAN22
<input type="checkbox"/>	 Current Task Org	Never

CLEAR **CANCEL**

The **Clear Network Data** dialog allows you to clear data within three areas: Report Layer, FFT Layer, and Current Task Org. Beware that clearing selected data will clear the data for everyone within the mission.

When you want to clear the Current Task Org and get a new one into the system, follow these steps:

- a. Open an hC2 PATROL application with administrative rights.
- b. Select which missions the current task org should be cleared from and select **Clear**.
- c. Deploy a hC2 PATROL platform with the new ORBAT. For details, see the hC2 PATROL and DISMOUNT Administrator Manual (10515-0479-4200).
- d. Start the deployed hC2 PATROL platform in order to distribute the ORBAT in the mission.

Clear Network Data comes with some limitations:

- For hC2 PATROL Dismount: if the track you are mounted on gets cleared you have to manually dismount to become visible to others again.
- Clearing FFT Layer will not have any effect on FFT with STC versions 3.2 and below.
- For HF networks it is only possible to clear FFT Layer and Report Layer, not Current Task Org.

NOTE

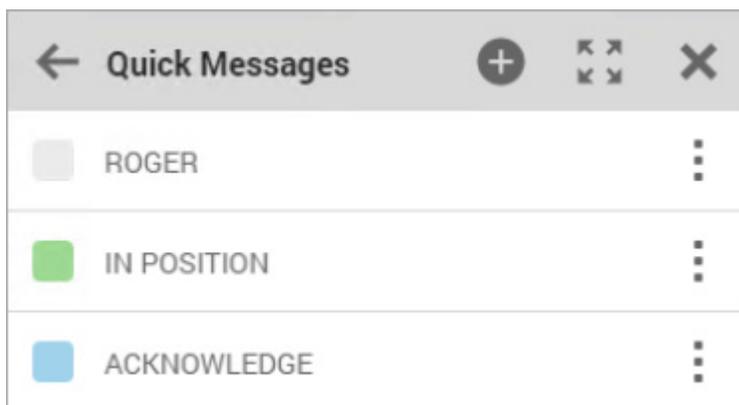
All users in the mission should be advised that this action has taken place, as it will also reset the organizational settings so all users are required to go back and select their settings in the Current Task Org.

NOTE

It is the intention that an administrator should configure and control the Network Selection and not the end user. The idea is that superior unit tells the user what to do when missions are to be connected or similar. For more information about missions, see the hC2 PATROL and hC2 DISMOUNT Administrator Manual (10515-0479-4200).

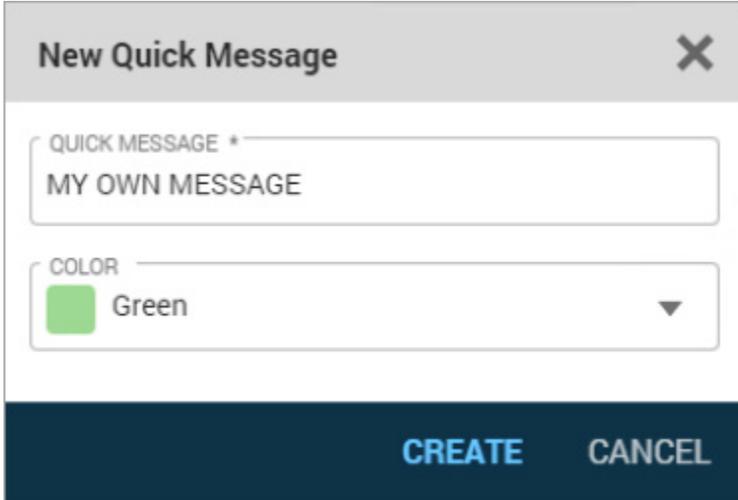
2.6.8 Quick Message Settings

 A quick message is a predefined text that you can add to a chat message to avoid having to use the on-screen keyboard on your touch device. The quick message settings let you customize which quick messages you can use from [Chat](#).

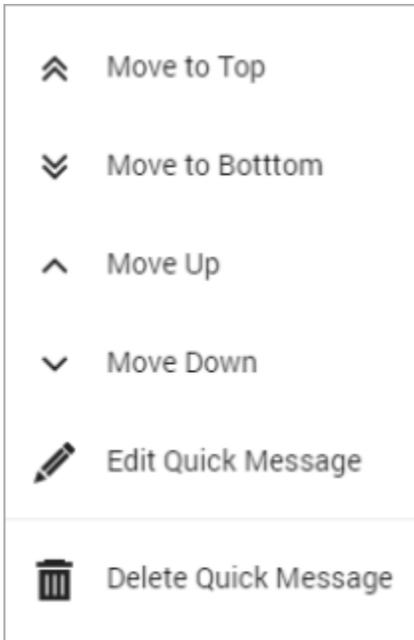


You can create a new quick message by clicking the plus button, .

You can change the background color of the quick message to categorize your quick messages, if desired. Colors are only visible to you, not the receiver of the chat.



You can reorder the quick messages by clicking the More button, . This opens a menu where you can move, edit, and delete the quick message.



2.7 SYSTEM STATUS



From the main menu you can open the System Status app, but you can also see the overall status as part of the top bar status icon. Tapping this icon will also toggle the System Status app to be open or closed.

The System Status gives you information about the reliability and health of the application. It can tell you if your battery is low or your GPS has stopped working.

2.8 TOOLBOX

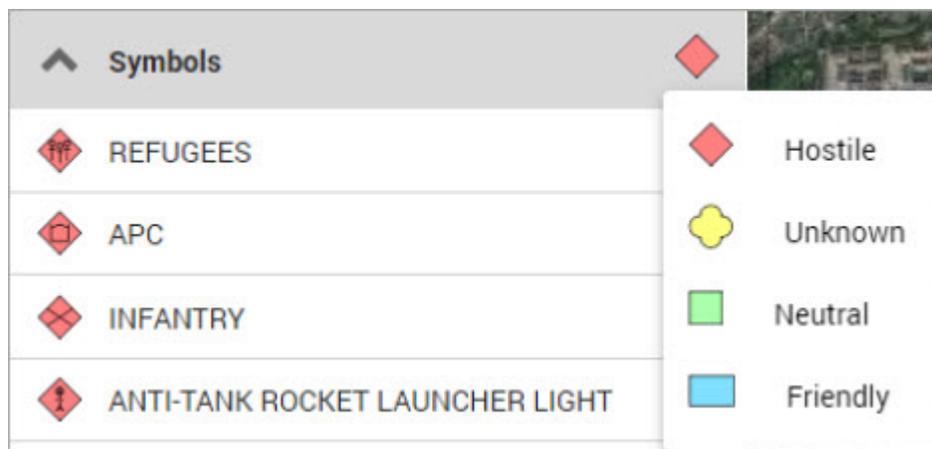


The toolbox is the overall container for all available symbols and contains both sketching tools and military symbols that you can use.

The objects or symbols available to you depend on the mode you are in: Report, Command, Plans, or Geo Tools. Each mode corresponds to an active layer. See the sections below for details on the different modes. The active layer is the layer you work on and only one layer can be active at a time. The active layer is displayed in the toolbox and in the Object Info Box when you add objects to the map.

When you open the toolbox you will see the currently active layer and the corresponding object and symbols allowed on that layer.

The toolbox contains a Favorites category for reports and plans where you can keep the symbols and sketch tools you use the most. To add symbols and sketch tools to Favorites, use the More button  and select **Add to Favorites** in the drop-down.



You can change the hostility of the categories by tapping the hostility symbol and selecting the one you want. This will change the hostility for all symbols in the entire category.

Map Symbol Standard

Nations have agreed on various standards of symbols to use in order to maintain interoperability and thus increase the ability to recognize symbols across nations. Military symbols are natively supported by hC2 PATROL based on the U.S. MIL-STD-2525C Common Warfighting Symbology. hC2 PATROL uses the MIL-STD-2525C symbol standard for military symbology rather than the equivalent NATO APP6.

2.8.1 Report Mode



Tap on Report in the toolbar to switch to Report mode and make the Report layer active. The toolbox will display the symbols, sketch tools and tactical graphics you can add to the map. Tap the symbol you want to add and place it on the map. Notice that the top bar shows a Report badge to indicate the current mode.

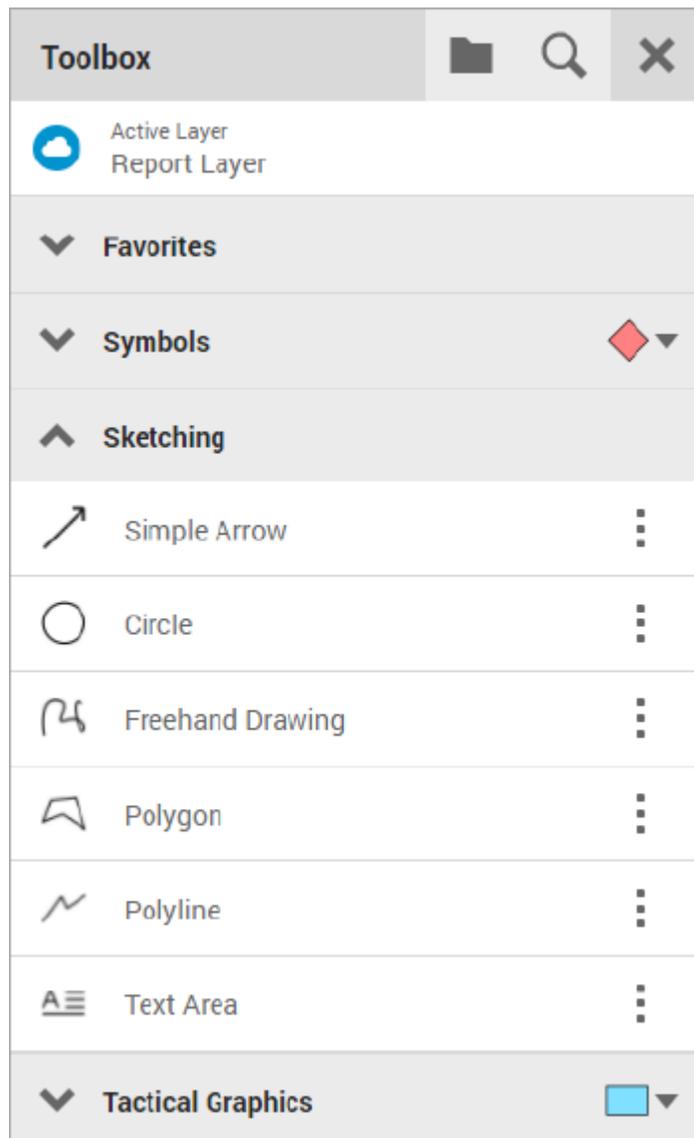
The **Symbols** category contains 11 default symbols. To find any other symbol you can either use free text search  or browse  to locate the symbol you need. You can add a symbol to the Favorites category by clicking the More  button and selecting **Add to Favorites** in the drop down.

The **Sketching** category contains six sketch objects: Circle, Freehand Drawing, Polygon, Polyline, Text Area, and Simple Arrow.

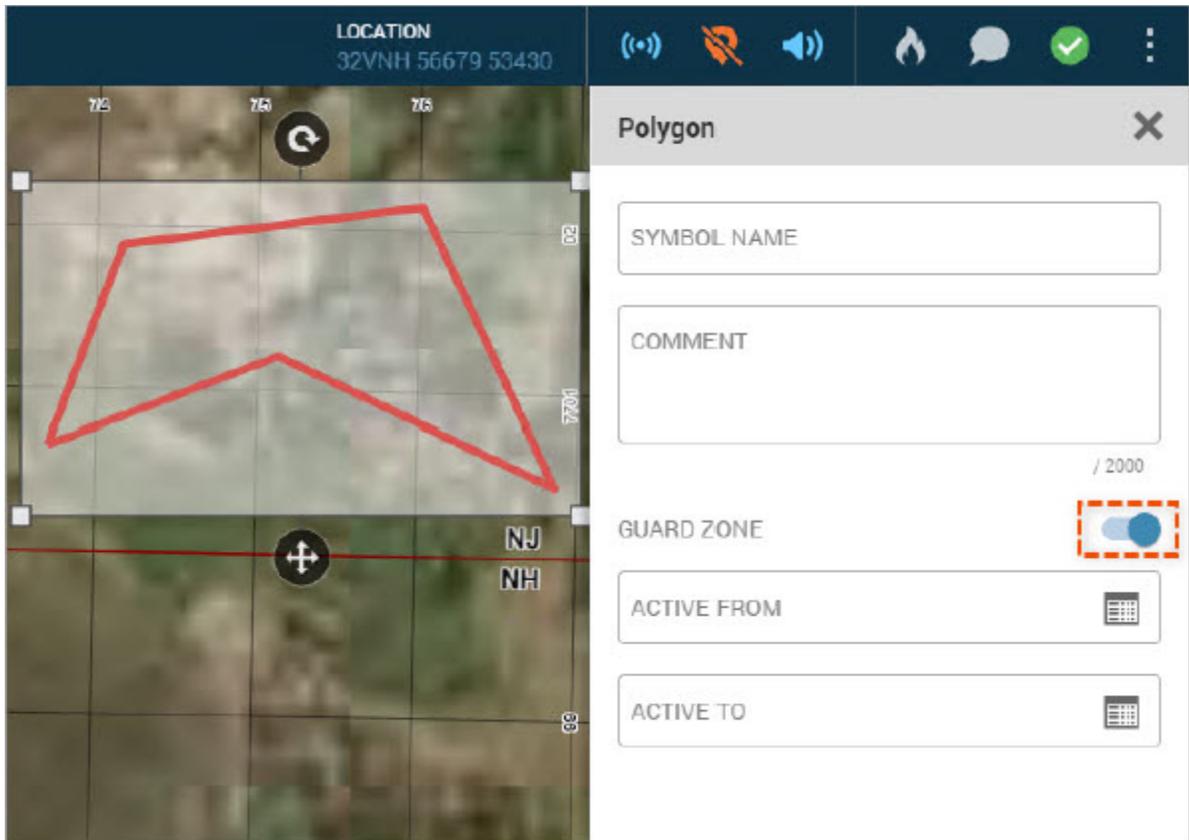
The **Tactical Graphics** category contains eight default symbols. Use search or browse to locate any other symbols you need.

