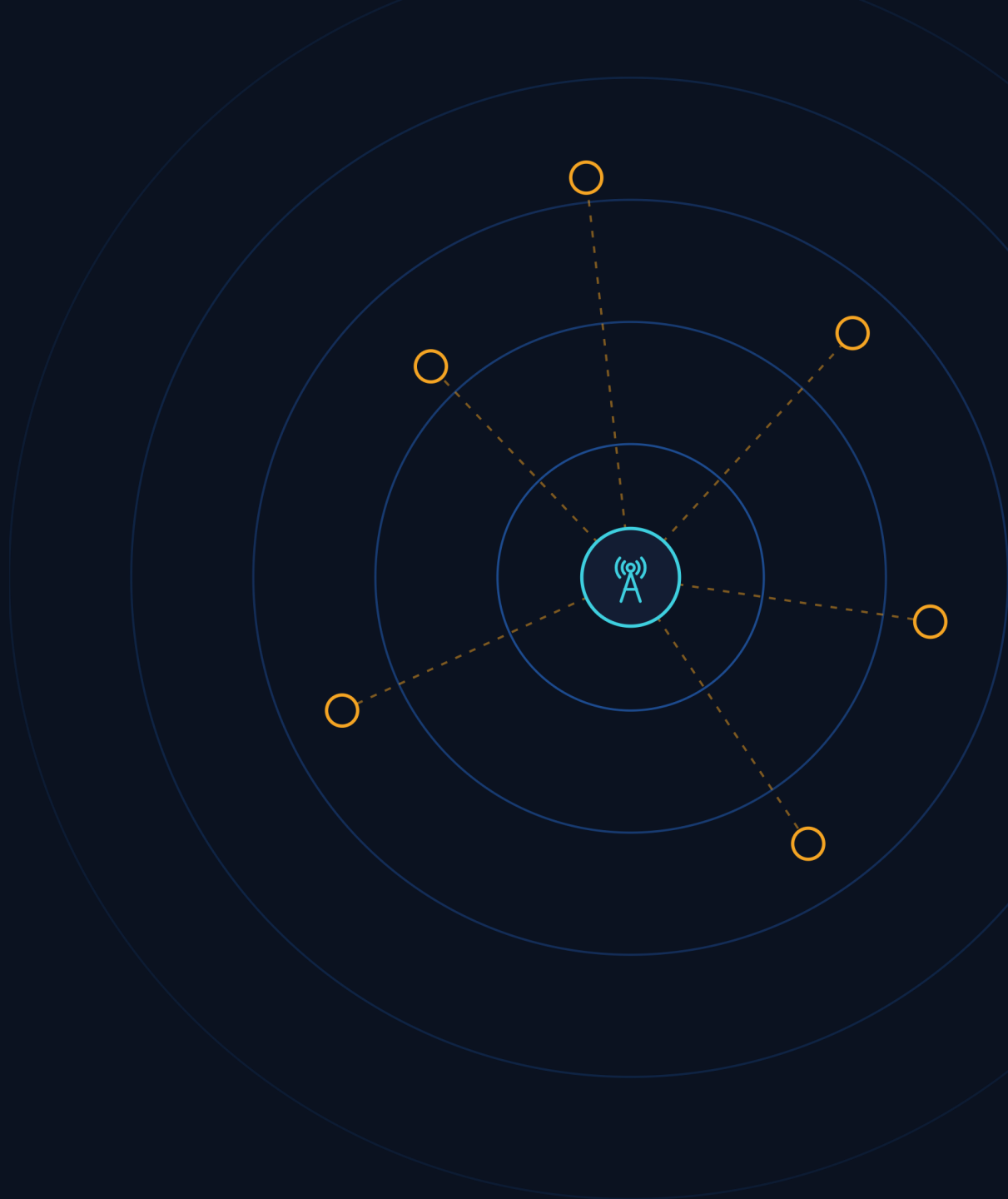
SafecomLink

FOR EMERGENCY COMMUNICATION TEAMS

# EmComm Tactical Guide

18 field procedures and 10 incident playbooks for running an emergency network over HF, VHF and UHF radio.

Version 2.0 · November 2026 · safecomlink.com



ABOUT THIS GUIDE

# How the guide is organized

Teams drill each procedure on its own, then combine them when an incident hits.

**18**

## Core procedures

One task each: alert the network, reach a station out of range, send a photo, email from the field. A situation, the capabilities used, numbered steps and a diagram.

**10**

## Incident playbooks

Blackout, earthquake, flood, wildfire and more. Each one lists which procedures to run in which phase of the incident.

**1**

## Drill checklist

Every procedure in one table, to run and score each quarter so the team is ready before it is needed.

EDITIONS

Slides tagged Enterprise Edition use features of the Enterprise plan: path finder, file server, email and AI gateways, cluster and the mobile app. The rest run on Professional and up.

READINESS

# Set up before the incident

Most of the work happens on a quiet day. These eight items decide how fast the network is up when it counts.

### 01
**Frequency plan**

Calling frequency, slots and the day and night bands, loaded in the Scheduler on every station.

### 02
**Alert tag file**

One shared file with every alert tag, installed on every station before deployment.

### 03
**Alert recipients**

Each alert tag linked to the people who must get the email.

### 04
**Gateway map**

Know which stations run email and AI gateways, ideally outside the risk area.

### 05
**File server**

Current routes, shelter lists, forms and contacts on the HQ station.

### 06
**AI on your data**

Your plans and lists added in the AI gateway settings, so every answer uses them.

### 07
**Beacon policy**

Interval, run time and when to set the EmComm flag, agreed by every team.

### 08
**Phones paired**

SafecomLink Go paired with each station, so operators can step away from the radio.

