FORTUNE FAVORS THE PREPARED · COMMS ONE-PAGER

Build Your Comms PACE Plan

Cell to Starlink to radio to HF and Winlink: so one failure never cuts you off.

1. What does PACE mean?
2. What are my options?
3. Why can a message beat voice?
4. What's my plan?
5. How do I keep it working?

1 PACE in one minute · a systems plan, not a frequency list

Primary	Alternate	Contingency	Emergency
Everyday. Most capable.	First backup, different system.	Works with the grid shaky.	Needs almost nothing else.

Two rules: no two layers should fail for the same reason, and decide **now** what makes you switch (a time, a missed check-in, no service).

2 The comms ladder · pick rungs for each layer · top needs the most infrastructure, bottom the least

	Rung	Options	Still has to be working	Watch out for
1	**Cellular, two networks**	Phones on **two different carriers** (second line, eSIM or prepaid). Text before you call.	towers · tower power · carrier	Overload after a disaster; towers die when backup power runs out.
2	**Starlink internet**	Starlink at home or in the car: Wi-Fi calling, apps, email. No local towers or ISP.	satellite ISP · your power	Dish and router need power; the other end needs service too.
3	**Internet-linked radio**	Analog: **EchoLink, IRLP, AllStarLink**. Digital: **DMR**, **D-STAR**, **Fusion** (WIRES-X, YSF). Statewide to worldwide.	repeater · its power · internet	Stops when the internet at the link drops. Ham license.
4	**RF / microwave linked repeaters**	Repeaters tied together by radio or microwave, not the internet. Many counties, sometimes a state.	every site · their power	One site down splits it into islands. Ask about backup power.
5	**Stand-alone repeater**	One ham 2 m / 70 cm or GMRS repeater on a high site. Tens of miles.	one site · its power	Gets busy fast. Pick ones with battery or generator backup.
6	**Simplex**	Radio to radio: ham VHF/UHF, GMRS, FRS, MURS, CB. A mile or two handheld, more from high ground.	radios · batteries	Short range. Agree a channel and a backup channel.
7	**Satellite services**	Phone satellite texting (Starlink direct-to-cell, satellite SOS), inReach or ZOLEO messengers, Iridium phones.	subscription · clear sky · charge	Texts can take minutes. Check your plan and phone support it.
8	**HF and NVIS**	Your own HF station. **NVIS** on 80, 60 and 40 m covers 0–300 miles with no gaps; other HF goes farther.	your station · power · propagation	General license, practice, right band for the hour. Solar storms.
9	**Digital messages**	**Winlink** (email over radio, even radio-only), **JS8Call**, **APRS** messages, **Fldigi / Flmsg** forms.	radio · computer or app · power	Set up and test the software and interface before you need it.

3 Why a message can beat voice

- **Gets through:** JS8Call and Winlink decode signals too weak to understand by ear.
- **Exact:** addresses, numbers and medications arrive spelled right.
- **Waits for them:** Winlink and texts are stored until read; voice needs you both on at once.
- **On cell too:** a short text often gets out when a call won't.

4 Don't stack one weak point

Cell, Starlink and internet-linked radio can all fail together. **Give Contingency and Emergency no internet and no repeater**: simplex, HF, satellite texting, radio-only Winlink.

A common family layout: P cell, two carriers · A GMRS or ham repeater · C simplex plus satellite texting · E HF / NVIS or Winlink to an out-of-area contact.

5 My comms PACE plan · fill it in, keep a copy with the radios and in each go-bag

Layer	Rung and method	Number / freq / tone / TG	Who has it	Move on when	Check-in times
Example: Primary	*1: cell, both carriers*	*Numbers on the contact card*	*Everyone*	*No reply in 15 min*	*Text on the hour*
Primary					
Alternate					
Contingency					
Emergency					

Out-of-area contact _____

Radio listening window (e.g. :00 for 10 min) _____

If every layer fails, meet at ... **by** ... _____

6 Keep it working

- ☐ Test **every** layer once a month, not just Primary
- ☐ Write numbers, frequencies and talkgroups on paper too
- ☐ Power for each layer: spare batteries, solar, car charger
- ☐ Licenses: ham (Technician; General for most HF), GMRS covers family
- ☐ At least two layers need no internet and no repeater
- ☐ Program every radio with the plan's channels
- ☐ Everyone knows the triggers and the listening window
- ☐ Update the plan when people, radios or repeaters change

Read more

When Cell Service Fails, EchoLink and IRLP, Linked Repeaters, Commercial Satellites, Text Without Towers, HF and NVIS

Put the plan to work

The Family Emergency Plan Workbook walks your household through PACE, contacts and meeting places. Ready Ledger keeps your family's and group's plans in one place. Ready Messenger (free) formats messages for any rung.

The full guide: *Communications P.A.C.E.*

fortunefavorsthepreprepared.com/comms/pace/

The QR code opens the guide: radios, repeaters, linking, digital modes, Winlink and the free COM-01 PACE course.

Remember, Fortune Favors the Prepared

Semper Paratus, Semper Gumby