NOTE

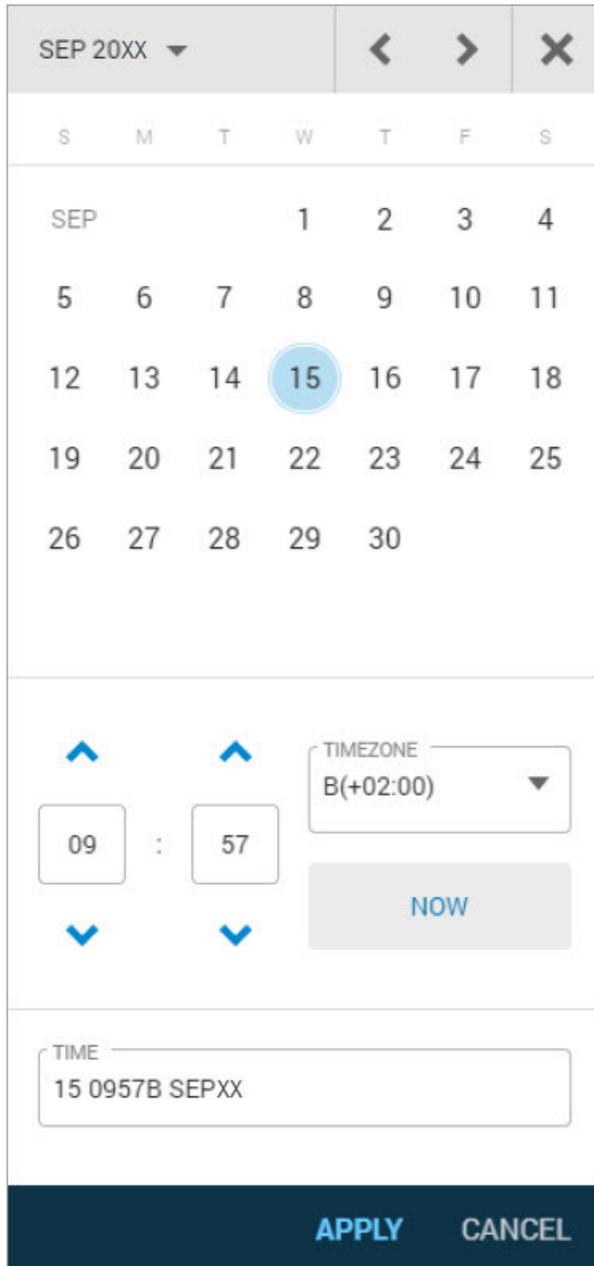
If you create tactical graphics with intersecting lines, they will not appear correctly in hC2 COMMAND.



You can convert polygons and circles to guard zones with an optional time frame connected to them. Any FFT who enters a guard zone will receive a warning.



To set the time frame you can use the DTG picker.



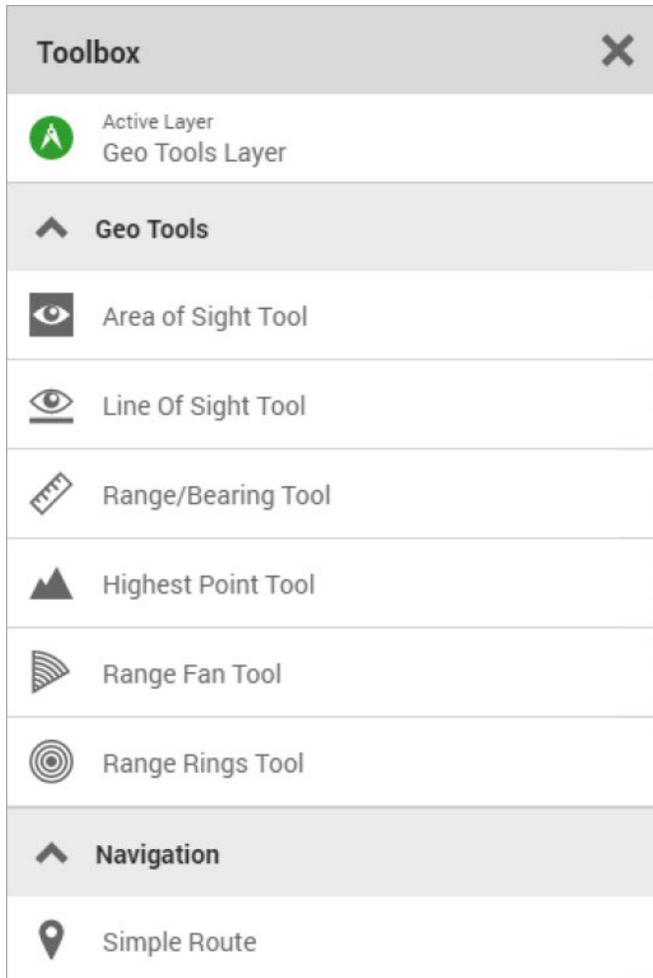
The image shows a date and time selection interface. At the top, there is a header with 'SEP 20XX', navigation arrows, and a close button. Below this is a calendar grid for the month of September. The date '15' is selected and highlighted with a blue circle. Underneath the calendar is a time selection section with two input boxes for hours ('09') and minutes ('57'), a colon separator, and a 'TIMEZONE' dropdown menu set to 'B(+02:00)'. A 'NOW' button is also present. At the bottom of the time section is a 'TIME' input field containing the text '15 0957B SEPXX'. The entire interface is contained within a dark blue footer bar with 'APPLY' and 'CANCEL' buttons.

2.8.2 Command Mode

 Tap on Command in the Map Toolbar as a shortcut to switch to Command mode and make the Command Layer active. The Toolbox will display a number of drawing tools which you can use to draw on the map to create a Command Layer. You can style your drawing by selecting a different color brush during your sketch as well as choose the width and style of the brush. You can send the Command Layer to selected recipients by using the contextual Send icon. Use the contextual Trash Can icon to clear the Command layer when you are in Command mode. See [Command Layer](#).

2.8.3 Geo Tools Mode

 Tap on Geo Tools in the Map Toolbar as a shortcut to switch to Geo Tools mode and make the Geo Tools layer active. The toolbox now gives you the **Area of Sight**, **Line of Sight**, **Range Bearing**, **Highest Point**, **Range Fan**, and **Range Rings** tools as well as a **Simple Route** tool for navigation. The Geo Tools you place on the map are only visible for you and they are removed on restarting the hC2 PATROL Application. Use the contextual trash can icon  at the bottom of the map to clear the Geo Tools layer when you are in Geo Tools mode.



	<p>Area of Sight: This tool lets you specify an area where you can determine what you can see from a specific point. The area covered by the green color is what you can see from the center point, and the red area is the terrain that you cannot see from the center point. You can snap AOS to a symbol.</p>
	<p>Line of Sight: This tool lets you specify a line where you can determine what you can see from a starting point to a target point and vice versa. You can specify default observer and target height in Settings > Map and you can adjust them for individual line of sight calculations.</p>
	<p>Range/Bearing: This tool is for measuring distances. You can mark several points and see the distance and bearing between each point and at the end of the arrow you can see the total distance. You can snap to symbols or FFTs and update the range and bearing dynamically if they move.</p>
	<p>Highest Point: This tool lets you specify a circular area and gives you the highest points within the circle, the highest points for each quarter of the circle, and the overall highest point for the area. Add it to the map and later, you can adjust the radius as well as move the entire tool by the center-point.</p>
	<p>Range Fan: This tool lets you place a fan on the map and specify the bearing and angle of this fan. You can add rings or remove rings from the fan, and style the rings to fit your purpose. You can save a customized version of your own favorite range fan display and use this as a future default.</p>
	<p>Range Rings: This tool lets you place range rings on the map to be able to set up measurements for different weapon type ranges. You can add or remove rings, and change color, style, and distance for the rings individually. You can save a customized version of your own favorite range ring display and use this as a future default.</p>
	<p>Simple Route: This tool is for creating a simple route you can use to navigate by. Every point you create in the route will be a waypoint and when you later execute the route a Execute Panel will guide you from one waypoint to the next. See Execute Route for more information.</p>

NOTE

The **Area of Sight**, **Highest Point**, and **Line of Sight** tools only work if the map contains elevation data. The tools do not calculate obstacles like woods, houses, and the like, but merely elevation of the terrain.

2.8.4 Plans Mode



Tap on Plans in the toolbar to switch to Plans mode and make a plan layer active. If you have had a plan layer active before, it will default to this layer if possible. If not, you will be asked to specify which plan layer to set to active. You can always change the active plan layer to a different plan layer by tapping the Active Layer part of the toolbox which opens a **Select Active Layer** dialog. If you have no editable plans available with any layers, you are directed to the Plans app to create a new plan.

The toolbox will display the symbols, tactical graphics, and sketch tools you can add to the map. Tap the symbol you want to add and place it on the map. Notice that the top bar shows a Plans badge to indicate the current mode.

The **Symbols** and **Tactical Graphics** categories contain a number of default symbols. To find any other symbol you can either search  or browse  for the symbol you need. You can add a symbol to the Favorites category by clicking the More  button and selecting **Add to Favorites** in the drop-down.

NOTE

If you create tactical graphics with intersecting lines as part of a plan which is later distributed to hC2 COMMAND, the plan layer with the tactical graphics will not be displayed correctly.

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CHAPTER 3

SITUATIONAL AWARENESS

3.1 SITUATIONAL AWARENESS

hC2™ PATROL provides dismounted soldiers enhanced tactical and situational awareness. You can exchange own position location and spot reports as well as exchange command layers between peers, subordinates and superiors through the network of tactical radios. hC2™ PATROL provides its users an overview of the battlefield.

hC2™ PATROL can take in tracks from various sources such as hC2™ DISMOUNT and hC2™ COMMAND as Friendly Force Tracks (FFT) and enemy reportings, from radars from ships or aircraft, etc. All that information will display the actual situation in the battlefield and bring situational awareness to the commanders. Having situational awareness will help commanders make more rapid decisions and give subordinates to ability to react swiftly, concentrated and focused.

You can report observations and share them between own units and headquarters. All reports are automatically shared with the tactical situational picture and are visible to other units within the tactical radio network across subnets. After having distributed reports, any commander keeping the reported object under observation can move and update location and information of a reported object.

NOTE

If you do not have an STC connection, you are on your own and do not get any updates—in or out.

This chapter will introduce you to [Layers](#) which are your means of separating different types of information, [Honesty Traces](#) which let you keep track of movements of own forces, and will also introduce [Video](#) as a means to improving your local situational awareness. [Bookmarks](#) and [Notifications](#) are also introduced.

3.2 LAYERS



You can open the **Layers** panel by tapping the **Layers** button from the map toolbar. Having layers is a means of separating different types of information into different boxes, allowing the information to be switched on/off individually.

In [Figure 3-1](#) below, the check boxes indicate that the **Aggregated** layer, **Report** layer, and the **Own Command** layer are displayed on the map while **FFT** layer, **Geo Tools** layer, and **Honesty Traces** layer are not. You can display as many layers as you like.

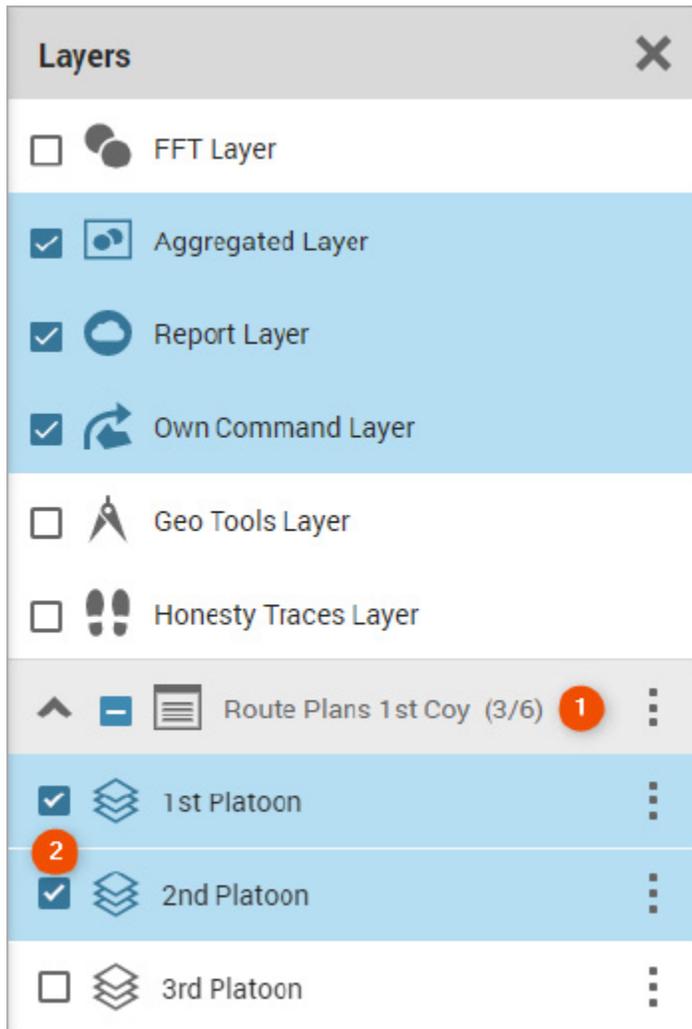


Figure 3-1. Layers Panel

Additionally you will see a list of current [PLANS](#), and check boxes offer information on how many of the layers from the individual plans are displayed.

- Use the more button in the plan header to add an entire plan to the layers panel or remove all layers.
- Use the more button of the individual layers to remove them individually.

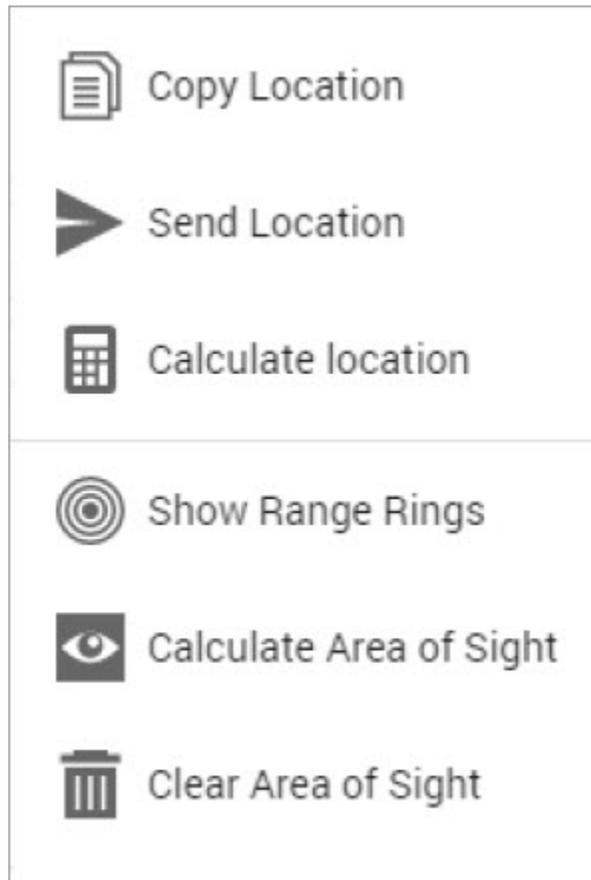
In the image above, the 'Route Plans 1st Coy' displays three layers out of six **1** and currently two of them **2** are visible on the map.