CAPABILITIES

# The SafecomLink EmComm toolkit

**Beacons** P01
Who is on the air, and where

**Last Heard** P01 P06
Who you hear, and who others hear

**Broadcast** P02 P13
One message to every station

**Alert tags** P02 P03
Alarm with sound, visuals and email

**VMail** P04
Store and forward to any station

**Path finder** P05
Ask the network for a route

**Mail peeking** P07
Check what was delivered

**File transfer** P08
Photos and files, approved in a click

**File server** P09
Current documents for every team

**Email gateway** P10
Email any address over radio

**AI gateway** P11 P12
Plain questions, answered over radio

**Cluster** P14
Bridge bands and modes at one site

**Live chat relay** P15
Digipeater or cluster chat

**GPS position** P16
On demand or every minute

**Band plan and ALE** P17
Scheduler, scanner and ALE

**SafecomLink Go** P18
The station on your phone

PART 1

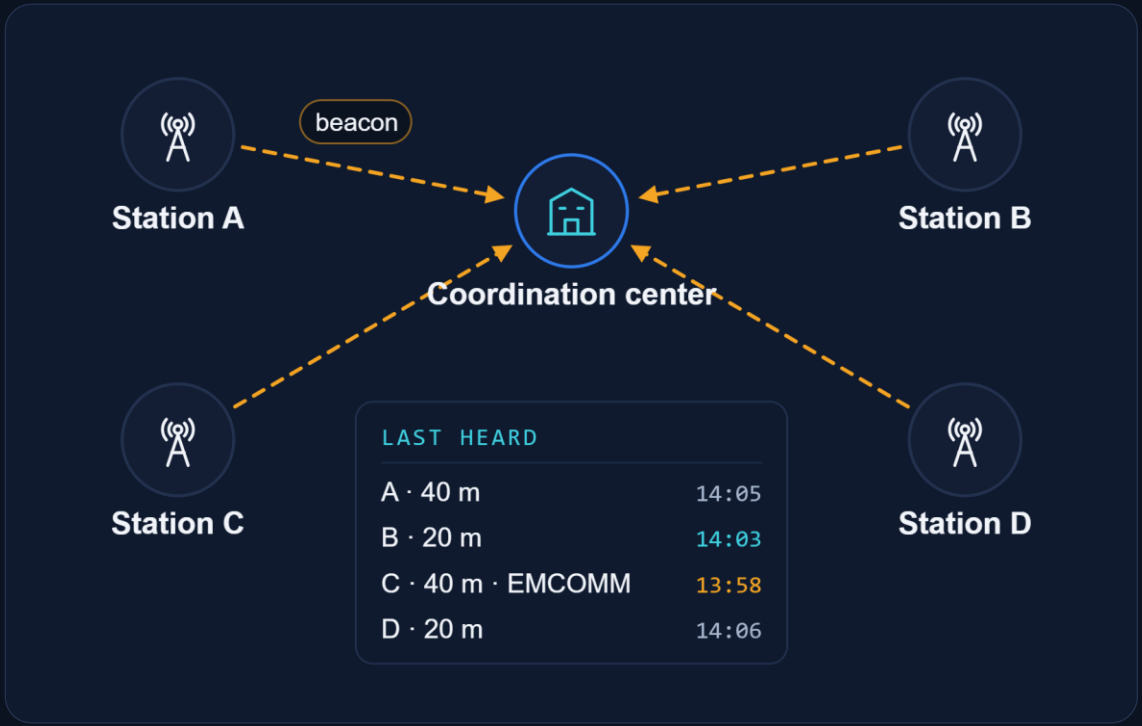
# Core procedures

Eighteen procedures, P01 to P18. Each one is a single task a team can drill on its own. The playbooks in Part 2 are built from them.

PROCEDURE P01 · SITUATIONAL AWARENESS

# Network check-in

On activation, the coordination center has to know within minutes which stations are on the air, where they are, and on which band.




Beacons · Last Heard · Scanner

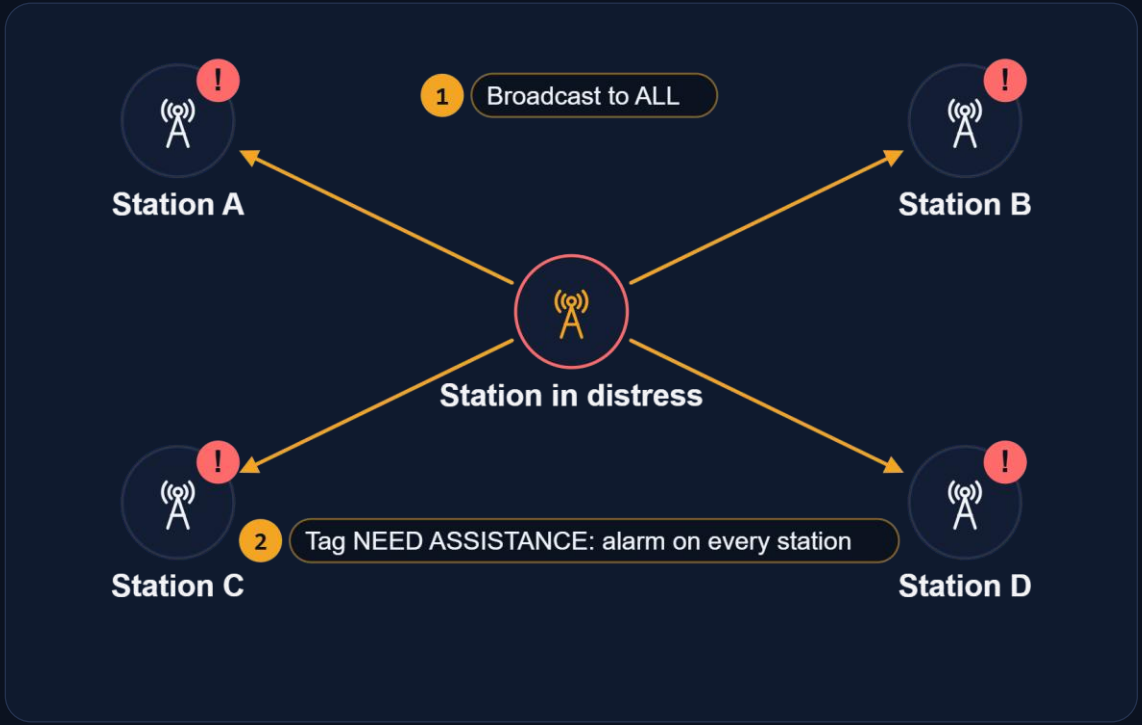
1. Every station turns on beacons on the agreed calling frequency, every 5 to 180 minutes.
2. A station in an emergency state sets the EmComm flag, and every beacon carries it.
3. The coordination center reads the Last Heard list: one line per station per band, with frequency and time.
4. Advanced beacons add a 6-character locator and the services each station offers.
5. With the scanner on, beacons go out on every band in the plan.

> Beacons go out only on a clear channel. Default run time is 72 hours.

PROCEDURE P02 · ALERTING

# Network-wide emergency alert

A station is in trouble. Every station in the network has to know now, including the operators who are not looking at the screen.




Broadcast · Alert tags · Alert Center

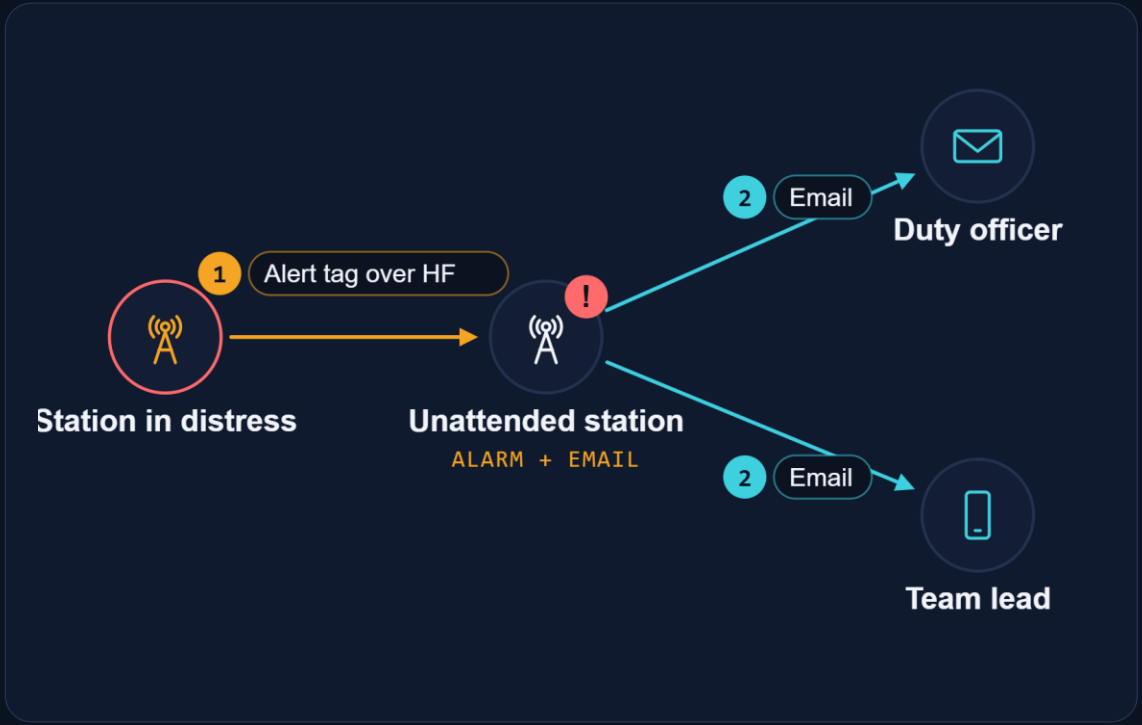
1. Before deployment, define the alert tags (EVACUATE, NEED ASSISTANCE, SHELTER IN PLACE) and send the tag file to every station.
2. The station in distress sends a broadcast to ALL with the tag in the text.
3. Every station with that tag configured raises a visual and audible alarm.
4. The alert is stored in the Alert Center with its full history.
5. To get a confirmation, address the broadcast to one station with confirm receipt on. It replies with an ACK.

> Each tag stands for its own alarm type, with its own name and text.

