

# APRSLink

**APRSLink** is a CMS-Hosted gateway providing a link between the Automatic Packet Reporting System (APRS) and the Winlink global radio email system. APRSLink monitors all APRS traffic gated to the internet, worldwide, and watches for special commands that allow APRS users to:

- read short email messages sent to their [callsign@winlink.org](mailto:callsign@winlink.org) account (only the base callsign, no SSID)
- send short email messages to any valid email address or Winlink 2000 user
- perform email related maintenance (see commands below)
- be notified of pending Winlink email via APRS message
- query APRSLink for information of the closest Winlink RMS packet station

**APRSLink** provides a very special capability for the Kenwood TH-D7, TM-D700 and TM-D710 and Yaesu FTM-350, FTM-400, VX-8DE/GE Radios for sending and receiving email from the radio front Panel without any need for a PC. (Of course APRSLink does work with APRSIS32, AGWTracker, UI-View, Xastir, APRSdroid or similar APRS message capable programs and so it can be used for HF-VHF-APRS as well.

Properly licensed Amateur Radio operators are automatically registered in the Winlink system the first time they send a message through the system. For someone to send email to you, you must first become registered by sending a message through the system. Your Winlink account cannot be established using APRSLink -- you must first create your Winlink email account before you can use APRSLink. See <http://www.winlink.org/user> for more information. Additionally, your APRS station must have sent at least one APRS position report (beacon) prior to attempting to access this service. In that way, APRSLink can know your Amateur callsign, location, and station type for use with some commands.

**LOGIN** – Now that secure login is enabled and required for all WINLINK users, just send any command to initiate login. The CMS will respond with a challenge consisting of three digits whose values represent positions of characters within your password (ex: LOGIN[123]).

**[RESP]** - This is a six character response to the login challenge. Respond with three password characters corresponding to the positions in the challenge plus three additional characters of your choosing (in any order). Example: Password is ABC123. Login challenge is: 425. You send '1B2AZ5'. ABZ21TY would also be valid since it contains the characters 1, B, and 2.

**LOGOFF** - Your login will expire after approximately two hours. You can manually log out anytime by issuing the "B" or "BYE" command.

## Commands Reference

Command	Description
<b>H or ?</b>	Return brief Help. Help is also returned whenever APRSLink does not understand a command. Use "?" followed by a command letter for detailed help for that command. Example: "?L" for help with the List command.
<b>L</b>	Return a List of pending messages (a maximum of 5 are returned). The List command queries the Winlink e-mail server and builds a list of up to 5 recent messages. Other commands operate on this list of messages using the message number (#).
<b>R#</b>	Read message number # (# is one of the numbered messages returned via the List command). Example: "R2"
<b>Y#</b>	rePLY to message. Reply to message number # (# is one of the numbered messages returned via the List command). Example: "Y2"
<b>SP</b>	<p>This is a replacement for the "W" command (deprecated). It simplifies the sending of messages from APRS devices considerably. Here's the format: SP [email address, callsign, or alias] [subject]</p> <p>Then, anything you send to WLNK-1 other than /EX or the (P)layback command makes up the body of your message. If you mess up and need to start over, just issue a new SP command.</p> <p>Here's an example (all sent to WLNK-1):</p> <p>SP <a href="mailto:sam@iam.com">sam@iam.com</a> Test Message Some text for the body of the message. Some more text for the message. /EX</p> <p>Each line is a separate APRS message, but the need for entering specific commands for each line/message has been removed. You type and send as much text as necessary and then send /EX as a separate APRS message to complete your email.</p>
<b>/EX</b>	Complete and send the composed message. You should receive a confirmation message.
<b>P</b>	Playback message. Play back message lines for the message being written.
<b>SMS</b>	Send short message (one line). Syntax: SMS [email address, callsign, or alias] [message]  Example: SMS <a href="mailto:sam@iam.com">sam@iam.com</a> A short message to Sam
<b>A</b>	Create/update an alias for an e-mail address.

<b>AL</b>	Example: A sam= <a href="mailto:sam@somelongdomainname.net">sam@somelongdomainname.net</a> Then use "SP sam" instead of "SP <a href="mailto:sam@somelongdomainname.net">sam@somelongdomainname.net</a> " To delete an alias omit the part after the equal sign. "A sam=" will delete the sam alias To get a list of all your aliases send "AL"
<b>F#</b>	Forward message number # to address or callsign following F# (# is 1 to 5)(# is one of the numbered messages returned via the List command).  Example: "F2 <a href="mailto:youraddr@home.net">youraddr@home.net</a> "
<b>K#</b>	Kill (mark as deleted) message number #(# is one of the numbered messages returned via the List command). Example: "K3"
<b>G#</b>	Return information about closest active RMS Packet Gateway. # is a number indicating how many "close" stations are returned. The default (no #) is 1.
<b>I</b>	Return Information about APRSLink

Here's how it works: You send an APRS message using WLNK-1 as the destination callsign with one of the above commands as the message text. APRSLink responds by sending APRS messages back to you via your IGate. Of course, your IGate must be configured to gate those messages back to RF - it should be.

APRSLink will detect if your request is from a Kenwood TH-D7 or TM-D700/710, and attempt to format retrieved messages to fit the display of those devices. For a TH-D7, this means you are limited to receiving a maximum of 48 characters per APRS message, and a maximum of 64 characters for the TM-D700/710. When you request to read an e-mail from the Winlink system, APRSLink will send one or more APRS messages back to your station. Reading large messages (over a few lines) is not appropriate, and APRSLink limits the number of APRS messages it will send back to your station.

APRSLink is tailored to fit the needs of remote TH-D7 and TM D700/710 users, but is fully functional for other radios/PC APRS clients as well. To allow easy entry using the D7 or D700/710 keypads, you can use a keypad letter instead of a number for the second part of commands that require message line numbers. For example, to read message 3 you can send Rd instead of R3; use Rj for message 5, etc. Actually, any letter on the key will be interpreted as the number on that same key for any command that uses a number following the command character.

If you desire notification of pending Winlink email just add "WINLINK" somewhere in your station's position comment (or status text) and you'll be notified with an APRS message whenever you have unread mail on the Winlink system. Notification is sent once per day (when it's detected that your station is on-line) but is reset whenever you use APRSLink to access your Winlink email. In that way, mail received after you have read the current batch of messages will trigger another notification.

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