3.2.1 FFT Layer

 Your own FFT (friendly force track) is always displayed as a green dot on the map. If you select the option to hide your own position, it will become black. If the system suspects your GPS is being spoofed, your FFT will turn orange, and you will receive a notification. Other FFTs are displayed as blue dots. If an FFT has not reported its location for a while or if you lose the GPS signal, it will turn gray. If your hC2™ PATROL is deployed as a hC2™ PATROL Dismounted Application you have the option to dismount and mount different vehicles. To mount, tap on the FFT you want to mount on the map and select **Mount** from the More button in the

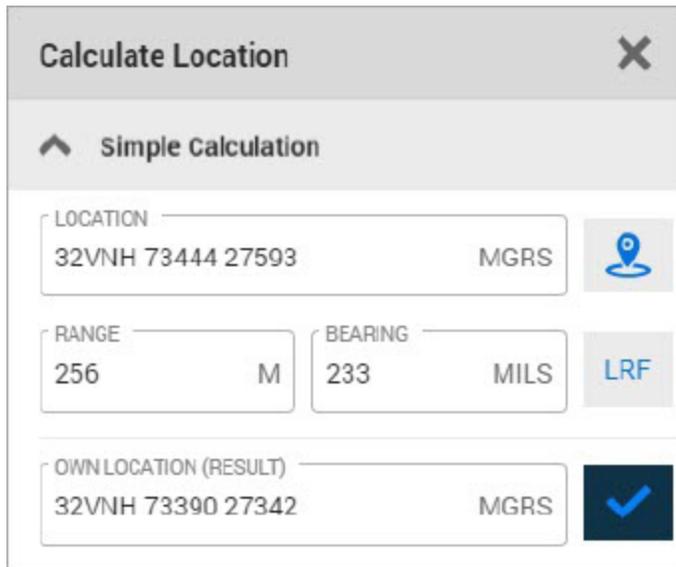
appearing action wheel. To dismount, use the More button in the top bar and select **Dismount**. See [Symbol Settings](#) for more information.

You can calculate your location by pointing out relative locations in the area.



Tap on your own FFT and select **Calculate Location** from the More button .

This will open the **Calculate Location** panel, where you can do a **Simple** calculation based on a range and bearing to a specific point, or a **Triangulation** based on 2-3 points with a bearing to each.



Calculate Location

Simple Calculation

LOCATION 32VNH 73444 27593 MGRS

RANGE 256 M BEARING 233 MILS LRF

OWN LOCATION (RESULT) 32VNH 73390 27342 MGRS

For a simple calculation, enter a location or use the pointer icon  to select a point on the map and enter a range and a bearing to that point. If you have a [Laser Range Finder](#) connected to your device, you may use this to provide the range and bearing. Just tap the **LRF** button.

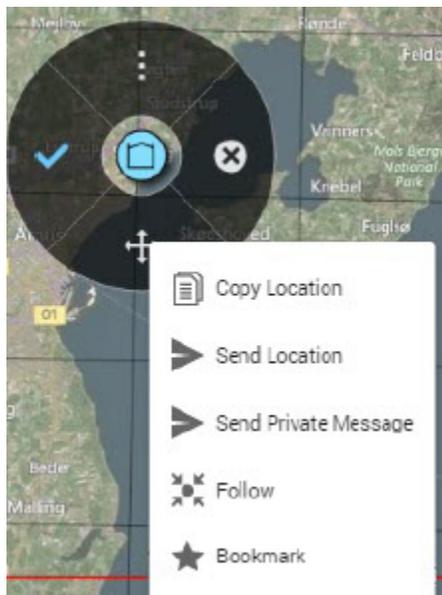
To apply the calculated location to your new location, tap the check mark .

NOTE

There is a 20 km range limit for LRF measurements.

For triangulation, use same approach to enter locations and bearings to calculate your location.

From the action wheel, you are able to move the position of your own and other FFTs on the map.



Using the action wheel, you can **follow** other FFTs. Following an FFT will allow you to keep the map centered on that FFT. Any interaction with the map, while in follow mode, will make you unfollow the FFT.

You can also **copy** and/or **send** the location of the FFT or you can **bookmark** the FFT.

3.2.2 Aggregated Layer



As FFT nodes within the network select their unit in the current organization, the aggregated layer is populated with these units. The aggregated layer lets you filter how many and which units you want to display on the different zoom levels.

Basically you can decide to only display the lower echelons when you are zoomed in close and as you zoom out, the lower echelons disappear as the higher echelons replace them. This will ensure that the map does not get too cluttered with units when you zoom out. The default filters are defined by an administrator in hC2™ Management Tool. See details on how to do this in hC2™ PATROL and hC2™ DISMOUNT Manual (10515-0478-4200) but you can modify them in [Settings](#).

You can see the immediate subordinates for any unit in the aggregated layer, regardless of the zoom filter, by selecting a unit and selecting **Show Subordinates** from the More option in the appearing action wheel. Any subordinates are displayed with a line drawn to the unit.

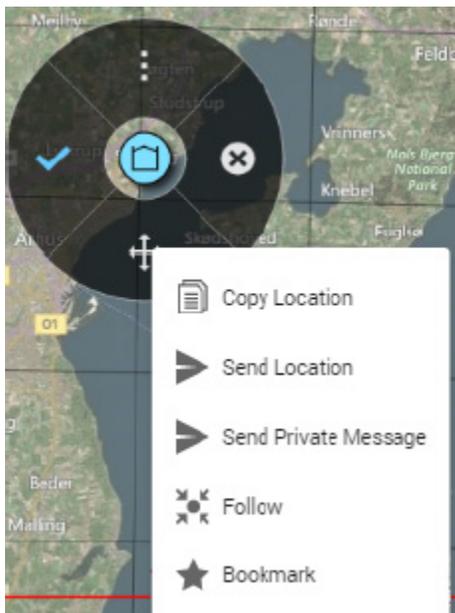
3.2.3 Report Layer



You must be connected to STC (Tactical Communication) in order to create reports. If you are not connected to STC, you are not connected to anyone else, and you cannot exchange data.

When you see an object in the terrain that you want to report, either long press on the map and report using the action wheel OR tap **Report** in the Map Toolbar which will present you with a longer list of available symbols. Place the symbol on the map.

The center of the symbol is the exact location of the symbol.



In the more button  of the action wheel for reporting you can set the location of your own FFT, or you can create a bookmark on the location.

3.2.4 Geo Tools Layer



The Geo Tools layer is a layer which is only visible for you. This is where you can work with geo tools, for example: Area of Sight, Line of Sight, Range Bearing, Highest Point, Range Fan, Range Rings, or Simple Routes. See [Geo Tools Mode](#) for more information.

3.2.5 Honesty Traces Layer

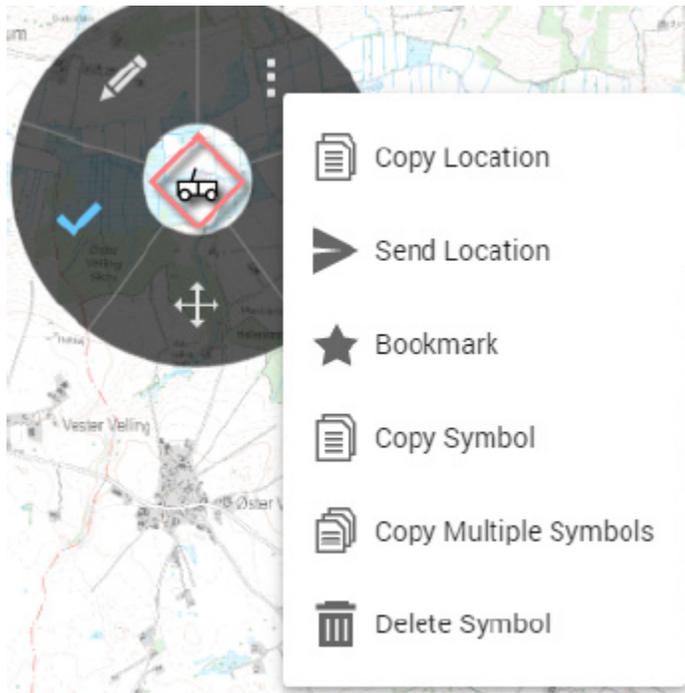


The Honesty Traces layer is a layer which is only visible for you. Honesty traces let you analyze where your own forces have been and also let you can view traces from other sources.

See [Honesty Traces](#) for more information.

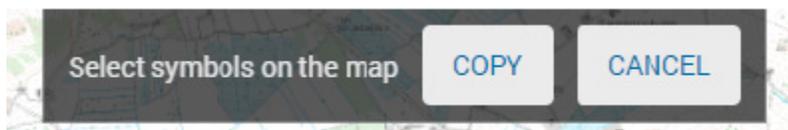
3.3 SYMBOLS

You can copy any symbol from the map and place it either as a new symbol on the same layer or as a new symbol on a different layer.



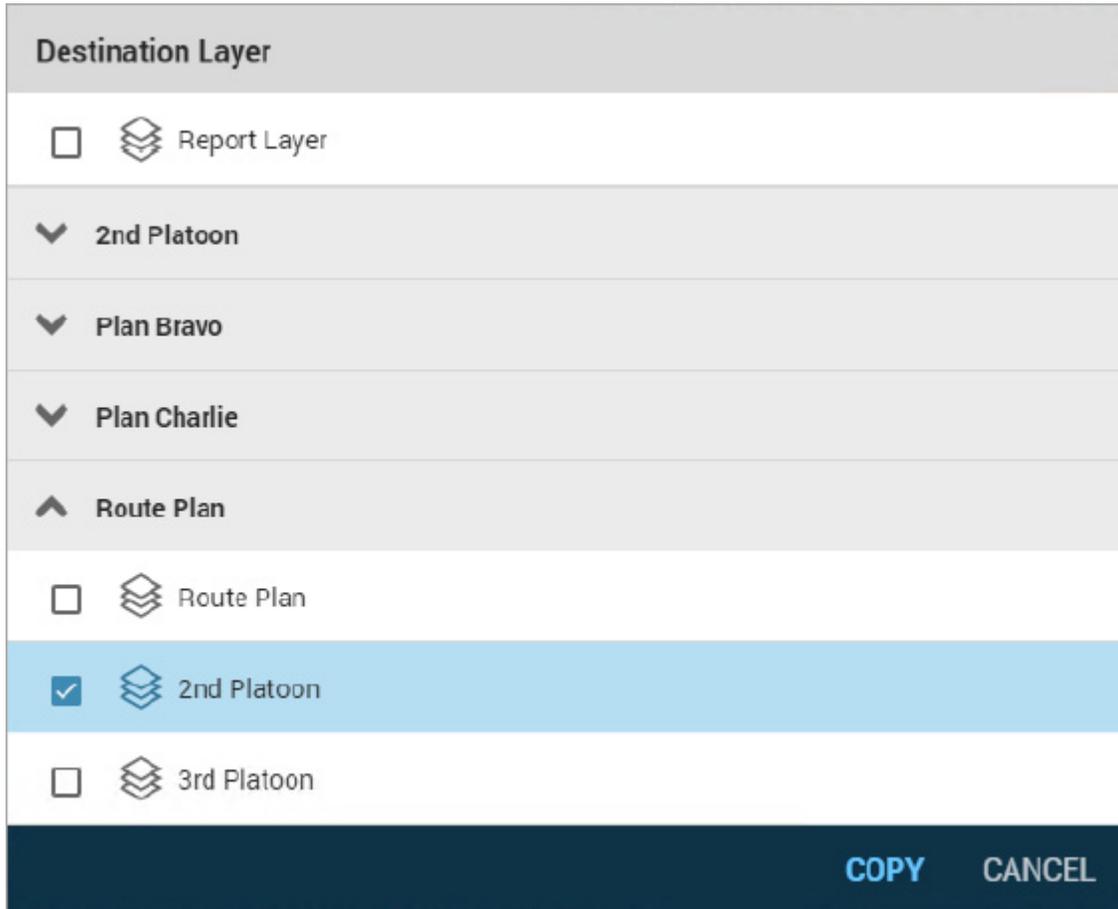
Select the symbol you want to copy and from the more button  in the action wheel (or the action toolbar if it is a multi-point symbol), select the **Copy Symbol** option.

You can also copy multiple symbols at once by selecting **Copy Multiple Symbols**. If you do this a panel will open at the top of the screen.



Tap on the symbols you want to copy and finish by selecting the **Copy** option in the top panel.

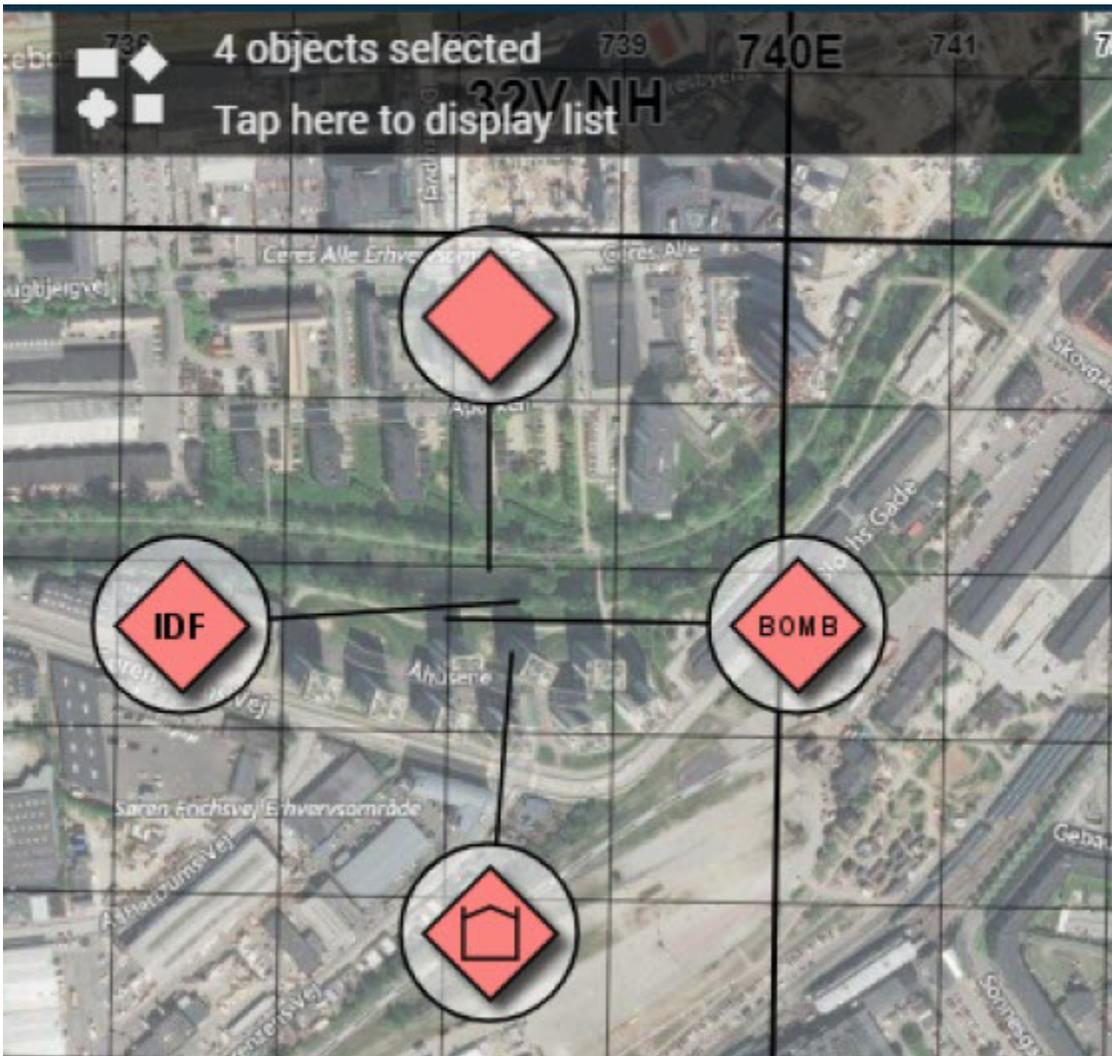
Once the symbols have been copied you must select the destination layer. By default the same layer is preselected, but you can choose to copy to a different layer.