PROCEDURE P03 · ALERTING

# Alert the people away from the radio

The alarm goes off at an unattended station at 03:00. The duty officer is at home and the team lead is in the next building.




Alert tags · Email notification · Alert Center

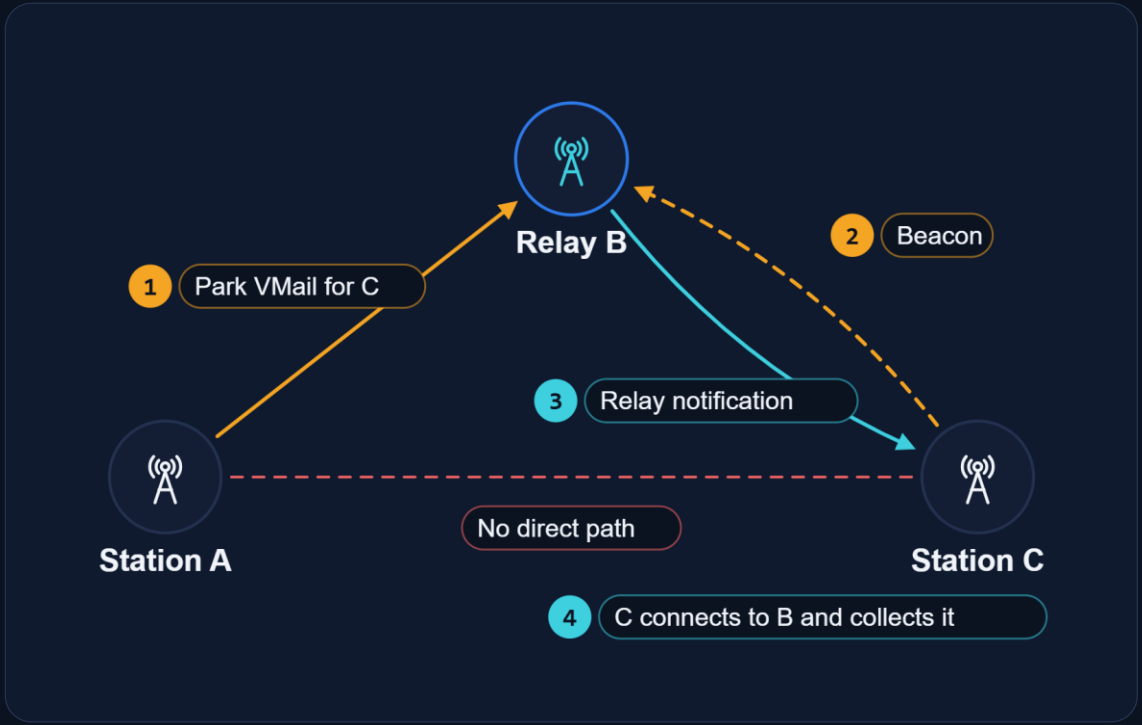
1. On each station, link every alert tag to the people who must hear about it: duty officer, team leads, operations center.
2. A matching broadcast arrives over the radio.
3. The station raises the alarm and sends the email in the same moment.
4. The email carries the alert text, the sending station and the time.
5. The alert waits in the Alert Center until an operator reviews it.

> Works on any station with a mail connection, even when the radio room is empty.

PROCEDURE P04 · MESSAGING

# Message to a station you cannot reach

Station C is out of range or off the air right now. The message still has to get there, without anyone retyping or relaying it by voice.




VMail · Parking · Relay notification · Beacons

1. A connects to B, a station both sides can reach, and parks a VMail for C.
2. B holds it for as long as it takes. There is no time limit.
3. When B hears C's beacon, it sends C a relay notification, at most once every 20 minutes.
4. C connects to B and collects the VMail.
5. C answers the same way, by parking its reply for A at B.

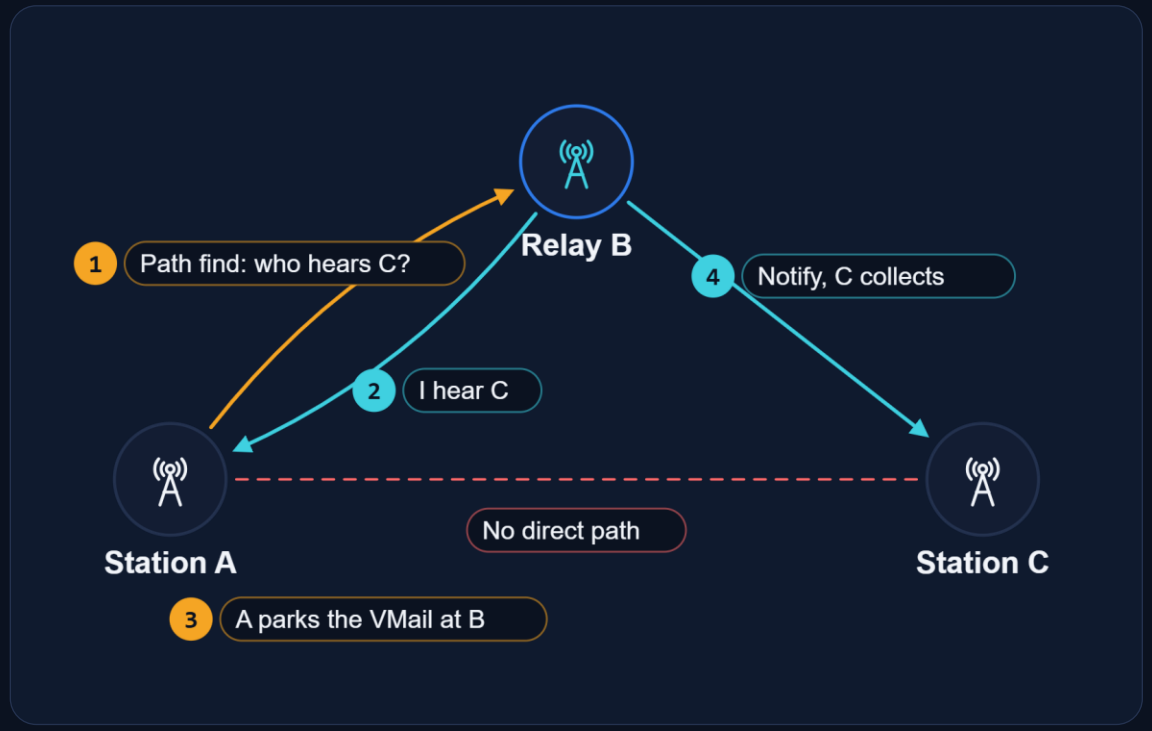
> If C can reach A directly later, it can also reply directly.

PROCEDURE P05 · ROUTING

# Find a relay path: path finder

Enterprise Edition

You need to reach C and you don't know which station can hear it. Ask the network.




