Steve!
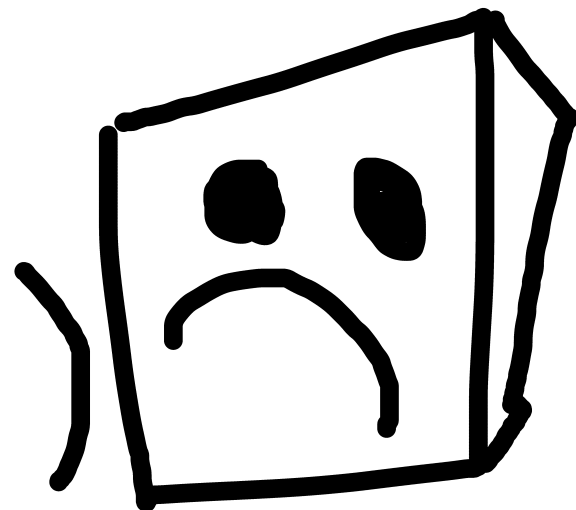
Michelle

SPACE

Paul!

φ4 Phase 4 Ground

Why What When Who Where How?

Solve Lots of Small Problems

Identify modular problems and publish the results.

- Usersynchronous log visualization tool release
- Dual band feed design
- DVB GSE for amateur radio implementation
- Signal aggregators for legacy traffic built

Digital Means Identity

Challenge: Properly defining Amateur Radio authorization and authentication in the digital age.

Solution: Leverage the existing mechanism of ARRL's Logbook of the World for authorization. Use tokens for authentication.

Signal Intelligence Pedagogy

Challenge: Teaching hams advanced digital communications techniques can be hard.

Solution: Include SIGINT basics in Phase 4 Ground to give hams traction and experience.

How? Wavelets and/or cyclostationary techniques.

Generic Stream Encapsulation

GSE is a transport protocol in DVB.

Transport used to be only MPEG in DVB.

GSE is much lower overhead and can be abused to provide amateur radio style functions.

Getting as many useful blocks for DVB receivers into GNU radio as possible is a big goal.

How to Find Us

https://github.com/phase4ground

Engineering reports on YouTube!
Search for "Phase 4 Ground Weekly Reports"

Join our dev mailing list! Go to AMSAT.org and volunteer for Phase 4 Ground team.

Join AMSAT, ARRL, TAPR – whatever appeals!