**NOTE**

You can only select editable layers as destination layers for the copied symbols.

3.4 DECLUTTER

When there are a lot of symbols and objects on the map it can be difficult to select the correct one. The Declutter functionality will help you in this situation. If you tap on an area of the map where there are multiple symbols, single-point symbols will spread out with a leader line to the actual location.



From here you can select the symbol you want to look closer at, or you can tap the object info at the top of the map. This opens a Declutter list. If there are both single-point and multi-point symbols where you tapped on the map, the list will display immediately as well as display any single-point symbols that are spread out.

If there are more than 20 symbols the list will display immediately and if you have more than 100 symbols you will be asked to zoom in to display a more sensible number.

Declutter		✕
	Polygon	Report Layer
	UNIT	Report Layer
	BOMB/BOMBING	Report Layer
	Jeep	Report Layer
	Own Position	FFT Layer
	MX-Demo-C02	FFT Layer

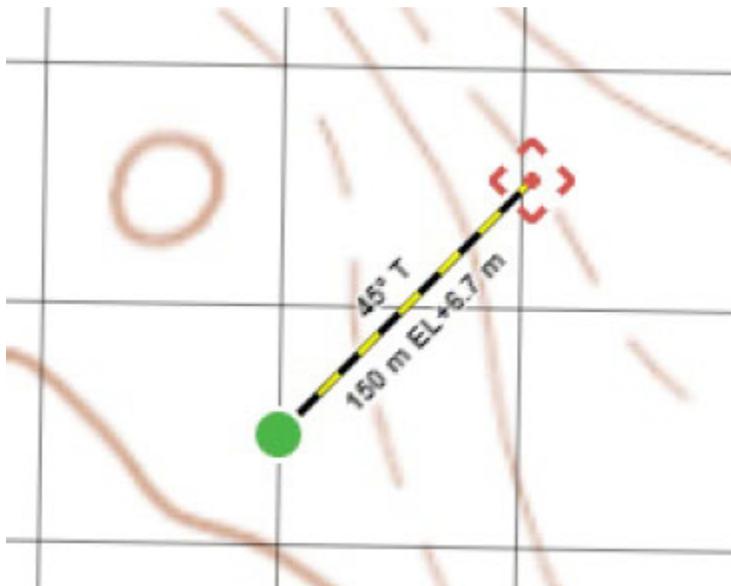
The Declutter list displays all the symbol icons, their names if available, otherwise the type, and tells you which layers the symbols reside on.

NOTE

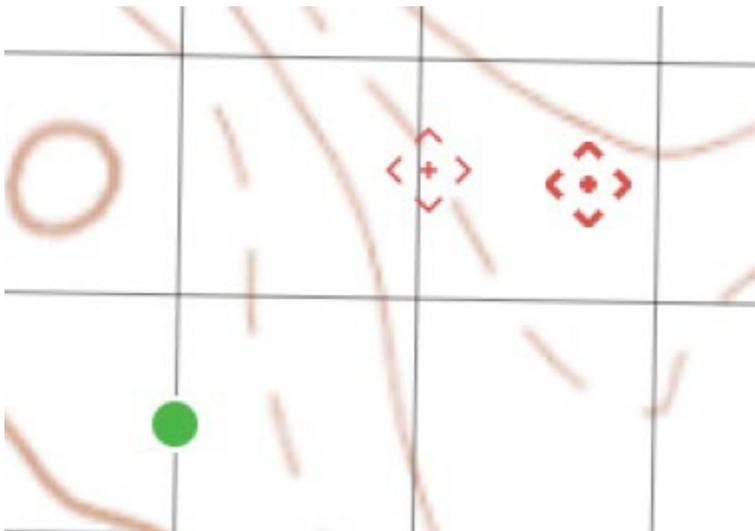
If you are using a small device, the Declutter list will never display immediately when you tap the map (even if there are multi-point objects), but you can always open it by tapping the object info box.

3.5 LASER RANGE FINDER

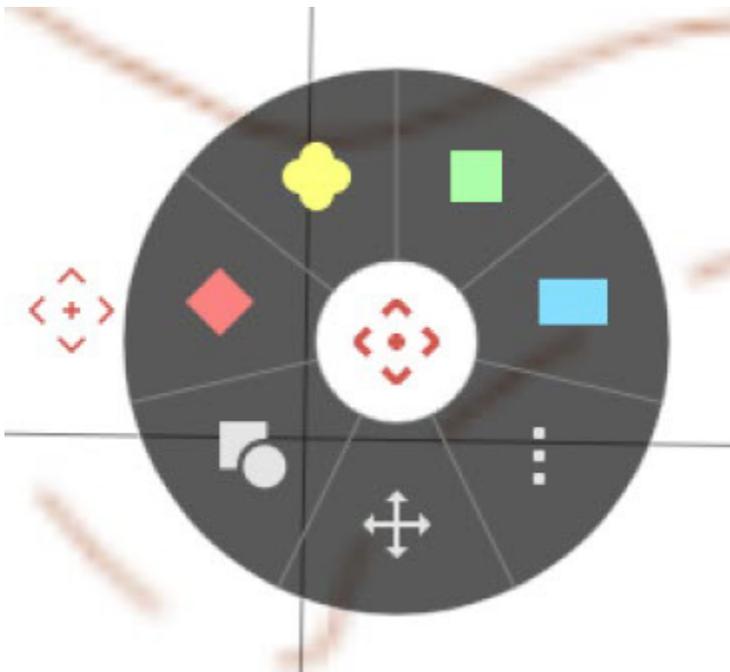
If you have a Laser Range Finder (LRF) connected to your device, you can use it to display measurements on the map. Measurements created with an LRF device are displayed on the map as red rhombus symbols .



The latest measurements have a bold view line from the LRF position to the measurement. The view line along with measurements is visible for 10 seconds while the rhombus symbols are displayed for 30 seconds.



After the temporary view line and labels disappear, only the red rhombus symbols are displayed on the map. There is a limitation of five rhombus symbols displaying at once. If you create more, the oldest are removed by the system.



You can select a measurement in order to report a symbol in that location, just as if you had long-pressed on the map.

If a report is created on a measurement the system will replace the measurement with the report.

NOTE

To use the LRF feature you must either have an Own Position set (GPS or set Own Location via long-press on map) or the LRF device must provide its position.

3.6 VIDEO



You can access the Video app from the main menu.

The Video app has three tabs: **Feeds**, **Recordings**, and **Snapshots**.

You can configure as many new video feeds as you like. This requires that you supply the video feed with a name and the URL to the source of the feed. You may have some pre-configured video feeds in the list. these are part of your deployment and you cannot edit or delete them and therefore they are displayed with a lock icon  .

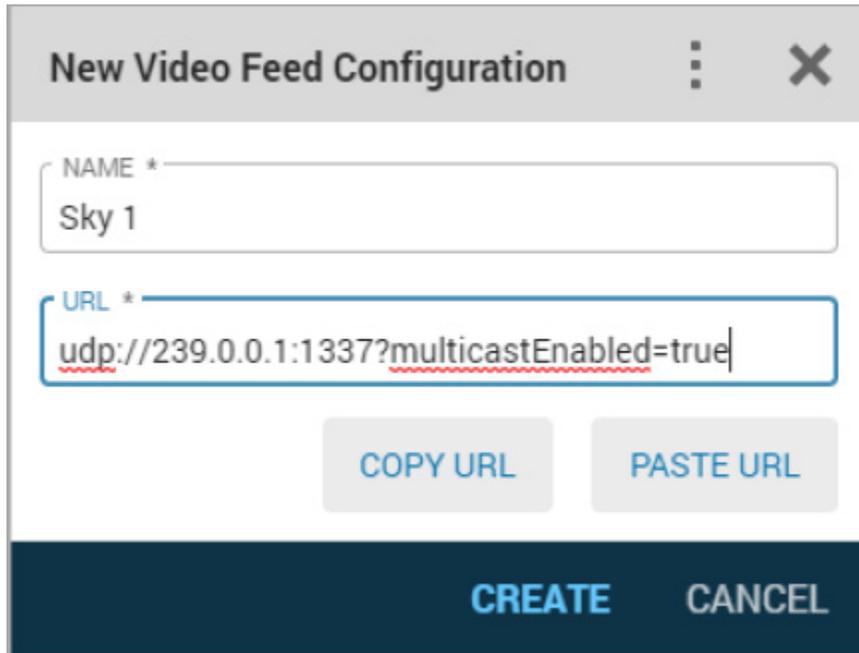


On the Feeds tab, the list of video feeds gives you information about the status of the feed.

- A green video icon  indicates that the video feed is ready to play.
- A gray video icon  indicates that the feed is currently unavailable.
- The eye  indicates if the symbol (UAV or similar) is visible on the map.
- The shared icon  indicates the location of the UxV track providing this video has been shared on the FFT layer.
- The red dot  is a recording indicator to show which of the feeds is being recorded, if any. Any recordings created will appear in the Recordings tab from where you can view them, rename them or delete them.

The more button  in the top contains an option to **Show/Hide Map Symbols on Video**. It controls whether reported single-point symbols are shown on top of the video. This is part of the advanced video support.

Use the plus button  at the top to add and configure a new video feed. In the appearing dialog, you can give the video feed a name and enter the URL. Since the URL is quite complex in structure the best way to ensure the validity is to have someone in your network send it to you, copy it from the message and then paste it here.



New Video Feed Configuration

NAME *
Sky 1

URL *
udp://239.0.0.1:1337?multicastEnabled=true

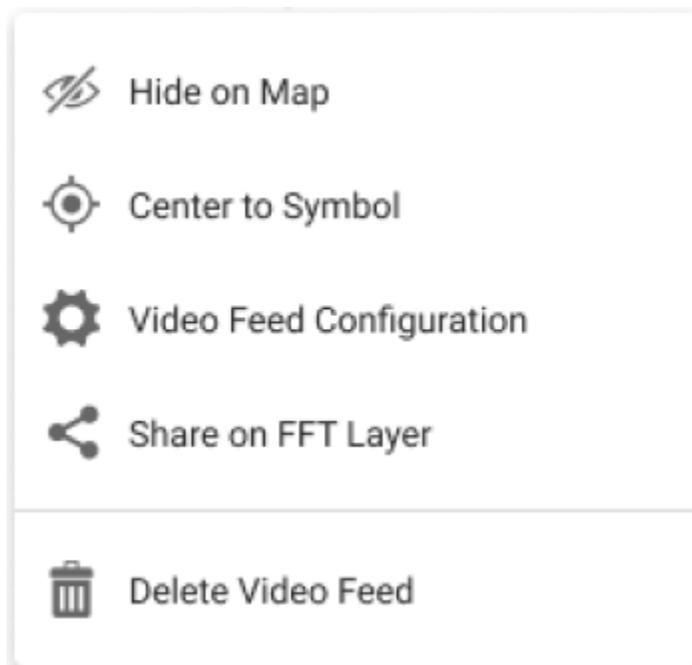
COPY URL PASTE URL

CREATE CANCEL

From the more button  for a feed, you can select the **Advanced URL** mode. This is only recommended for experienced users. You need to add information about protocol, host, port, etc.

NOTE

The supported protocols are UDP, RTMP, and Direct Show (dshow). You can configure a fallback option for all protocols to open the video in VLC media player.



From the more button  you can select **Show/Hide on Map** or **Center to Symbol**.

Video Feed Configuration lets you edit the video feed configuration, for example, name and URL.

Share on FFT Layer will share the track on the FFT layer, making it available for others to see.

Finally, you can select **Delete Video Feed**.

When a feed is being played the video icon turns into a green play icon  and the feed is shown with a blue selected background. The actual video is shown on the right-hand side of the panel. You can dock this panel as any other panel in the application. On small devices, the list of video feeds and the actual videos are always separate full screen panels. The video panel has a number of options and bits of information. The footer displays a Live indicator on the left along with a latency (delay) indication. If the video is not a live feed, a timestamp will show when it was taken. There are two buttons in the bottom right-hand corner: Record  and Take Snapshot  . At the bottom right-hand order there is a Take Snapshot button  .

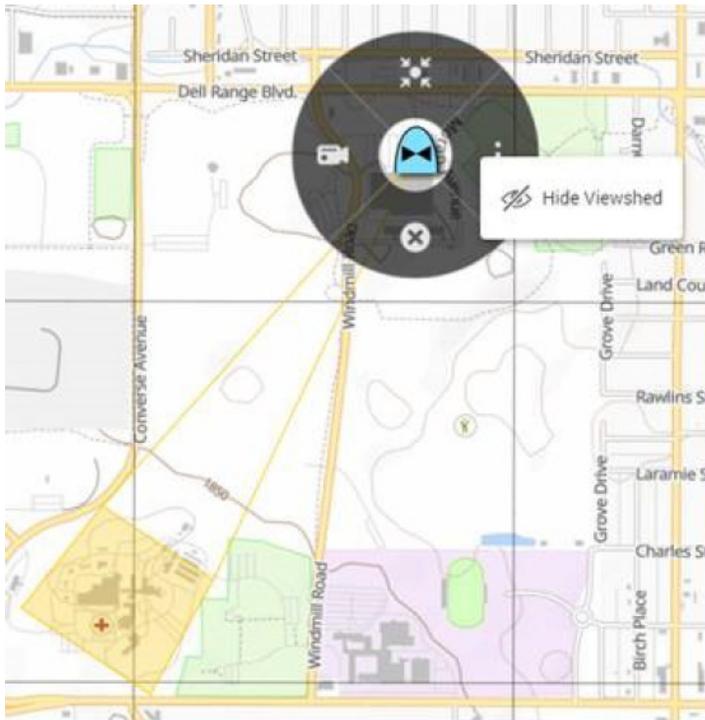
Record is only available for live feeds. Once a recording has been started, the video feed will display the record indicator in the list. When the recording is stopped by tapping the stop icon  , it will be added to the list of recordings. You can rename a recording if needed after you have created it.