Path finder · VMail · Relay notification

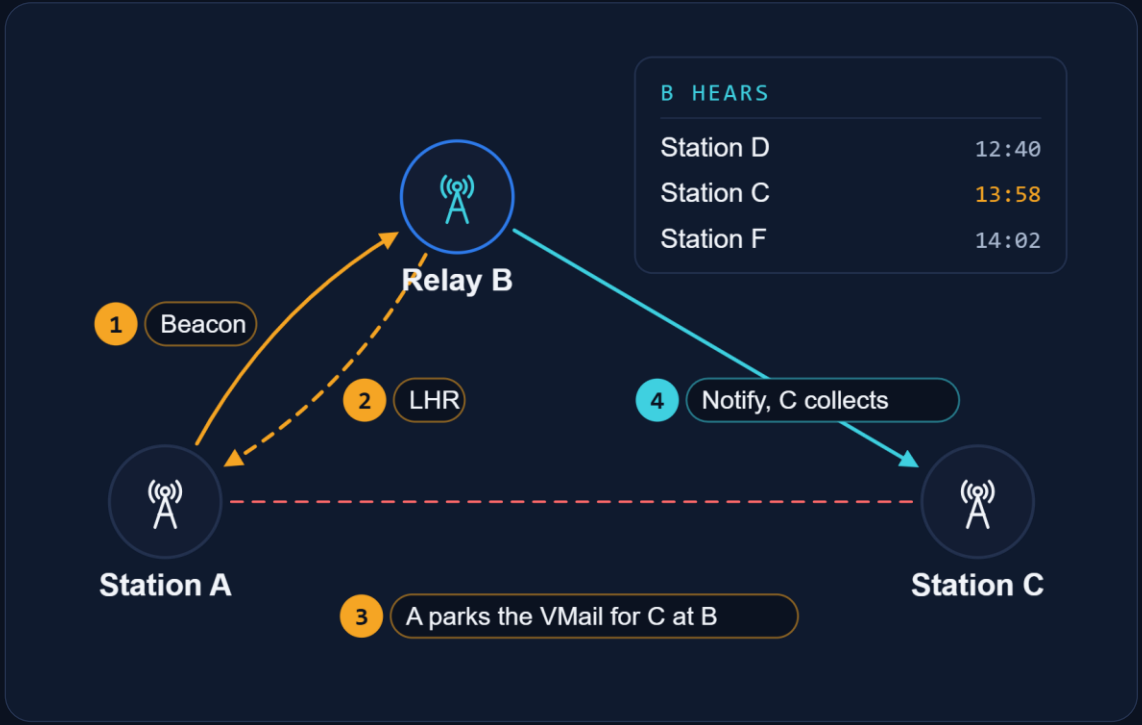
1. A sends a path-find call for C.
2. Every station that has heard C answers after a random delay, and only when the frequency is clear, so replies do not collide. Here, B answers.
3. A connects to B and parks the VMail for C.
4. B notifies C on its next beacon, and C collects the message.

> Use P07 later to check that the message was delivered.

PROCEDURE P06 · ROUTING

# Find a relay path: ask a station who it hears

A can hear B. Before parking anything, A checks whether B can actually hear C.




Last Heard Remote (LHR) VMail

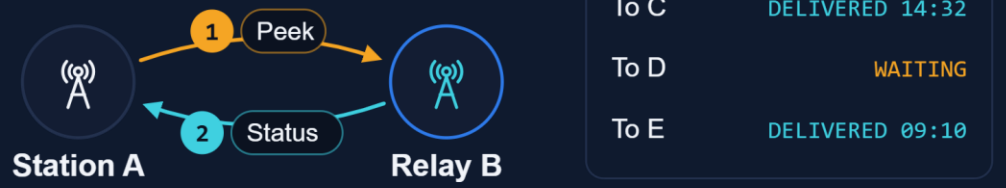
1. A hears B's beacon and connects to it.
2. A pulls B's Last Heard list with the LHR command.
3. C is on the list, so A parks the VMail for C at B.
4. B notifies C, and C collects the message.

> LHR also tells you how recently B heard C, which shows how good the path is.

PROCEDURE P07 · MESSAGING

# Confirm delivery

A parked an evacuation order at B two hours ago. Command needs to know whether C has it.




PARKED BY A

| | |
|---|---|
| To C | DELIVERED 14:32 |
| To D | WAITING |
| To E | DELIVERED 09:10 |

**Parked Mail Peeking**

1. A connects to relay station B.
2. A runs Parked Mail Peeking.
3. B reports every message A parked there, whether it was delivered, and when.
4. Still waiting? Leave it parked, or try another path with P05 or P06.

PROCEDURE P08 · FILES

# Send a photo of a missing person

Search teams need the photo itself, not a description read over voice. The same applies to damage images and sketch maps.




File transfer · Image compression (Enterprise)

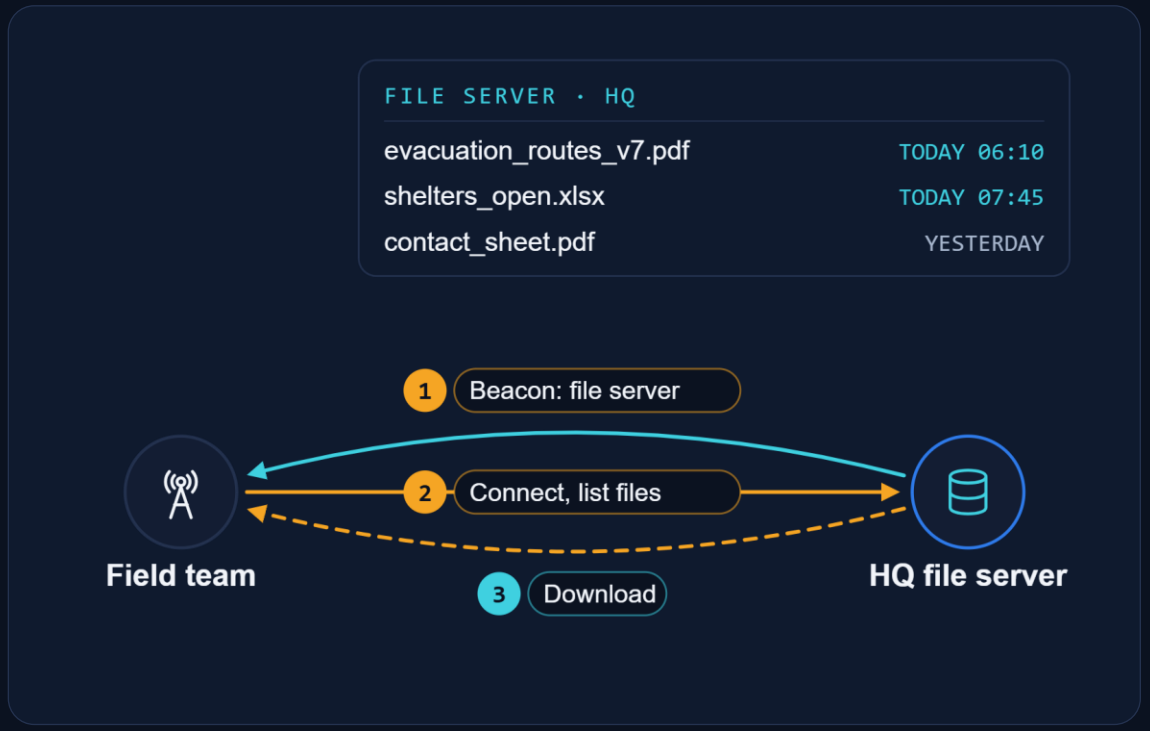
1. Search HQ connects to the field team, selects the image and compresses it to a size the link can carry.
2. HQ sends a file request.
3. The field team approves it, or it is approved automatically below their size limit.
4. The image opens in the conversation window, like in a messaging app.
5. The team passes it on to the next team the same way.

PROCEDURE P09 · FILES

# Download the latest evacuation plans

Enterprise Edition

Routes, open shelters and contact lists change by the hour. Field teams need today's version, not last year's printout.




