

What is APRS2SOTA and how do I use it?

APRS2SOTA is a gateway between the APRS system and SOTA (via SotaWatch)

The gateway accepts suitably formatted messages from the APRS-IS network and posts Spots on the SotaWatch site.

The **APRS2SOTA** gateway accepts only messages as detailed in the APRS Protocol Specification (V1.0.1 Chap 14) 'MESSAGES BULLETINS AND ANNOUNCEMENTS'.

Information Required

Each APRS message requires:

- Full Summit Reference (see SOTA Database)
- Operating Frequency (with or without units, can be given as kHz or MHz)
- Mode (AM,CW,DATA,DV,FM,PSK,RTTY,SSB,OTHER)

Optional Information

Each APRS message may also contain:

- The operators callsign (with or without any prefix or suffix)
- A short Comment

The system is not case sensitive so you may use mixed case for any of the parameters.

The preferred order of parameters is:

<Ass/Ref> <Freq> <Mode> [callsign] [comment]

Note: Whilst the system will accept most parameters in any sequence any optional callsign **MUST** be given before any comment and the first part of the comment **MUST NOT** be something that looks like a callsign (or undesired effects may result).

Formatting of Parameters

Parameters may be separated by any of the following:

' " ` ^ # @ % , : ; < > / *or a space*

Note: That the '!' character is no longer allowed as a separator (so that it may be used as part of a comment).

An example APRS message when sent over AX25 may look like:

GOLGS-2>APRS,WIDE2-1*::SOTA :ON/ON-010 144.320 SSB ON/GOLGS/P Calling now{003

or

GOLGS-9>APRS,WIDE2-1*::APRS2SOTA:G/CE-001 144.320 SSB Needs more callers{003

(i.e. a message directed to 'SOTA' or 'APRS2SOTA').

The system accepts any SSID on the originators callsign.

The system does NOT accept APRS 'position comments' , 'location' reports or simple AX25 Beacons.

How to send a suitable message

Details on how to send a APRS message vary a little between radio's, a search on YouTube or Google (i.e. 'aprs vx-8r message') should find examples for your radio - just remember that the destination for your message is 'SOTA' or 'APRS2SOTA' (no SSID is required - set the SSID to 0 if your radio requires one).

Prefix, Callsign and Association matching

The APRS2SOTA system accepts UK calls with any regional variation (G,GW,GM;M,MU,MW; 2E,2W,2M etc) and handles putting in the correct regional callsign variation to match the given Summit reference.

The system originally added /P to all callsigns (unless some other suffix was given) however this feature has been disabled (following user requests).

For non-UK operators in the UK and any operators in another Country it will try to add the Country Prefix (i.e. ON/G0LGS or MW/F6ENO etc) when necessary (unless another one is given with the APRS info).

Note: The code for callsign/summit matching is complex and may not always work exactly as expected, this means spots may appear on SotaWatch with different pre-fixes to those actually being used by an activator (work on this part of the gateway code is ongoing as anomalies arise).

Spot de-duplication.

The gateway should not re-post an identical spot if received within 10 minutes of the previous spot.

APRS Ack's and Gateway Messages

The gateway will attempt to send APRS Ack's and attempt to respond via APRS with information informing the APRS user of successful, failed, duplicate spots etc.

Access to the APRS2SOTA Gateway

If anyone would like to use the APRS2SOTA gateway then contact me via email so that I can add you to the list of authorised users.

Commands

The following single word commands may be useful (when a bi-directional i-Gate is available):

/help - Gives a Reminder of the preferred parameter order

/last - Shows information on the last APRS2SOTA spot.

/mylast - Shows information on your last spot posted via APRS2SOTA.

/time - Shows the current Time (normally in UTC).

/spots - Shows the 3 most recent spots from SpotLite.

Note: The gateway will try to send APRS messages up to 3 times before they are discarded.

Filtering of certain calls

Note: I have been requested by the SOTA Management Team to prevent spots using certain callsigns from being posted on SOTAwatch, so in accordance with their wishes the system will NOT permit certain callsigns to post spots (or have spots posted for them)

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