APRS RESOURCES

APRS (Automatic Packet Reporting System) holds a unique and influential place in the history of digital modes in amateur radio. While its immediate impact was on real-time data sharing within the amateur radio community, its broader influence extends into several areas of both amateur and commercial technology. Here's how history might view the importance of APRS:

1. Pioneering Real-Time Data Communication

APRS was groundbreaking in that it introduced the concept of real-time data communication and tracking within amateur radio. Before APRS, most digital modes focused on message passing or voice communication. APRS allowed hams to share their location, weather conditions, and messages in real-time over radio frequencies, which was a novel application at the time. This concept has since influenced other real-time data applications, both in and out of amateur radio.

2. Integration of GPS and Mapping

APRS's integration with GPS technology was forward-thinking and paved the way for the fusion of location-based services with digital communication. This approach has been widely adopted in various fields, from personal navigation devices to modern smartphones. APRS showed how GPS data could be utilized in practical ways, inspiring similar integrations in other digital modes and technologies.

3. Influence on Emergency Communication and Public Service

APRS's ability to track and relay real-time information has made it an invaluable tool in emergency communications and public service. Its utility in search and rescue operations, disaster response, and event management has set a precedent for how digital modes can be used for public good. This legacy continues as newer technologies build upon the principles APRS established, especially in real-time situational awareness.

4. Cross-Pollination with Other Digital Modes

APRS's development and usage have had a ripple effect on other digital modes. The principles behind APRS, such as packetized data transmission and automated reporting, have influenced the design and function of newer modes. APRS also demonstrated the value of integrating internet connectivity with radio communication, a concept further expanded by modes like EchoLink and D-STAR.

5. Inspirational Role for Modern Digital Modes

APRS has inspired a generation of hams to experiment with digital modes and explore new possibilities. The excitement around APRS's capabilities has led to broader experimentation and innovation within the amateur radio community. Many modern digital modes and technologies can trace their conceptual roots back to the ideas that APRS popularized.

6. Visionary Look into the Future

APRS's applications extend beyond terrestrial use. Its principles have been considered in the context of space exploration (e.g., Mars rovers) and even ocean floor mapping. APRS's influence on thinking about the future of communication, especially in challenging environments, solidifies its place in the history of digital modes as not just a tool for today, but a visionary system for tomorrow.

Conclusion

In summary, history will likely regard APRS as a transformative digital mode that not only advanced the capabilities of amateur radio but also laid the groundwork for future developments in real-time communication, location-based services, and emergency response systems. Its impact on the amateur radio community and beyond will be seen as a testament to the innovative spirit that drives the evolution of digital communication.

APRS Information Services

John Langner, WB2OSZ [callsign<at>arrl<dot>net] July 2024

Besides sending “messages” to other people, you can also send messages to many automated APRS Information Services.

I could not find a comprehensive list, so I started my own list. I would greatly appreciate any additions, corrections, and improvements. Tell your friends!

ANSRVR

ANSRVR allows you to quietly remain joined to a group. ANSRVR is a great way to send announcements to people interested in the same thing

To send a message to an announcement group, you can either change the Announcement's CQ Text and poke Send, or send "CQ <Group> Announcement Text" to ANSRVR via a Send Message / Chat.

Reference: http://aprsisce.wikidot.com/doc%3Aansrvr

APRSPH

APRSPH is also a bot that can be used to run queries, execute commands, and exchange messages with the SMS network.

Reference: http://aprsph.net/

APSPOT

APSPOT is an APRS system designed to provide a one-stop shop for self-spotting activations via APRS, to the myriad of activity based spotting systems out there.

Reference: https://apspot.radio/

APRS RESOURCES

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CQSRVR

CQSRVR is an APRS server designed to facilitate initial contact between amateur radio APRS stations (hams) worldwide with similar interests. It is not a messaging server, BBS, or any other type of interactive forum. It is a global service and requires unique callsign-SSIDs to be used. It is designed for simplicity and consistency of use.

Reference: https://www.aprs-is.net/CQSrvr.aspx

EMAIL-2

This forwards messages from APRS to Internet e-mail. Reference: https://www.aprs-is.net/Email.aspx

ISS (SATSRV)

When ISS (not the real space station, but the APRS satellite server) receives your query (via the APRS-IS), it will calculate the current or next pass of the ISS for an observer at your station's last beaconed position (it will say "Please beacon Position" if it doesn't know where you are). The response depends on when the pass begins.

.Reference: http://aprsisce.wikidot.com/doc:satsrv

MPAD

Python implementation of a multi-purpose APRS daemon (WX/METAR/TAF/ CWOP reports, satellite & other celestial data, find the nearest repeater to my position, user coordinates & distance etc. ...)