File server · Advanced beacons · Broadcast

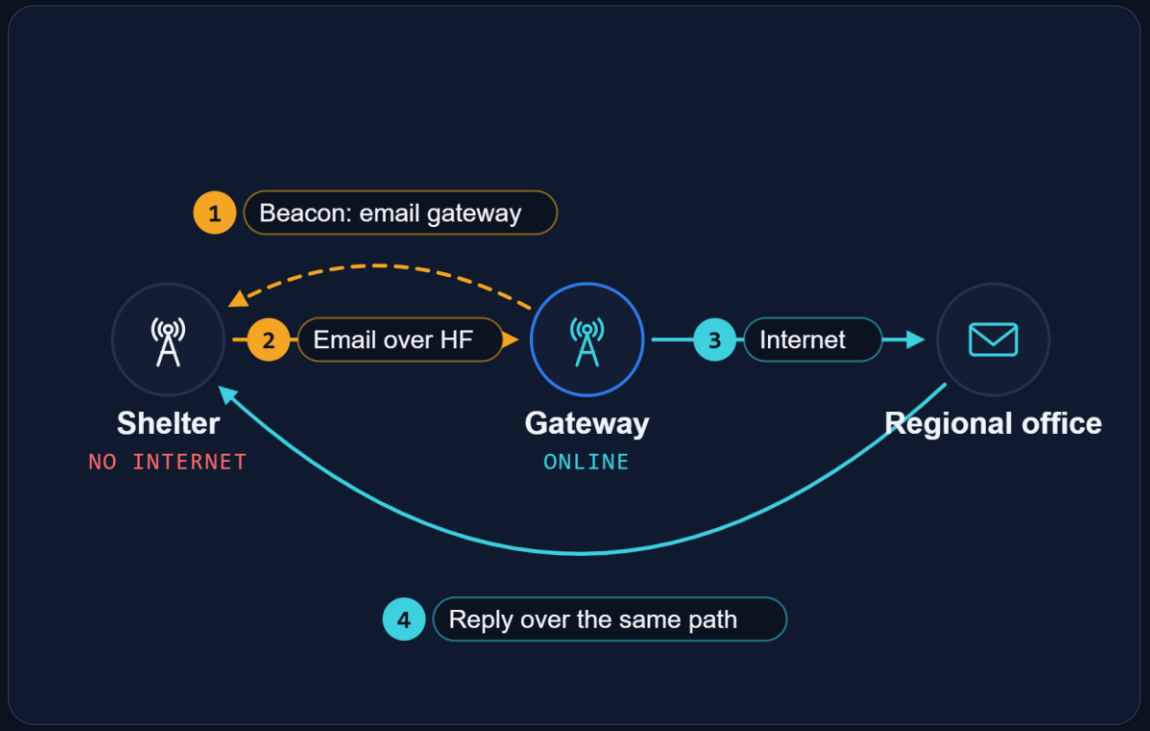
1. HQ keeps the current documents on its station's file server: routes, shelter lists, forms, contacts.
2. HQ's advanced beacon announces the file server, so every station knows where to find it.
3. A field team connects to HQ and lists the files.
4. The team downloads what it needs. The copy on the server is always the current one.
5. When HQ updates a file, it sends a broadcast so teams pull it again.

PROCEDURE P10 · GATEWAYS

# Send email from the disaster zone

Enterprise Edition

A shelter needs supplies from a regional office that only works by email. The shelter has a radio and no internet.




Email gateway · Advanced beacons · Last Heard

1. Check the Last Heard list. Advanced beacons flag every station that runs an email gateway.
2. Pick the gateway with the strongest signal and connect to it.
3. Write the email to any address and send it over the radio.
4. The gateway delivers it over the internet.
5. Replies come back to the shelter over the same path.

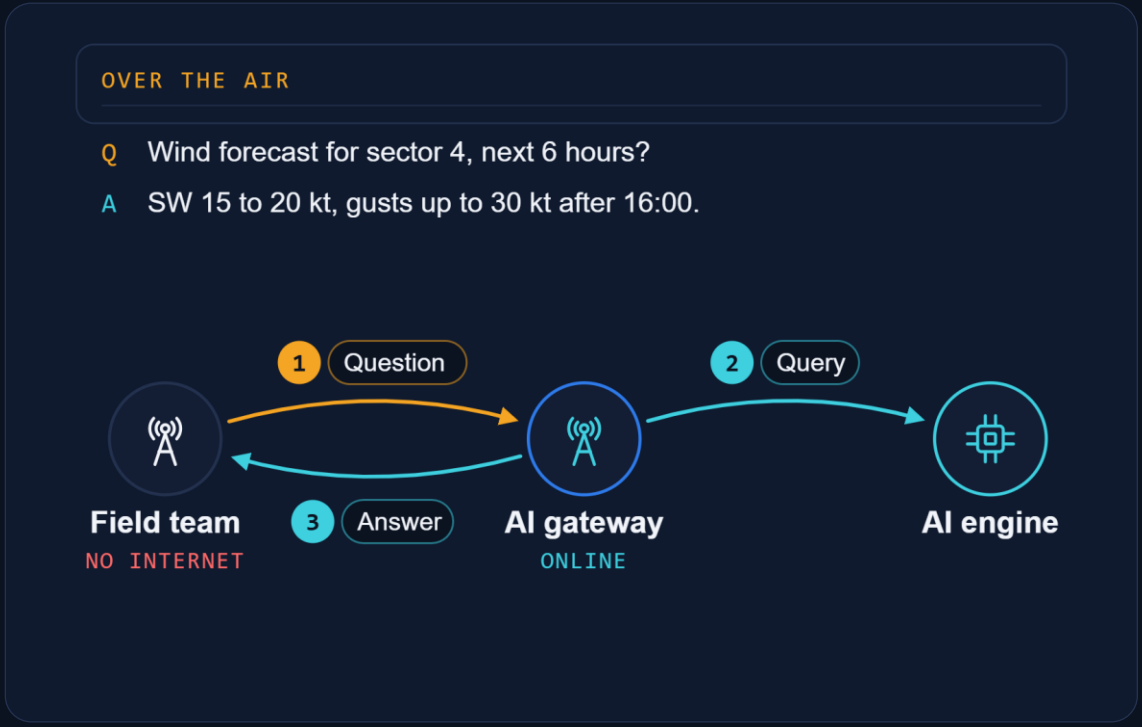
> Place gateway stations outside the expected disaster area, so they stay online.

PROCEDURE P11 · GATEWAYS

# Ask AI with no internet

Enterprise Edition

A team in the field needs an answer now: the weather window, a translation, a technical check. There is no internet where they are.




AI gateway · Advanced beacons

1. Find a station whose beacon announces an AI gateway.
2. Connect and type the question in plain language.
3. The gateway passes it to the AI engine and sends the answer back.
4. Answers come back as short text, so they use little airtime.

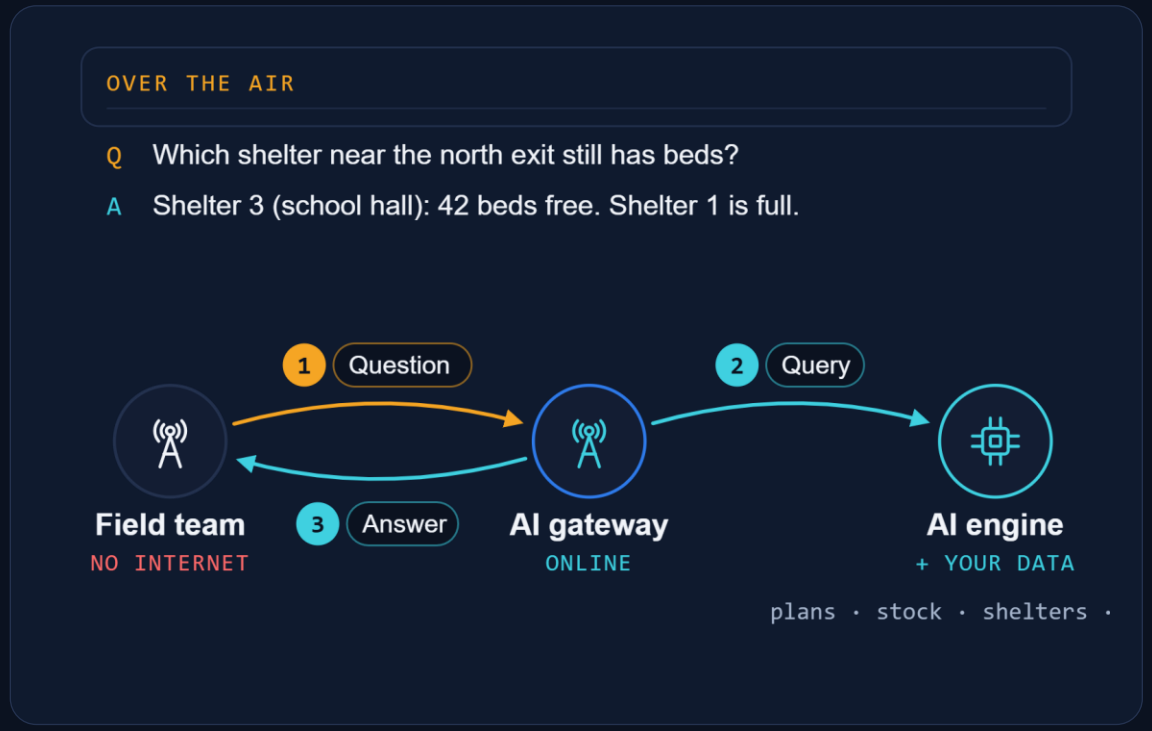
> Treat AI answers as advice. Decisions stay with the operation's command.