Take Snapshot will take a snapshot of the current video and place it in the snapshots section. From here you can view it, rename it, or delete it. It is also made available from Chat and Plans, so you can attach any video snapshot to a message or a plan. When sending a video snapshot from Chat notice that it will also send information about the location and the observation time of the snapshot. When receiving a video snapshot the location info is in form of a link from where you can navigate to the location of the map.

Additionally, you are able to drag the seek bar and pause the video if needed.

Click the close  button in the top right hand corner to close the video.

If a video feed contains relevant metadata, the position and viewshed of the video source will be displayed on the map. You can interact with the video source symbol to bring up an action wheel that enables you to show or hide the viewshed (i.e. the area on the map which is visible in the video). Follow the video source symbol on the map or play the video feed in the video panel.



3.7 OPERATIONAL STATUS



You can use this app to see the operational status of your subordinates. The app also lets you report to your superior and others in the network. You cannot set the operational status on an FFT, but only on the unit specified in the current task organization.

NOTE

A prerequisite for Operational Status is that you have selected your own unit in the [Current Task Organization Settings](#) and that you have enabled the Operational Status.

Operational Status		Subordinates			
	1 COY Last update 01 1156B JUL 21	1 PLT 01 1322B JUL 21	2 PLT Never	3 PLT Never	
Unit Status					
Shoot					
Move					
Communicate					
Sustain					
Force Protection					
Personnel status					
POL	<input type="text" value="25 %"/>	100 %	-	-	
AM	<input type="text" value="75 %"/>	100 %	-	-	
Personnel	<input type="text" value="3434"/>	85	-	-	

Ten different status items are listed and can be changed by an administrator. See the hC2™ PATROL and hC2™ DISMOUNT Administrator Manual (10515-0479-4200) for details.

3.8 HOLDINGS



You can use the Holdings app to report your logistical consumption of e.g. fuel, ammunition, and any other critical logistical item after having been engaged in combat or after any other kind of operation.

NOTE

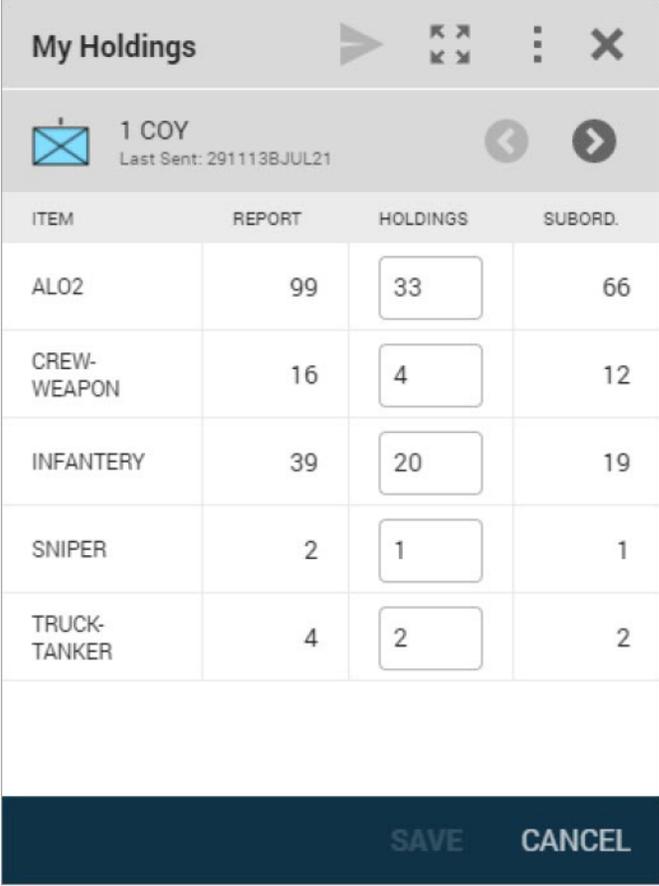
A prerequisite for using Holdings is that you have selected your own unit in the [Current Task Organization Settings](#) and that you have enabled the Holdings - Receive and Report.

When your organization is in place you can start reporting your holdings, and the reports will automatically be visible at your superior's side. Open the Holdings app to get started. If your superior has defined a list of holdings for you to report on as described below, the list will be populated. Otherwise you can create your own template.

Select the **Edit Template** option from the More button. This will open the **Edit Template** dialog where you can add items (by using the edit pen ) and control which of the items you will report on and which of the items your subordinates should report on.

Holdings Template 			
ITEM	<input checked="" type="checkbox"/> OWN	<input checked="" type="checkbox"/> SUBORD.	
ALO2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	⋮
CREW-WEAPON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	⋮
INFANTRY	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	⋮
SNIPER	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	⋮
TRUCK-TANKER	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	⋮
OK CANCEL			

Once the template is to your satisfaction you can send it to your subordinates by using the **Send Template to Subord** option in the More button, and you can start reporting your own holdings to your superior.



ITEM	REPORT	HOLDINGS	SUBORD.
ALO2	99	33	66
CREW-WEAPON	16	4	12
INFANTRY	39	20	19
SNIPER	2	1	1
TRUCK-TANKER	4	2	2

In the Holdings app you have some additional options under the More  button.

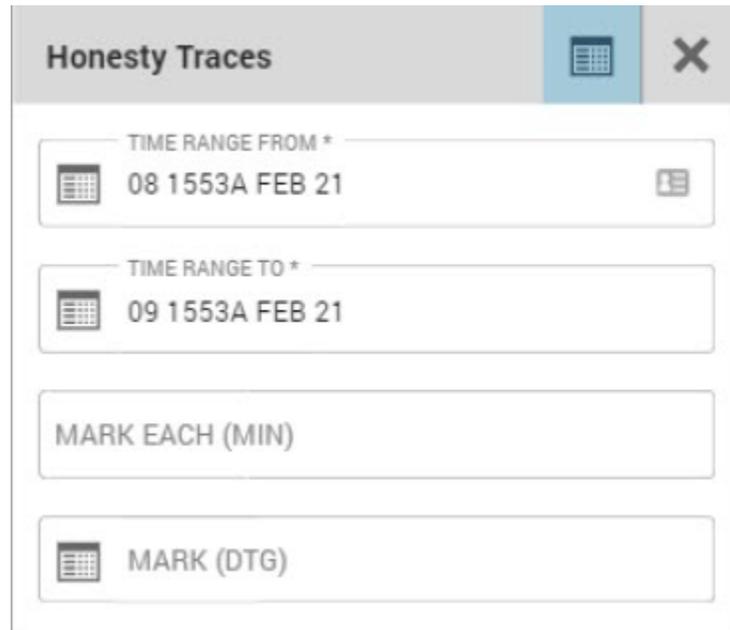
- You can set a periodic reminder if you want the system to remind you at specific intervals to send your holdings report.
- You can manually edit your subordinates' holdings if needed.

When you have filled out the Holdings Report, tap the Send icon  in the header.

3.9 HONESTY TRACES

 You can use Honesty Traces to analyze where own forces have been during a certain interval of time and you can view collected traces from other applications and GPS devices for analysis and decision of future routes.

Select which traces to view on the map and set a time filter using the Calendar icon at the top. As default, the time is set to display traces from the last 24 hours.



Honesty Traces

TIME RANGE FROM *
08 1553A FEB 21

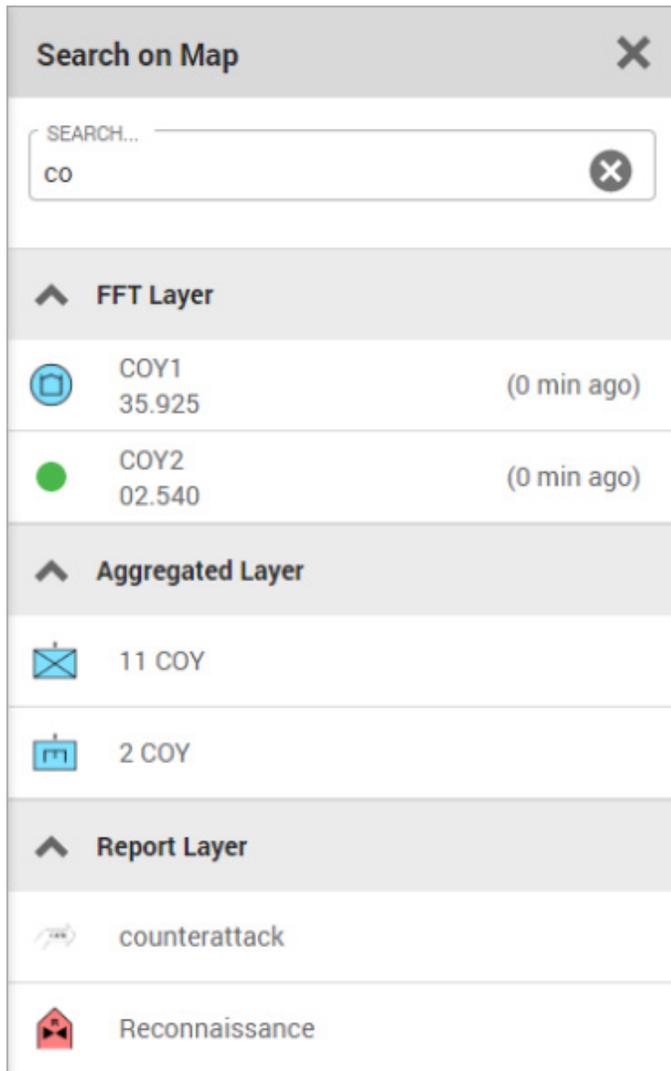
TIME RANGE TO *
09 1553A FEB 21

MARK EACH (MIN)

MARK (DTG)

3.10 SEARCH ON MAP

You can use Search On Map to locate specific FFT, units, or reports based on name, call sign, or label. When searching the feature will display the results for the three layers: FFT Layer, Aggregated Layer, and Report Layer. Tap on a search result to center the map on that specific element. If the search result has timed out and is no longer visible on the map, it will display the latest known location of the element.



3.11 BOOKMARKS

 The Bookmarks function lets you mark a specific place and zoom level on the map for easy return. Tapping **Bookmarks** from the map toolbar displays a list of the bookmarks you have created, and you can delete bookmarks you no longer need. You can also rename them. You can save a number of bookmarks so you can easily jump from place to place.

You can bookmark a specific report or FFT on the map e.g. an enemy report by tapping the symbol and through the More menu in the appearing action wheel selecting **Bookmark**. In the dialog that appears, you can name your bookmark. If you are familiar with hC2™ COMMAND you will know that this application also has a functionality called Bookmarks. However, the Bookmarks feature in hC2™ COMMAND is different as it allows you to take snapshots of situations that you can use for example, in PowerPoint presentations.



3.12 NOTIFICATIONS

There are two different ways to be notified on new events in hC2™ PATROL: as a banner or as sound. In Settings, it is easy to configure which banners and which sound notifications you would like. See [Notification Settings](#) for more information.

[Banner Notifications](#) appear at the top of the device when selected events occur. You can receive a banner when you receive a new chat message or a command layer. You can actively decide to open the received message or dismiss the banner. The banner notification reflects and stacks notifications according to the precedence of events providing you with an easy overview of unattended banners.



If you have not muted sound in the application, you can also receive different sound notifications when different events occur. In this way you can be notified even if you are not looking at the application.

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CHAPTER 4

PLANS

4.1 PLANS



You can receive plans from anyone in your network via [Chat](#) or you can add plans to your device directly. You can create your own plans with any number of layers, text elements, images, or other files attached. You can even import layers from other plans and use them directly in your own plan.

The Plan feature can display geo-referenced selected plan and intelligence overlays created in hC2 DISMOUNT, hC2 PATROL, or hC2 COMMAND, thereby allowing dismounted commanders to bring this information into the field.

This section will introduce you to the tools you need to work with plans:

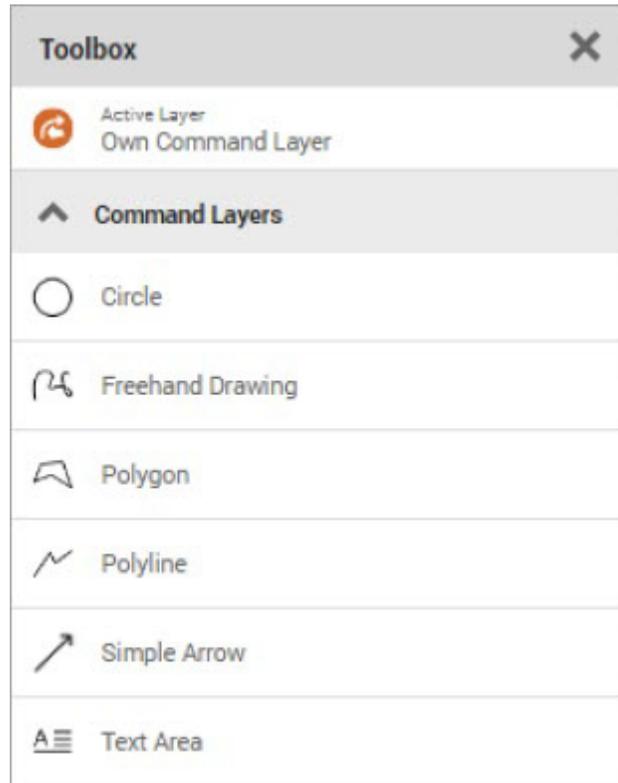
- The [Command Layer](#) is designed for quickly changing ongoing operations and thereby saving valuable voice time. You can also show how a given order will be solved. If you are in a situation where you have to change a plan, tap the Command Layer icon.
- The [Plan Browser](#) displays the plans you have downloaded. It is from here you create new plans.

4.2 COMMAND LAYER



The command layer is for making simple sketches that are easily understood in order to save voice time. These sketches are not for making formal five point orders. Imagine how much easier it is to draw a command layer showing e.g. the new axis of advance you want your subordinates to follow rather than explaining over the radio exactly which routes to take. You save valuable time.