Reference: https://github.com/joergschultzelutter/mpad

APRS RESOURCES

WA1GOV-10

APRS to Twitter Gateway-Send an APRS message to WA1GOV-10 Your call and message will appear as a tweet from @wa1gov
Share your US WX forecast on Twitter-Send WXBOT to WA1GOV-10 Get the next SATELLITE pass prediction for your QTH!

Send an APRS message to WA1GOV-10 with a single uppercase SAT entry! See list: https://www.qrz.com/db/WA1GOV

Reference: Can't find any other documentation other than its bulletins.

WHO-IS, WHO-15

Callsign lookup
Reference: https://www.aprs-is.net/WhoIs.aspx

WTSAPP

WTSAPP is an APRS Gateway designed to allow Licensed Radio Amateurs around the world reach their loved ones from their radios by using APRS messages. This is very similar to the gateway SMSGTE, that allows communication to text messages.

Reference: https://wtsapp.org/

WXBOT

WxBot is an APRS-IS listener app that listens for messages and responds with a brief US National Weather Service forecast.

APRS RESOURCES

Title: "APRS: The Evolutionary Spark in the World of Digital Ham Radio"

Introduction: Fellow hams, let's dive into a fascinating piece of our hobby's history and future—APRS! We're all familiar with it as that nifty tool for tracking your buddy on the trail or monitoring the local weather station. But what if I told you that APRS is more than just a handy tool? It's a pioneering force that has shaped and influenced a wide array of digital technologies we use today, both inside and outside of ham radio.

The Legacy of APRS: When Bob Bruninga introduced APRS in the late 1980s, it wasn't just a novel way to use packet radio—it was a glimpse into the future. APRS was one of the first systems to blend real-time data communication with location services, a combination that's now standard in everything from GPS apps to IoT devices. Bob took the core of what made ham radio special—community, experimentation, and communication—and injected it with a dose of innovation that would ripple across the tech world.

APRS and the Push Forward: Now, let's be clear: APRS didn't just sit quietly in the corner while other technologies blossomed. It pushed the boundaries and set the stage for many digital modes we see today. Think of APRS as the trailblazer that proved the viability of real-time, decentralized communication. Before APRS, the idea of tracking someone's location or sending weather data in real-time wasn't exactly mainstream. APRS made it not only possible but practical, and in doing so, it influenced the development of modern digital communication systems.

Influence Beyond Ham Radio: Here's where it gets really interesting—APRS didn't just stay within our ham radio circles. The ideas that Bob Bruninga and the APRS community explored caught the attention of the broader tech world. GPS integration? APRS was doing it early on. Real-time data networks? APRS showed how it could be done. The way APRS brought together data, location, and communication laid the groundwork for what would become the Internet of Things (IoT), location-based services, and even some of the public safety systems we rely on today.

What If APRS Didn't Exist? Imagine for a moment if APRS had never come to be. Would we still have these technologies? Probably. But they might look a lot different. Without APRS as a proof of concept, we might have seen a slower development of real-time location services and data communication networks. Instead of the open, community-driven innovation that APRS fostered, we might have ended up with more closed, proprietary systems—less fun for us hams, and certainly less collaborative.

APRS: The Ongoing Evolution: But here's the best part: APRS isn't just a piece of history—it's a living, evolving technology. As we look to the future, APRS continues to inspire new ideas and applications. Think about autonomous vehicles, drones, and even space exploration. The principles behind APRS—decentralized communication, real-time data sharing, and community-driven development—are just as relevant today as they were 30 years ago. Who knows? The next big leap in digital communication might just have its roots in the APRS network you're using today.

APRS RESOURCES

Conclusion: So, the next time you fire up APRS, remember that you're not just tracking a signal—you're participating in a legacy of innovation. APRS has not only shaped the way we communicate in the ham world but has also had a far-reaching impact on the digital modes and technologies we rely on today. As hams, we should be proud of how APRS has pushed the boundaries and continue to explore its possibilities, because who knows what future innovations it might inspire?

Thank you, and 73!

APRS RESOURCES

https://www.amsat.org
https://www.amsat.org/status/
https://www.amsat.org/two-way-satellites/

http://www.aprs.org
https://github.com/wb2osz/direwolf
https://github.com/wb2osz/aprsspec
https://github.com/wb2osz/direwolf-doc/blob/main/Understanding-APRS-Packets.pdf
https://blog.aprs.fi/2020/02/how-aprs-paths-work.html
https://packet-radio.net/direwolf/

APRS@groups.io