PROCEDURE P12 · GATEWAYS

# Ask AI about your own data

Enterprise Edition

The answers that matter most are in your own systems: shelter capacity, stock levels, rosters, the evacuation plan.




AI gateway | Custom data | Gateway settings

1. In the AI gateway settings, add your own data: plans, inventories, shelter and hospital lists, contact rosters.
2. The gateway sends that data to the AI engine as context with every question.
3. A field team asks a plain question over the radio.
4. The answer comes back based on your data, in a few lines of text.

PROCEDURE P13 · COORDINATION

# Group chat for all stations

Briefings, status rounds and shift handovers need everyone in one conversation at the same time.




Broadcast

1. All stations tune to the shared frequency.
2. Each station sends its update as a broadcast to ALL.
3. Every station sees every message, in order, on one screen.
4. Stations transmit only on a clear channel, after a short random wait, to reduce collisions.
5. Broadcasts are size-limited, so no single station can hold the frequency.

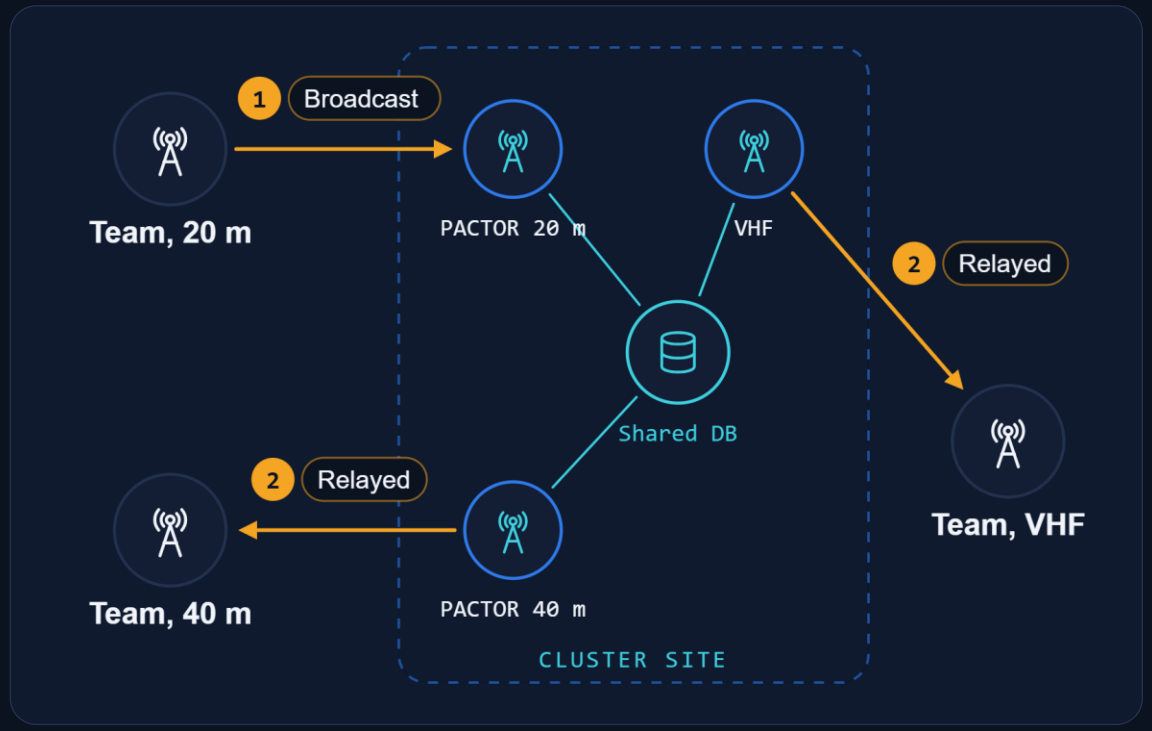
> A group broadcast is not acknowledged. Use VMail when a message must be confirmed.

PROCEDURE P14 · COORDINATION

# Bridge bands and modes

Enterprise Edition

Teams work on 20 m, 40 m and VHF at the same time. A message sent on one band has to reach all of them.




Cluster · Broadcast bridge · Shared database

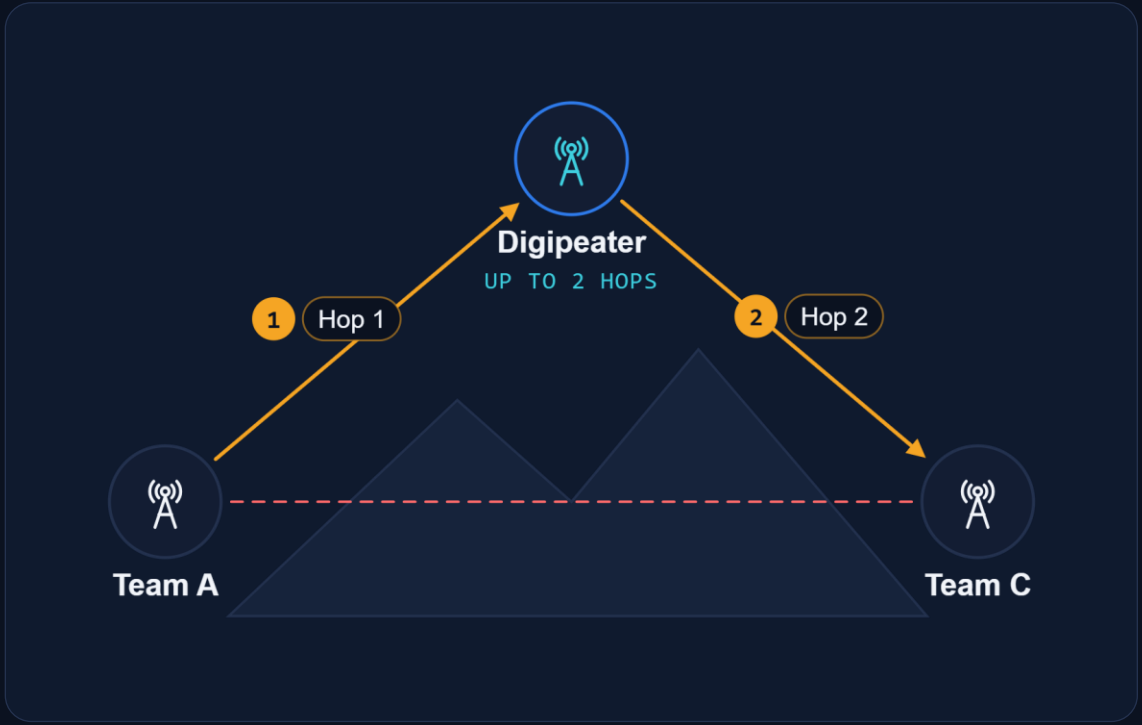
1. Run several SafecomLink stations at one site as a cluster with one shared database.
2. A broadcast that reaches one cluster station is retransmitted by all of them, on all their bands.
3. A VMail received on one band can be collected on another.
4. The cluster dashboard shows every station, its frequency, whether it is busy, and the traffic between them.

> No cables between the radios are needed.

PROCEDURE P15 · COORDINATION

# Live chat beyond direct range

Two teams need a live conversation, but a ridge blocks the direct path between them.




Chat · Digipeater (VARA FM)

Cluster chat (PACTOR, Enterprise)

1. VARA FM: set up to two digipeaters in Settings, enter the destination station and connect. You chat live over one or two hops, and files and broadcasts can use the same path.

