# Phase 4 Look and Feel

## What Makes Phase 4 Feel Like Amateur Radio?

With instant messaging, hangouts, Skype, and more cell phones than people, the novelty of being able to communicate is not enough to make a Phase 4 radio stand out from the crowd.

With a relatively high unit price, what can Phase 4 do that your relatively inexpensive cell phone with chat apps cannot do?

When the human interface to a modern amateur radio looks exactly like a human interface to commonly available communications program that run over the Internet, then why use a Phase 4 radio?

If the only difference is that there are connections over microwave ham bands instead of Internet routers, then is it still ham radio?

These questions get right to the heart of a problem that faces amateur radio today. One can look at it as if ham radio has won. Ham radio provided services that were rare on the ground a generation ago. Mobile communications were enabled, auto patch provided POTS access over the air, and packet radio provided keyboard-to-keyboard QSOs. All of these things and more are now provided by commercial services. Cellphones, for example, are so ubiquitous and pervasive that not having a cellphone is more unusual in some cohorts than having one. In other words, commercial services caught up to amateur radio.

One can also look at it as if ham radio has lost. Instead of picking up a hands-on hobby that requires learning, everyone is essentially an appliance operator in a world of closed-source hardware and software.

We believe in the first reality, but we acknowledge the many lessons of the second.

## Phase 4 Radios Enable Extreme Monitoring

The first and most powerful difference between Phase 4 and commercial or commodity communications is that amateur radio means monitoring. Communications are in the open, and anyone can listen to anyone else. Phase 4 radios allow monitoring of everything going on in the system, and this directly enables some powerful functionality. In order to take advantage of this functionality, some visualization code and user interface design is going to have to be written.

## Examples

The following are a few examples of the sort of things that can be done when you are able to monitor everyone using a communications system.

A map of everyone on the system at that moment.

The statistics of everyone on the system at that moment in graphical or tabular form

A “FractalQSL” record of all your QSOs with another operator.

Everyone in a conference, placed in a stereo field, so that it sounds like you are in the middle of the group as they talk.

Contests! Puzzles! Challenges! Collaborate and win.

Visualization of ad hoc connections being made with other local Phase 4 radios.

## Next Section

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