Tapping the **Command Layer** icon will open the toolbox with these options:



The active layer is displayed at the top. Click the arrow next to **Command Layers** to unfold the list of tools you can use to create your command layer.

You can draw your change to the original plan using the different sketching tools directly on the map. You can style the brush by selecting the color, width, and style. If you change color while drawing a freehand sketch it will change your drawing pen, but not change the color of what you have already drawn.

You can undo steps as well as styling during the individual sketch. When you have finished your changes, tap the check mark.

If you tap any of the sketches you have made, you can delete the parts individually.

When you have finished editing your command layer, tap **Send** to send the layer to your subordinates and/or superiors. If you have not previously selected any recipients from Contacts you must select to whom you want to send your command layer. Once you have selected your recipients, tap the **Send** button.

The system remembers the recipients you selected last time, so next time you only have to tap the **Send** button right after preparing your command layer and it will automatically display the same recipients as last time. Edit the list, if needed, or just tap it to send the message.

NOTE

The reason why only sketching tools are available for drawing a command layer and not the full set of MIL2525C tactical graphics is simply that the intention of the command layer is to make quick sketches for your subordinates to react from and not to create a new plan.

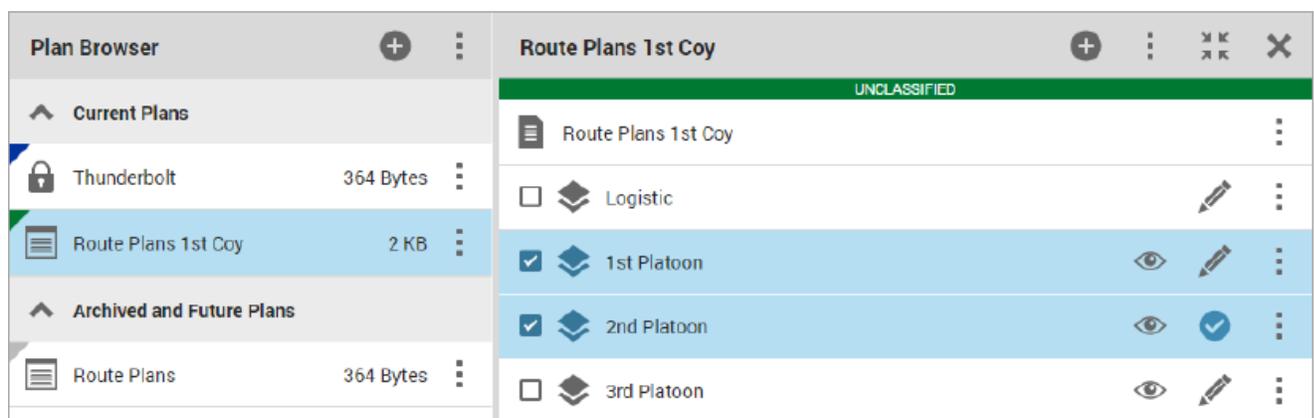
4.3 PLAN BROWSER

When you have downloaded a plan you have received via Chat it will appear in the Plan Browser along with any plans you have created yourself.

In the plan browser, you can display [Plan Properties](#) by tapping the More button  next to the plan name and selecting **Plan Properties**. The More button for the individual layers includes **Rename Layer**, **Add to Layers**, and **Delete Layer**. When a layer has been added to the Layers panel it will be shown with an eye icon,  .



The Plan Browser is split into two sections: **Current Plans** and **Archived and Future Plans**. All new plans are automatically added to Current Plans but can be moved to Archived and Future Plans using the More button  . They can easily be moved back again if needed by using the More button again.

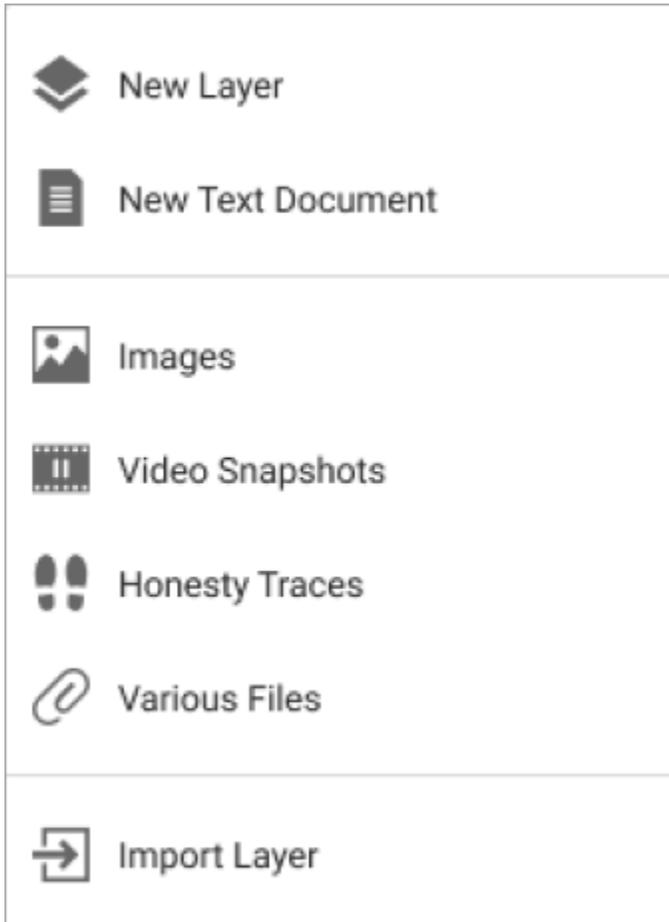


Only plans that you are currently working on should reside in the Current Plans section. Plans in the Archived and Future Plans sections are not editable and are not available in [Layers](#). However, you can import layers from an archived plan to a current plan.

Any plan will display the classification with a colored triangle in the list and a colored header with the classification text and any additional prefix and postfix in the details view.

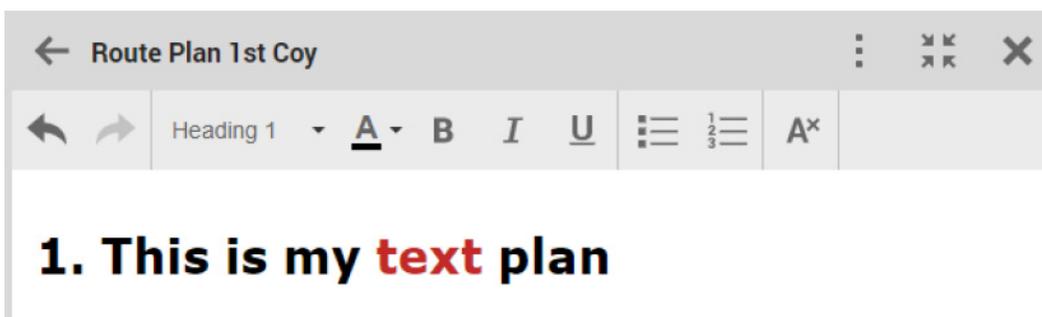
Editable plans are displayed with a plan symbol  and the received or locked plans are displayed with a lock  . When you have finished your own plans you can choose to lock them, but you do not need to lock them before distributing them as they will always be read-only on the receiving end.

You can create a new plan using the plus button  to add files to the plan.

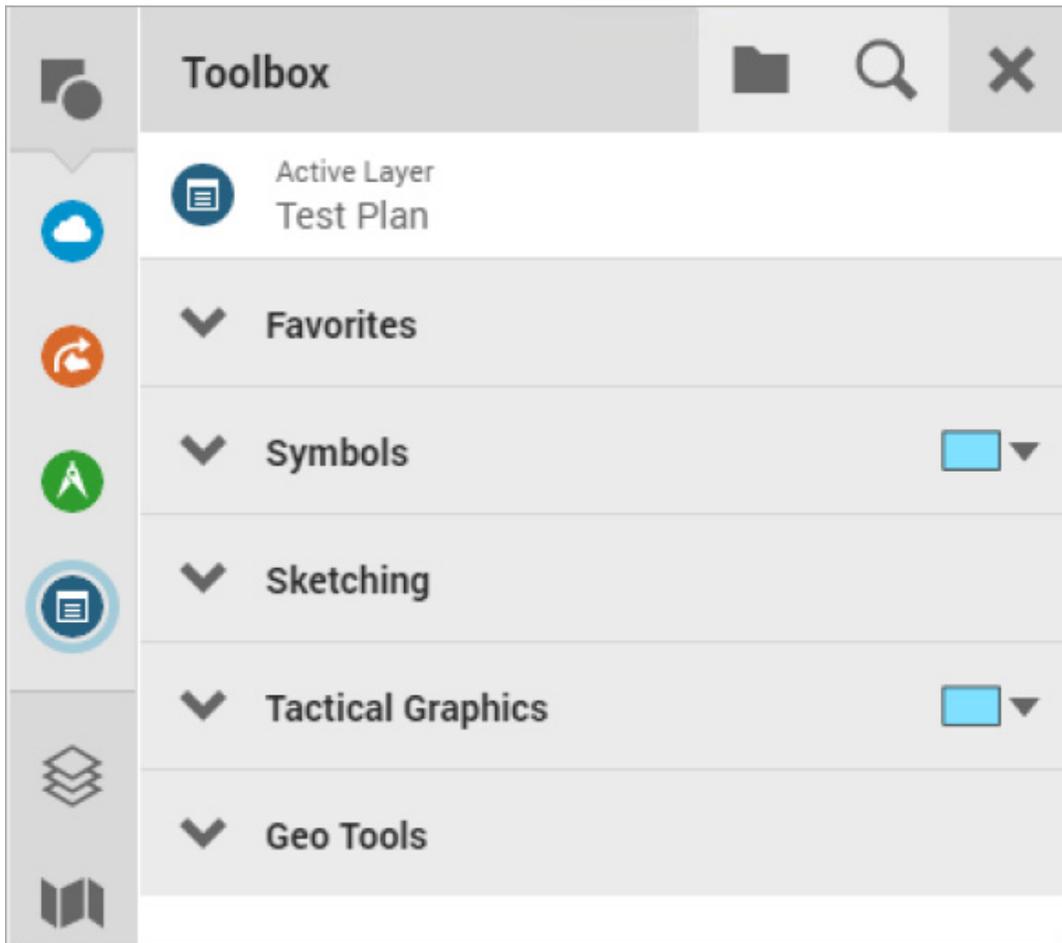


By default the plan is created with a text element and a single layer named as the plan itself. You can add more elements to the plan as needed by using the plus button and you can rename all layers and text elements after creation by using the more button for the individual layers. Once a plan has been created you can set a plan layer as the active layer.

When you create new text elements you can format the text.



The fastest way to start adding symbols and graphics to your plan layer is to use the edit tool . This will set the layer as active and open the toolbox where you can pick a symbol or graphic to add to the layer. You can change the active layer by tapping on the Active layer display at the top of the toolbox.

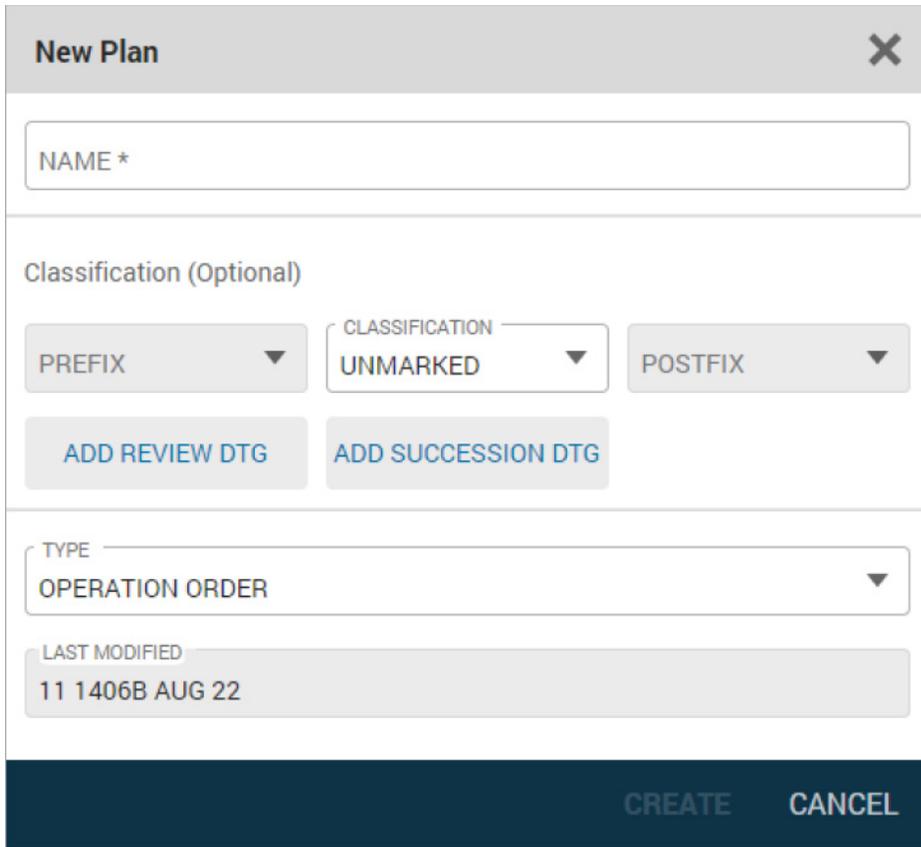


In the plan browser, you can display [Plan Properties](#) by tapping the More button  next to the plan name and selecting **Plan Properties**. The More button for the individual layers includes **Rename Layer**, **Add to Layers**, and **Delete Layer**. When a layer has been added to the Layers panel it will be shown with an eye icon, .

To see the content of a plan, tap the plan name in the list.

← SSE Hasty Dragoon		×
	Text	
	worddocument.doc	
<input type="checkbox"/>	 1st Platoon	
<input type="checkbox"/>	 2nd Platoon	
	 Area Information	
	 Second Phase	
<input type="checkbox"/>	 1st Platoon	
<input type="checkbox"/>	 2nd Platoon	
	 Local Intelligence	
	 Area.png	
<input type="checkbox"/>	 Enemy Sightings	

4.3.1 Plan Properties



Name: This is the name of the plan. If the plan is editable, you can change the name.

Classification: See and edit the classification of the plan. The classification consists of:

- Prefix
- Classification
- Postfix

Review DTG: If you use this you cannot use **Succession DTG**. Review date is often a date way out in the future and represents the date when the content can be disclosed. You need to select a DTG for when the security classification should be reviewed.

Succession DTG: If you use this you cannot use **Review DTG**. Succession date is when this plan can be declassified. If you select **Add Succession DTG** you need to select a DTG when the alternate classification takes effect and you need to select the alternate classification. By default, the **Succession Classification** is set to UNMARKED. When you change this value, you can select a postfix and prefix.