Enterprise Edition

2. PACTOR: query the cluster for the stations connected right now, and send any of them a real-time chat message through it.

PROCEDURE P16 · SITUATIONAL AWARENESS

# Report your position

During an evacuation or a relocation, command needs to know where every team is.




GPS integration · Verbose GPS mode · Map

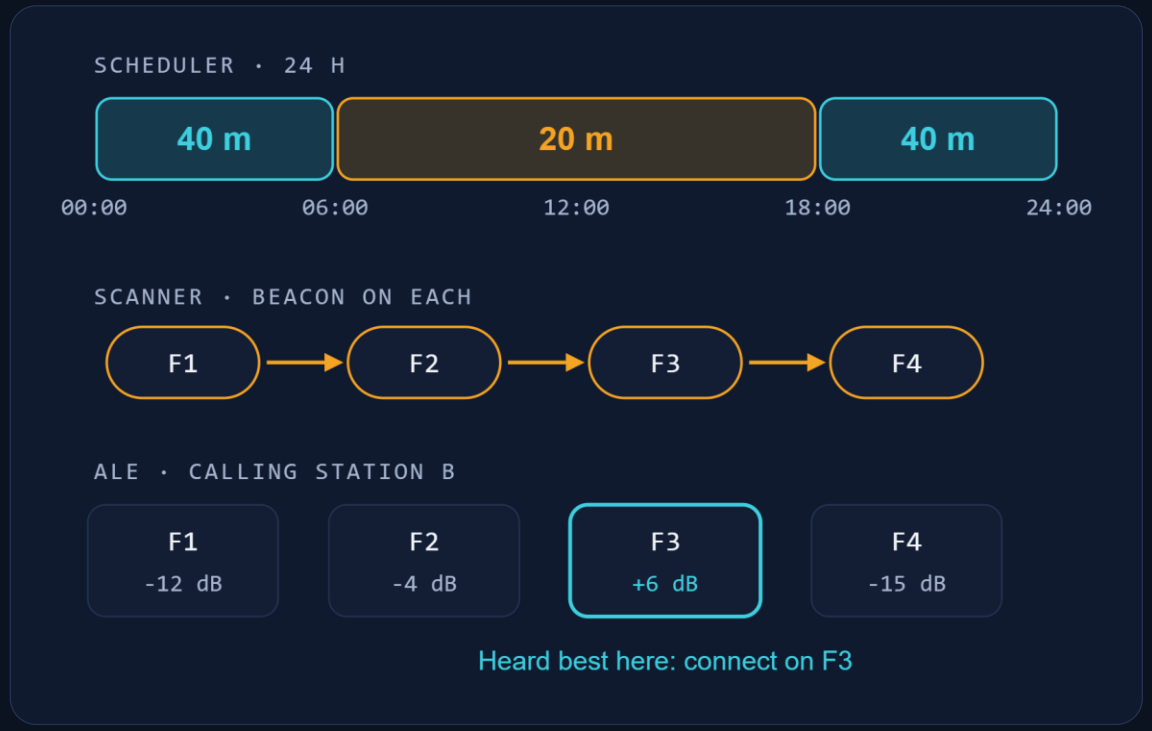
1. Connect a GPS receiver in Settings.
2. While connected, press F1 to send MY INFO with your current GPS position.
3. To share it automatically, turn on verbose GPS mode. Your position goes out every minute.
4. The position lands in the other station's log and on its map.

> Teams at fixed sites can turn GPS off.

PROCEDURE P17 · LINK MANAGEMENT

# Stay on the band that works

HF conditions change between day and night. A plan that works at noon can fail at midnight.




Scheduler · Scanner · ALE

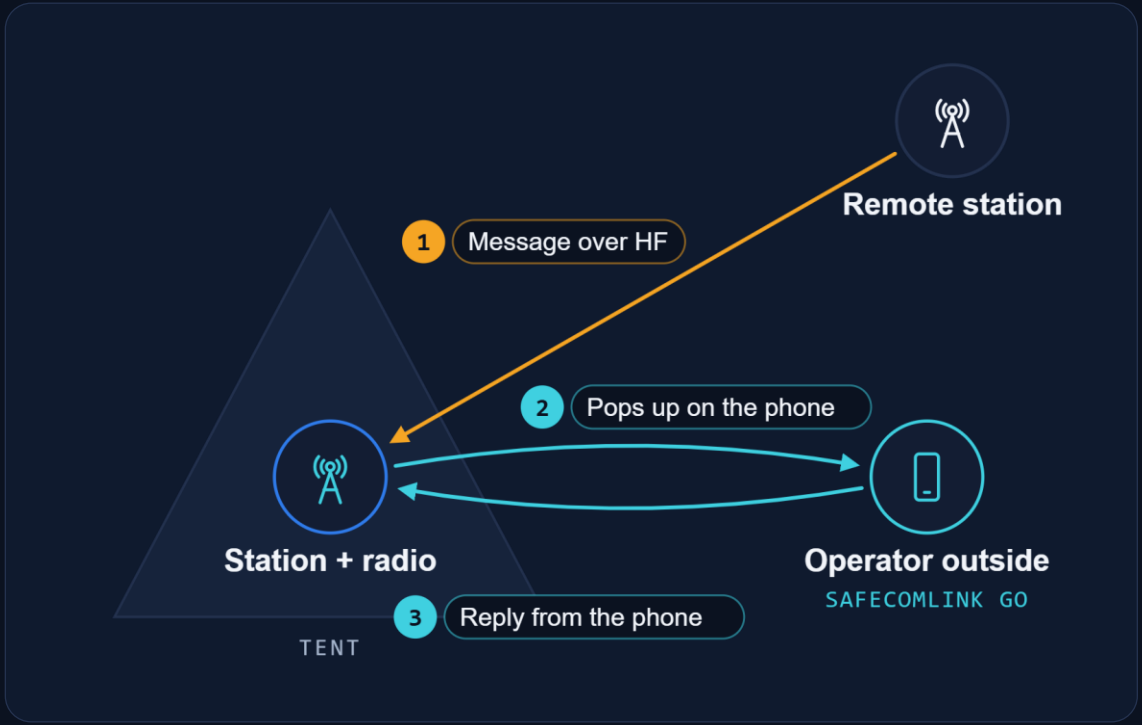
1. Scheduler: stations change frequency at set times, for example 20 m by day and 40 m by night. One plan everywhere moves everyone together.
2. Scanner: the station steps through a list of frequencies and beacons on each one.
3. ALE (Enterprise): when you call a station, it connects on the frequency where that station was heard best.
4. During a link, change frequency without dropping the connection.

PROCEDURE P18 · MOBILITY

# Leave the radio, stay connected

Enterprise Edition

The operator leaves the radio in the tent to help outside: fix the antenna, refuel the generator, carry a stretcher. Traffic keeps coming in.




SafecomLink Go · Android app · QR pairing

1. Before deployment, install SafecomLink Go on an Android phone and pair it by scanning the QR code on the station.
2. Leave the station running in the tent, connected to the radio.
3. Walk out with the phone. Calls, messages and broadcasts pop up on it like in any messenger.
4. Read and reply from the phone. The station sends the reply over the radio.
5. The app talks only to your own station. No internet, no cloud.

PART 2

# Incident playbooks

Ten emergencies, each split into phases. Every action points to the procedure that carries it out, so the team runs what it already drilled.

PLAYBOOK 01

# Regional blackout

Power and mobile networks are down across a large area, as in the 2025 Iberian blackout.

## 01 · FIRST HOUR

Activate the network and run check-in. Find out which sites are on the air.
P01

Send the ACTIVATE tag to all stations, with email to duty officers.
P02 · P03

Move to the night band plan if the outage runs past sunset.
P17

## 02 · FIRST 24 HOURS

Status round from every site to HQ at fixed times.
P13

Reach the grid operator and suppliers through a gateway outside the blackout.
P10

Relay to sites out of range by VMail.
P04 · P05

## 03 · UNTIL RESTORED

Pull updated restoration plans from the HQ file server.
P09

Confirm critical orders reached their sites.
P07

Ask the AI gateway, with your data loaded, for fuel and generator status across sites.
P12

PLAYBOOK 02

# Earthquake

Buildings down, roads cut, towers damaged. Aftershocks keep coming.