Type: See and edit the type for the plan.

Last Modified: This field is filled out automatically.

4.4 EXECUTE ROUTE

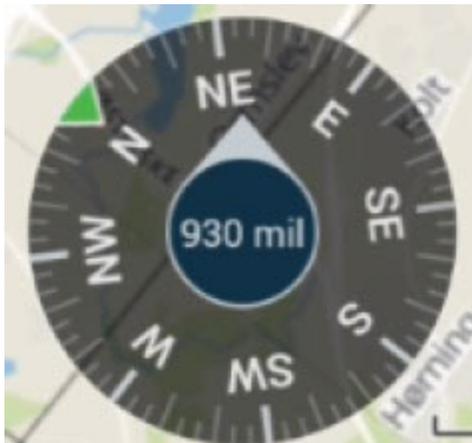
You can receive a route as part of a plan or you can yourself create a simple route from [Geo Tools Mode](#).

To execute a route either select the route on the map and select  from the appearing Action Toolbar or select Execute Route from the Map Toolbar. The latter will give you a list of all available routes. Select the route you want to execute and enter a **Start Time** in the appearing dialog. An **Execute Panel** at the top of the map will appear allowing you to navigate the route. It may also give you an estimated time (and an ordered time if this has been specified in the route) to waypoints and end point based on your current speed.



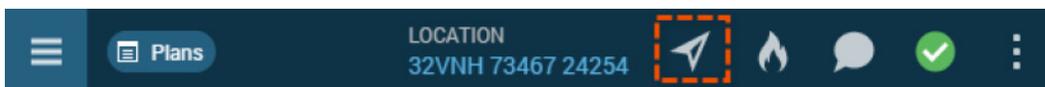
NOTE

Simple Routes do not have any passage time defined for waypoint or end point.



While executing a route, a compass is displayed to help navigate. The green arrow shown on the compass indicates the direction to the next waypoint.

If you interact with any objects or menus during the execution of a route, the execution will continue in the background and you can return to the Execute Panel by tapping on the Execute icon in the top bar.



CHAPTER 5

REPORTING

5.1 REPORTING

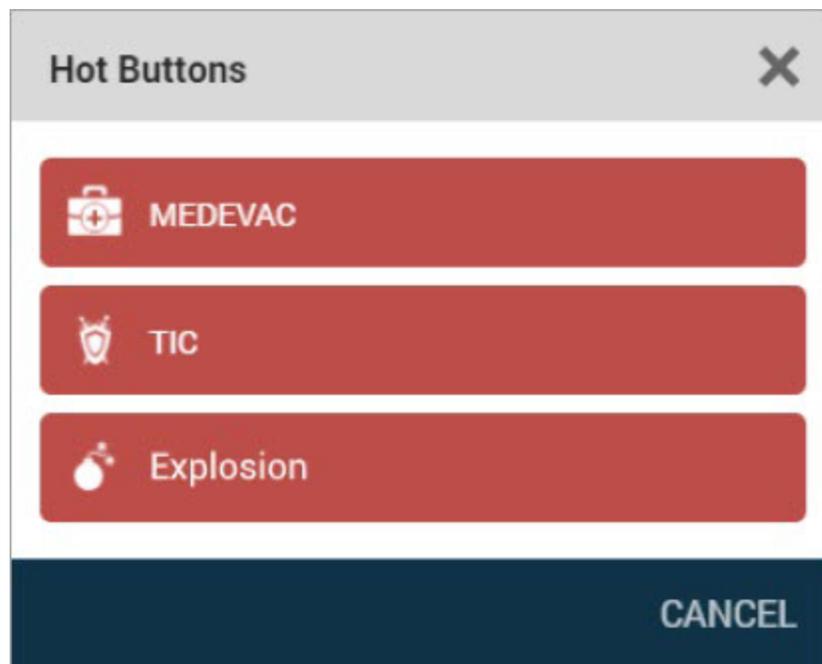
As a supplement to voice-only reports, hC2 PATROL gives you the ability to quickly send reports or other important messages used for reporting purposes, through the use of the integrated chat functionality. This could for example be extended observation reports or reports stated by your units battle rhythm. Another way of sharing data across devices is using [TacDrop](#).

See also [Report Mode](#).

5.2 HOT BUTTONS



From the Hot Button icon in the top bar you get access to a list of available hot buttons which let you act quickly and send certain types of messages to predefined recipients. The application comes with three standard hot buttons: MEDEVAC, TIC, and Explosion.



From hC2 Management Tool your administrator can have added others and also added predefined recipients. Any predefined recipients can be changed and new ones can be added through the Hot Button Contacts category. See [Contacts](#) for more information.

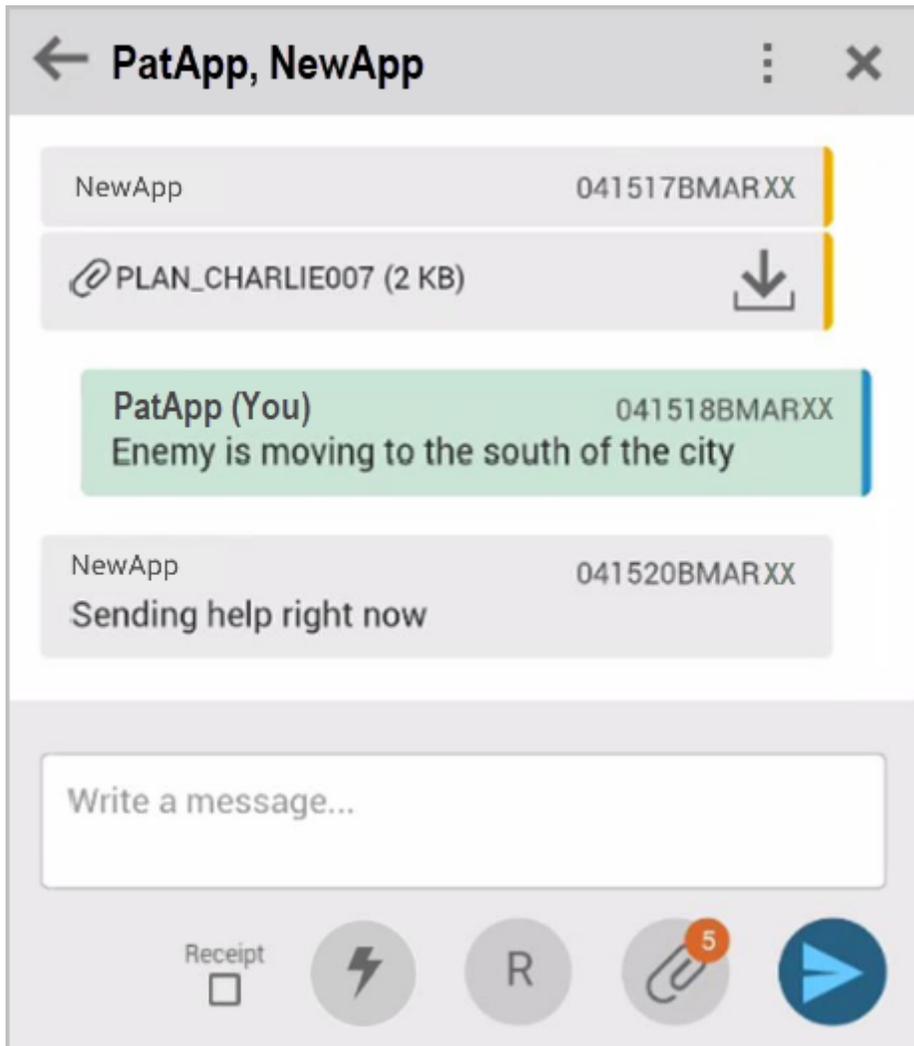
5.3 CHAT



Chat is a means to send and receive plans and report back. It is a supplement to voice communication and can never replace radio voice communication. The chat functionality contains chat rooms and private messages. Basically, chat rooms work just like Messenger and private messages work just like their own Outlook mailbox. The Chat app is available from the top bar or the main menu.



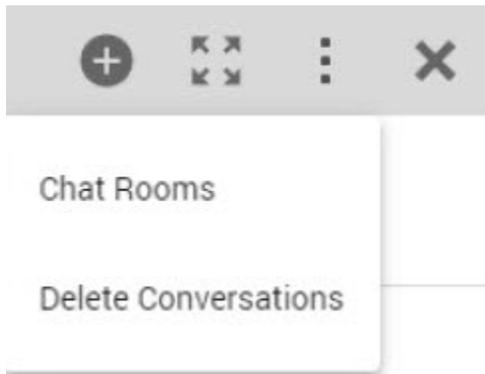
The orange badge on the Chat icon shows the number of unread messages. When you tap the Chat icon, the **Chat** panel will open and display the list of ongoing conversations. Tapping the icon again will close Chat. If you tap a specific conversation from here, the panel will change and display this conversation only. The specific conversation panel contains a back arrow which allows you to return to the main **Chat** panel.



[Chat Rooms](#) are public for all to join while private messages are between selected recipients.

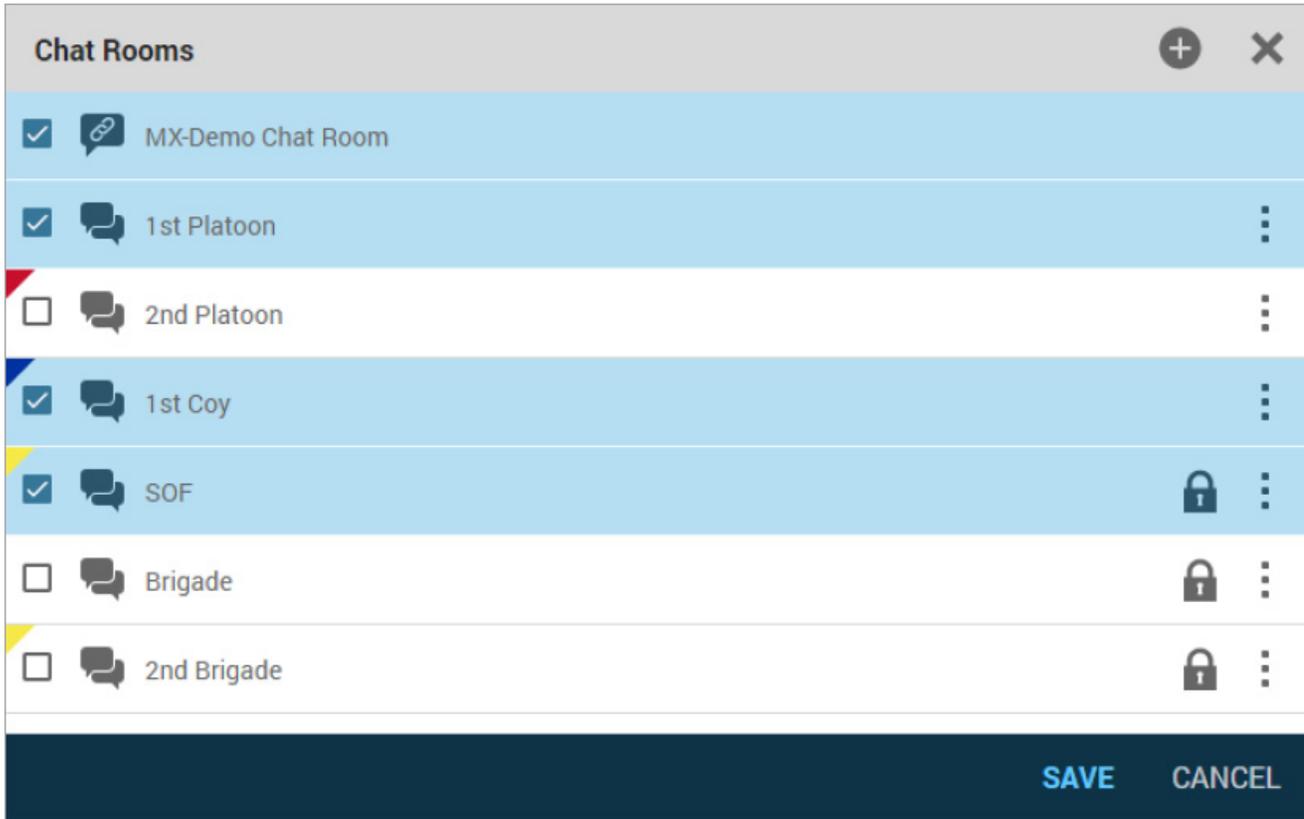
5.3.1 Chat Rooms

You have the option to join the chat rooms that exist within the network. You find the available chat rooms by tapping the More button  and selecting the **Chat Rooms** menu item in the drop-down.



In the list of available chat rooms you can select the chat rooms you want to join. Later, you can leave chat rooms again by tapping on them in the list to deselect them. If the chat room you want is not available you can create a new chat room by using the Plus button, . You may already be subscribed to a number of static chat rooms which are connected to the radio networks that you use. Static chat rooms are displayed with a . You cannot leave or delete static chat rooms.

When you create a new chat room you need to specify a name and optionally specify a classification and a password. If you specify a password, users need to enter the password to join the chat room. You will automatically join the chat rooms that you create.

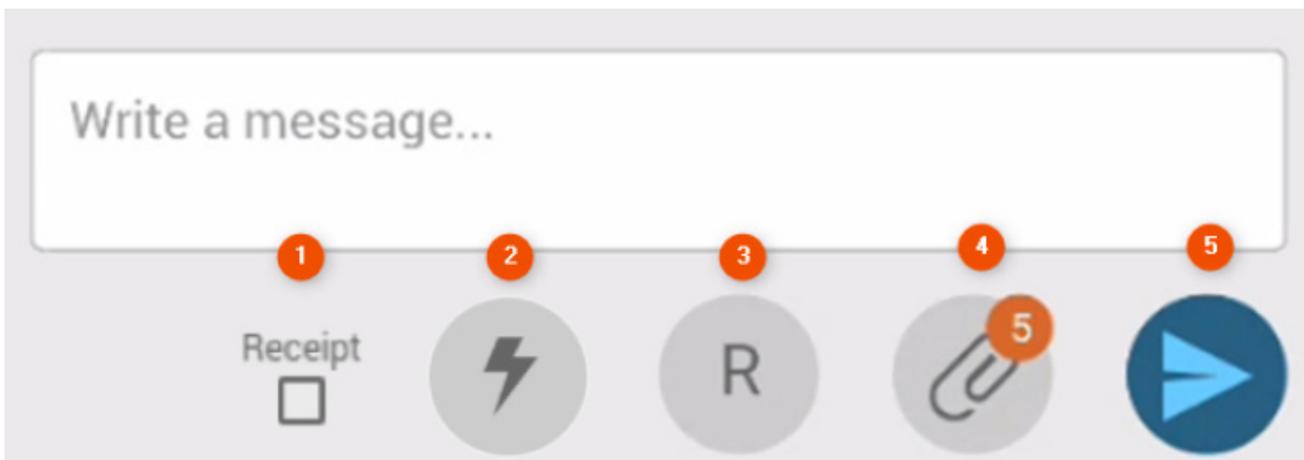


5.3.2 Create Message

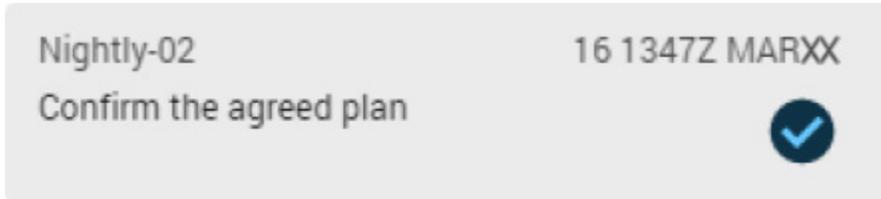
A message outside of a chat room is a private message to one or more recipients.

-  To create a new private message tap the Plus button. In the dialog that appears, enter the recipients separated by a comma or select them in the list of contacts and tap **Create**. This starts a new private message conversation with the recipients.

The message can hold up to 999 characters.



1 To request a read receipt from the chat recipients, check the **Receipt** check box. The recipient of a chat message with a read receipt request will be presented with the check-mark button in the message to send the receipt back.



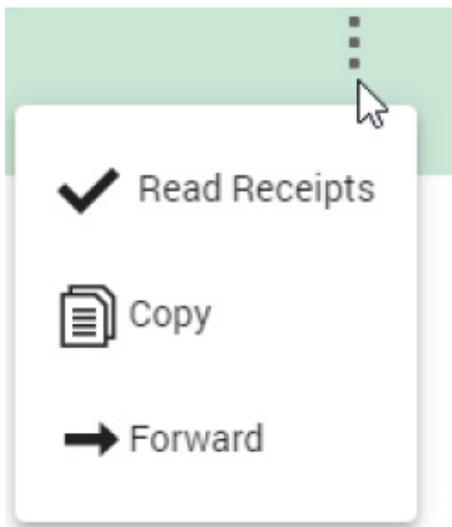
Once the button has been tapped, the message will display a smaller checkmark.



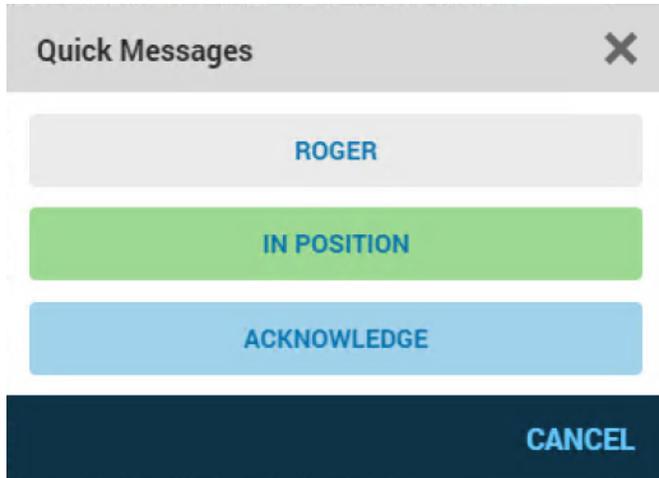
On the sender side, a returned receipt displays an additional checkmark along with a number saying how many of the recipients have sent receipts.



To view details on which specific recipients sent the receipts, tap on the message and click the More button  .

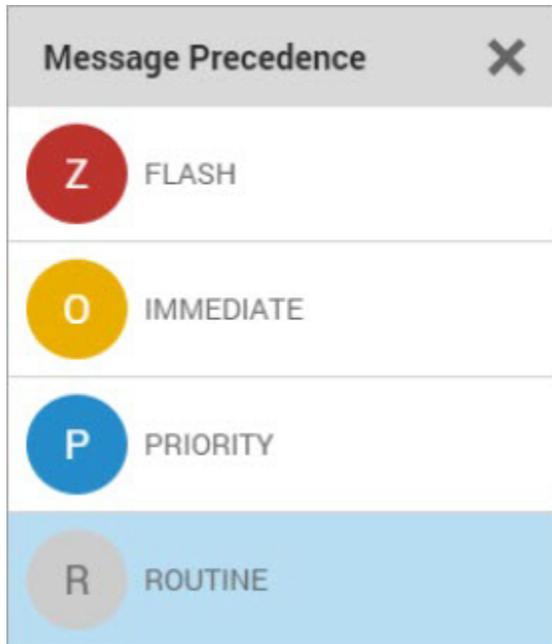


2 You can add a **quick message** to your chat message by tapping the lightning button . A quick message is a predefined text that you can add to a chat message to avoid having to use the on-screen keyboard on your touch device.



Simply tap on the message text you need in the appearing **Quick Messages** dialog and the text will be added to the message field, ready to be sent. You can add or edit quick messages through [Quick Message Settings](#).

3 You can tap the **R** button to specify a **precedence** for a message before you send it. The receiver of the chat message will see the precedence and can act upon it, but the system does not differentiate between chat messages with different precedences.



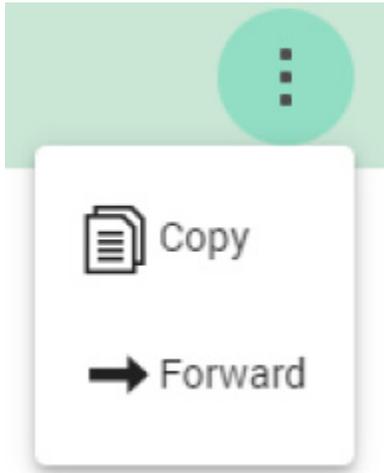
By default, your message has ROUTINE precedence unless you change it. You can select **Flash**, **Immediate**, **Priority** or leave it as **Routine**.

4 **Attachments** can be added to messages, for example, honesty traces, images, plans, video snapshots, formatted messages, and various other files, by tapping the attach button, .

5 Tap **Send**  when you are ready to send your message.

5.3.3 Copy or Forward Message

You can copy or forward messages that you have received or sent. To do this start by tapping on the message in question. This will give you a temporary floating More button . Tap it to get a context menu from where you can select copy or forward.



If you select **Copy** the message is added to your clipboard and you can paste it by long-pressing in an edit field.

If you select **Forward** you will get a **Select Contacts** dialog where you must specify who you want to forward the message to.

5.3.4 Receive a Location

If you receive a geographical location via chat, the location itself works as a link and if you tap it, the map will center on the location. Additionally, a symbol with an envelope will appear at the location, linking the location and the chat together.



You can open the original chat by clicking the symbol on the map.

5.3.5 Formatted Messages

Basically, a formatted message is a template where fields may be filled in automatically if the data is available. hC2 PATROL is delivered with eight predefined, structured message templates by default.

Select Template ✕		
ENEMY REPORT	Enemy Report	Never
MAJOR INCREP	Major Incident Report	Never
MEDEVAC REQ	Medical Evacuation Request	Never
PATROL REPORT	Patrol Report	Never
REPORT	Enemy or Incident Report	Never
RFI	Request For Information	Never
SHOTREP	Shooting Report	Never
SUPINTREP	Supplementary Intelligence Report	Never
CANCEL		

When you create a new private chat message and tap the attach button  , one of the attachments types you can use is **Formatted Messages**. When you select the **Formatted Message** attachment type you will see the list of predefined, formatted messages.

Select one of the message types and fill in the individual fields as needed. You can copy and paste text using the **Copy** and **Paste** buttons located in the More button  . As the templates are structured messages there are mandatory fields in the individual templates that you must fill out. When you have finished filling out your template, tap **Validate**. If you have missed filling out a mandatory field you will receive a warning when the system tries to validate your template. When the template has been validated, tap the back arrow  in the heading, and the template is automatically attached to your chat message which you can fill out and send. You can still send a formatted message even if it has not been completely filled out as it can have mandatory fields missing.

You can create additional templates using a special tool called IRIS Quick Definer and an administrator can add the templates as part of the deployment. See the hC2 PATROL and hC2 DISMOUNT Administrator Manual (10515-0479-4200) for information about how to do this.

5.3.6 Attachments.



When you tap the attach button (the paper clip) you have the option of selecting which attachments you want to attach to your message. The list includes images from the local pictures folder and plans that you have received, along with honesty traces and video snapshots that you have taken.

Select the files you want to attach and tap **OK**. This will return you to the Chat window. The attach button will now display a number that corresponds to the number of attachments you selected.

If you want to change the attachments that are already added or remove any of them, just tap the attach button again.

NOTE

By default, the system will accept attachments up to 20 MB but an administrator can lower this.



Do not attach big files! Messages may be sent over very low bandwidth, and bandwidth speed is what determines how long it takes the receiver to download. When you send a private message with an attachment, what you actually do when you tap the **Send** button is that you send a link to the receiver and not the message with the attachment. The reason for this is that e.g. if you send your message with the attachment to e.g. seven recipients you would add a lot of pressure on the network. Sending a link which each recipient can tap to download your message and attachment will disperse the strain of the network and the system does not have to download it. It can also be downloaded by one of the other recipients who has already downloaded your message.

5.3.7 Download Attachment

When you receive a message containing one or several attachments, typically plans, you need to download the attachments manually. An exception from this is command layers which are automatically downloaded and displayed on both the map and in the Layer panel.

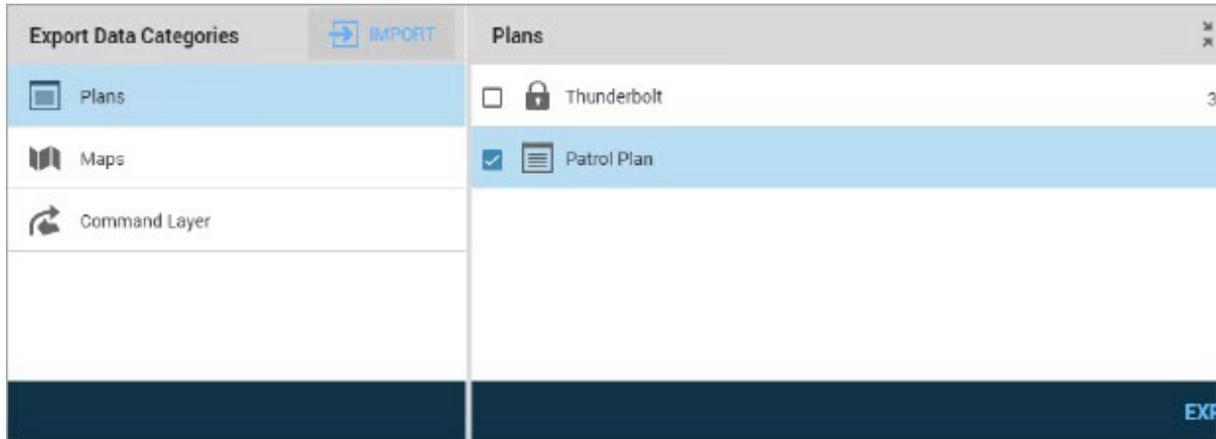


When you receive a plan or other attachment, tap on the download icon in the received message section to start the download. You can pause a download if you want to use your bandwidth for something else and resume the download at a later stage. Once the attachment is downloaded, tap on the attachment (the plan) to open it in the Plan Browser.

5.4 TACDROP



In the field, you may need a simple way to exchange mission data such as plans, maps, honesty traces, and command layers between hC2 PATROL and hC2 DISMOUNT devices without using radio communication. For this you can use **TacDrop** which allows you to export mission data or import it.



Select the data you want to export and tap **Export**. You need to select which available source to export the mission data to, e.g. a USB drive.



If you need to import data, tap the **Import** button at the top and select where to import data from.

NOTE

Since maps are usually large files, this will impact the amount of time it takes to list importable files. If you are importing from a custom location (USB drive or SD card), L3Harris suggests that you place maps in a separate folder as this will decrease the amount of time it takes TacDrop to locate importable files.

APPENDIX A

TERMS AND DEFINITIONS

Active Layer

The active layer is the layer you work on. Only one layer can be active at a time.

AOI

Area of Interest. That area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory to the objectives of current or planned operations. This area also includes areas occupied by enemy forces who could jeopardize the accomplishment of the mission.

AOS

Area of Sight, a geo tool.

Application

Term used about a single instance of either the PATROL application, the PATROL Dismounted application, or the DISMOUNT application.

Bookmark

A bookmark in PATROL gives you the possibility to mark a specific place and zoom level on the map for easy return.

CA

Certificate Authority

Deployment

Term used about all applications that need to be configured and deployed.

DTG

Date Time Group

ETA

Expected time of arrival.

FFT

Friendly Force Tracking. Layer showing the location of friendly units.

Flash Message

A flash message is a chat message with the highest precedence.

GIS

A Geographic Information System is a system designed to capture, store, manipulate, analyze, manage, and present spatial or geographic data.

GPS

The Global Position System is a global navigation satellite system that provides geolocation and time information to a GPS receiver anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellites.

IRIS

Software product for structured and interoperable message exchange for military messaging.

LOS

Line of Sight, a geo tool.

LRF

Laser Range Finder

Mission

Term used about partitioning units or vehicles in logical data networks.

OODA loop

The OODA loop is the cycle, Observe, Orient, Decide, and Act, developed by a military strategist and United States Air Force Colonel John Boyd. Boyd applied the concept to the combat operations process, often at the operational level during military campaigns. The approach explains how agility can overcome raw power in dealing with human opponents.

ORBAT

The order of battle (ORBAT) of an armed force participating in a military operation or campaign shows the hierarchical organization, command structure, strength, disposition of personnel, and equipment of units and formations of the armed force.

Platform

A platform is used for combining the network communication and sensors. The platform provides the application and the user with sensor and communication information. Tactical Communication is a major part of the platform and is used for the communication.

Release

A collection of products released at the same time. Releases are identified by the hC2 Project number, for example "3.X".

RP

Release point

SA

Situational Awareness is the understanding of the combined tactical situation which is visually represented on your device. In this case the positions of radios in the same network, displayed as the blue Friendly Force Tracks, as well as reported symbols, sketch objects, or tactical graphics.

SIT

Situational picture

SOF

Special Operations Forces

SP

Start point

Tactical Communication

Tactical Communication. A component that supports tactical data exchange using low bandwidth and high latency radio networks.

UAV

An unmanned aerial vehicle, commonly known as a drone, is an aircraft without a human pilot aboard.

FAST.FORWARD.