## 01 · FIRST HOUR

Check-in shows which stations survived and where they are.
P01 · P16

Aftershock warning to every station with an alert tag.
P02

Damage photos from the field to HQ.
P08

## 02 · FIRST 24 HOURS

Rescue teams report positions as they move.
P16

Casualty and needs lists to authorities through the email gateway.
P10

Find relay paths around damaged areas.
P05 · P06

## 03 · RECOVERY

Shelter coordination rounds twice a day.
P13

Download building inspection forms from the file server.
P09

Ask the AI gateway, with your data loaded, which shelters still have space.
P12

PLAYBOOK 03

# River flooding

Water rises over hours. Villages get cut off, and evacuation routes close one by one.

## 01 · WARNING

Flood warning with the EVACUATE tag, emailed to off-duty staff.
P02 · P03

Teams download today's evacuation routes.
P09

Gauge readings feed the station through the API.
API

## 02 · RESPONSE

Boat teams report positions.
P16

Photos of breached levees and blocked roads to command.
P08

Water-level and rain forecast through the AI gateway.
P11

## 03 · CUT-OFF AREAS

Messages to isolated villages through a relay station.
P04 · P07

Supply requests by email from shelters.
P10

Night band plan to hold the links.
P17

PLAYBOOK 04

# Wildfire evacuation

Wind shifts the fire front within minutes. Smoke and terrain block line of sight.

## 01 · FIRST HOUR

Evacuation order by alert tag, with email to staff away from radios.
P02 · P03

Teams download the current evacuation routes.
P09

Wind forecast by sector from the AI gateway.
P11

## 02 · EVACUATION

Every moving team reports its position.
P16

Fire-line photos to command.
P08

Hourly status round across all sectors.
P13

## 03 · HOLDING THE LINKS

Relay through a ridge-top station.
P05 · P15

Bridge HF and VHF teams at the command post.
P14

Confirm evacuation orders were delivered.
P07

PLAYBOOK 05

# Severe storm or hurricane

The warning comes days ahead. Landfall takes out power, mobile and internet for days.

## 01 · BEFORE LANDFALL

Complete the readiness steps: tags, band plan, gateways, file server.
Readiness

Check-in of every station that will stay on air.
P01

Load shelter lists and routes on the file server.
P09

## 02 · LANDFALL

Shelter-in-place alert to all stations and duty officers.
P02 · P03

Short status rounds at fixed times.
P13

Band plan holds the links through the night.
P17

## 03 · AFTERMATH

Damage photos from every site.
P08

Supply and repair requests by email.
P10

Relay to sites that lost their antenna path.
P04 · P06

PLAYBOOK 06

# Missing person search

Every minute counts. Teams spread over a wide area with no mobile coverage.

## 01 · LAUNCH

Photo and description to every team.
P08 · P13

Base operators join the search and stay reachable by phone.
P18

Sector maps and assignments from the file server.
P09

Teams check in and report their start positions.
P01 · P16

## 02 · SEARCH

Position reports at fixed intervals.
P16

Sector status rounds: searched, clear, next.
P13

Weather window for air support from the AI gateway.
P11

## 03 · FOUND

FOUND tag stops the search on every station.
P02 · P03

Medical team gets the exact GPS position.
P16

Far teams get the stand-down by relay.
P04 · P07

PLAYBOOK 07

# Mass-casualty incident

Hospitals and ambulance posts lose their phone and data lines while patients keep arriving.

## 01 · FIRST HOUR

MCI tag to hospitals and ambulance posts, emailed to duty managers.
P02 · P03

Check which hospitals are on the air.
P01

Patient counts in a fast status round.
P13

## 02 · DISTRIBUTION

Ask the AI gateway, with your data loaded, where ICU beds are free.
P12

Patient lists to each hospital by VMail.
P04

Confirm each list arrived.
P07

## 03 · REPORTING

Reports to the health authority by email.
P10

Updated triage forms from the file server.

P09

Bridge hospital VHF and regional HF.
P14

PLAYBOOK 08

# Shelter operations

Shelters open for days or weeks. Each one needs supplies, staff and a line to the outside.

## 01 · OPENING

Each shelter checks in with its status.
P01

Registration forms and shelter list from the file server.
P09

Position of each shelter reported once.
P16

## 02 · DAILY

Morning and evening headcount rounds.
P13

Staff helping outside stay reachable on their phones.
P18

Supply requests by email to the regional office.
P10

Ask the AI gateway, with your data loaded, for stock levels across shelters.
P12

## 03 · FAMILIES

Photos for family reunification.
P08

Messages to other shelters by VMail.
P04

Translations for displaced people from the AI gateway.
P11

PLAYBOOK 09

# Cyber attack or network outage

Email, phones and the corporate network are down or can't be trusted. Radio has no provider to attack.

## 01 · FIRST HOUR

OUTAGE tag to every site.
P02

Check-in of all sites over radio.
P01

Command runs its own group chat, with no internet in the path.
P13

## 02 · OPERATIONS

Orders and reports by VMail.
P04 · P07

Bridge bands at headquarters.
P14

Band plan keeps links up day and night.
P17

## 03 · RECOVERY

Reach outside partners through a gateway in another region.
P10

Recovery procedures from the file server.

P09

Alert each site when its service is back.
P02 · P03

PLAYBOOK 10

# Chemical or hazmat release

A toxic plume drifts with the wind. People inside the zone must shelter at once.

## 01 · FIRST MINUTES

SHELTER IN PLACE tag to all stations, with email to duty officers.
P02 · P03

Wind direction from the AI gateway to set the danger zone.
P11

Check which stations are inside the zone.

P01

## 02 · CONTAINMENT

Perimeter teams report positions.
P16

Photos of the site and hazard placards.
P08

Status round every hour.
P13

## 03 · ALL CLEAR

Updated zone maps on the file server.
P09

ALL CLEAR tag to every station.
P02

Confirm the all-clear reached isolated sites.
P07

PART 3 · DRILL CHECKLIST

# Quarterly drill

Date _____ Coordinator _____ Stations taking part _____

| | | |
|---|---|---|
| P01 | Network check-in | ☐ Pass ☐ Fail ☐ Skip |
| P02 | Network-wide emergency alert | ☐ Pass ☐ Fail ☐ Skip |
| P03 | Alert the people away from the radio | ☐ Pass ☐ Fail ☐ Skip |
| P04 | Message to a station you cannot reach | ☐ Pass ☐ Fail ☐ Skip |
| P05 | Find a relay path: path finder | ☐ Pass ☐ Fail ☐ Skip |
| P06 | Find a relay path: ask a station who it hears | ☐ Pass ☐ Fail ☐ Skip |
| P07 | Confirm delivery | ☐ Pass ☐ Fail ☐ Skip |
| P08 | Send a photo of a missing person | ☐ Pass ☐ Fail ☐ Skip |
| P09 | Download the latest evacuation plans | ☐ Pass ☐ Fail ☐ Skip |
| P10 | Send email from the disaster zone | ☐ Pass ☐ Fail ☐ Skip |
| P11 | Ask AI with no internet | ☐ Pass ☐ Fail ☐ Skip |
| P12 | Ask AI about your own data | ☐ Pass ☐ Fail ☐ Skip |
| P13 | Group chat for all stations | ☐ Pass ☐ Fail ☐ Skip |
| P14 | Bridge bands and modes | ☐ Pass ☐ Fail ☐ Skip |
| P15 | Live chat beyond direct range | ☐ Pass ☐ Fail ☐ Skip |
| P16 | Report your position | ☐ Pass ☐ Fail ☐ Skip |
| P17 | Stay on the band that works | ☐ Pass ☐ Fail ☐ Skip |
| P18 | Leave the radio, stay connected | ☐ Pass ☐ Fail ☐ Skip |

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