

## 2016 AMSAT Field Day

It's that time of year again; summer and Field Day! Each year the American Radio Relay League (ARRL) sponsors Field Day as a "picnic, a campout, practice for emergencies, an informal contest and, most of all, FUN!" The event takes place during a 24-hour period on the fourth weekend of June. For 2016 the event takes place during a 27-hour period from 1800 UTC on Saturday June 25, 2016 through 2100 UTC on Sunday June 26, 2016. Those who set up prior to 1800 UTC on June 25 can operate only 24 hours. The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

With the loss of AO-51, VO-52 and SO-67 this year it is going to be as challenging as last year. A few new satellites are up there to take some of the load. If you are considering ONLY the FM voice satellites like SO-50 for your AMSAT Field Day focus. Don't, unless you are simply hoping to make one contact for the ARRL rules bonus points. The congestion on FM LEO satellites is always so intense that we must continue to limit their use to one-QSO-per-FM-satellite. This includes the International Space Station. You will be allowed one QSO if the ISS is operating Voice. You will also be allowed one digital QSO with the ISS or any other digital, non-store-and-forward, packet satellite (if operational).

It was suggested during past field days that a control station be allowed to coordinate contacts on the FM satellites. There is nothing in the rules that would prohibit this. This is nothing more than a single station working multiple QSO's. If a station were to act as a control station and give QSO's to every other field day station, the control station would still only be allowed to turn in one QSO per FM satellite while the other station would be able to submit one QSO.

The format for the message exchange on the ISS or other digital packet satellite is an unproto packet to the other station (3-way exchange required) with all the same information as normally exchanged for ARRL Field Day,

e.g.:

W6NWX de KK5DO 2A STX  
KK5DO de W6NWX QSL 5A SDG  
W6NWX de KK5DO QSL

If you have worked the satellites on Field Day in recent years, you may have noticed a lot of good contacts can be made on some of the less-populated, low-earth-orbit satellites like FO-29, AO-7, or AO-73. During Field Day the transponders come alive like 20 meters on a weekend. The good news is that the transponders on these satellites will support multiple simultaneous contacts. The bad news is that you can't use FM, just low duty-cycle modes like SSB and CW.

### THE 2016 AMSAT FIELD DAY RULES

The AMSAT Field Day 2016 event is open to all Amateur Radio operators. Amateurs are to use the exchange as specified in ARRL rules for Field Day. The AMSAT competition is to encourage the use of all amateur satellites, both analog and digital. Note that no points will be credited for any contacts beyond the ONE allowed via each single-channel FM satellite. Operators are encouraged not to make any extra contacts via these satellites (Ex: SO-50). CW contacts and digital contacts are worth three points as outlined below.

#### 1. Analog Transponders

ARRL rules apply, except:

- Each phone, CW, and digital segment ON EACH SATELLITE TRANSPONDER is considered to be a separate band.

- CW and digital (RTTY, PSK-31, etc.) contacts count THREE points each.

- Stations are limited to one (1) completed QSO on any single channel FM satellite. If a satellite has multiple modes such as V/u and L/s modes both turned on, one contact each is allowed. If the PBBS is on - see Pacsats below, ISS (1 phone and 1 digital), Contacts with the ISS crew will count for one contact if they are active. PCSat (I, II, etc.) (1 digital),

- The use of more than one transmitter at the same time on a single satellite transponder is prohibited.

## 2. Digital Transponders

For the Pacsats (GO-32, etc.) or 'Store and Forward' hamsats, each satellite is considered a separate band. Do not post "CQ" messages. Simply upload ONE greeting message to each satellite and download as many greeting messages as possible from each satellite. The subject of the uploaded file should be posted as Field Day Greetings, addressed to ALL. The purpose of this portion of the competition is to demonstrate digital satellite communications to other Field Day participants and observers. Do not reply to the Field Day Greetings addressed to ALL.

The following uploads and downloads count as three-point digital contacts.

- (a) Upload of a satellite Field Day Greetings file (one per satellite).
- (b) Download of Satellite Field Day Greetings files posted by other stations. Downloads of non-Field Day files or messages not addressed to ALL are not to be counted for the event. Save DIR listings and message files for later "proof of contact."

Please note AMSAT uploaded messages do not count for QSO points under the ARRL rules.

Satellite digipeat QSO's and APRS short-message contacts are worth three points each, but must be complete verified two-way exchanges. **Remember, only one digipeat contact is allowed for the ISS and other satellites in this mode.**

The use of terrestrial gateway stations or internet gateways (i.e. EchoLink, IRLP, etc.) to uplink/downlink is not allowed.

Sample Satellite Field Day Greetings File:

Greetings from W5MSQ Field Day Satellite station near Katy, Texas, EL-29, with 20 participants, operating class 2A, in the AMSAT-Houston group with the Houston Amateur Television Society and the Houston QRP club. All the best and 73!

Note that the message stated the call, name of the group, operating class, where they were located (the grid square would be helpful) and how many operators were in attendance.

## 3. Operating Class

Stations operating portable and using emergency power (as per ARRL Field Day rules) are in a separate operating class from those at home connected to commercial power. On the report form simply check off Emergency or Commercial for the Power Source and be sure to specify your ARRL operating class (2A, 1C, etc.).

AND FINALLY...

The Satellite Summary Sheet should be used for submission of the AMSAT Field Day competition and be received by KK5DO (email or postal mail) by 11:59 P.M. CDT, Monday, July 11, 2016.

The preferred method for submitting your log is via e-mail to [kk5do@amsat.org](mailto:kk5do@amsat.org) or [kk5do@arrl.net](mailto:kk5do@arrl.net).

You may also use the postal service but give plenty of time for your results to arrive by the submission date. Add photographs or other interesting information that can be used in an article for the Journal.

*You will receive an email back (within one or two days) from me when I receive your email submission. If you do not receive a confirmation message, then I have not received your submission. Try sending it again or send it to my other email address.*

If mailing your submission, the address is:

Bruce Paige, KK5DO  
Director of Awards and Contests  
PO Box 310  
Alief, TX 77411-0310.

Certificates will be awarded to the first-place emergency power/portable station at the AMSAT General Meeting and Space Symposium in the fall of 2016. Certificates will also be awarded to the second and third place portable/emergency operation in addition to the first-place home station running on emergency power. A station submitting high, award-winning scores will be requested to send in dupe sheets for analog contacts and message listings for digital downloads.

You may have multiple rig difficulties, antenna failures, computer glitches, generator disasters, tropical storms, and there may even be satellite problems, but the goal is to test your ability to operate in an emergency situation. Try different gear. Demonstrate satellite operations to hams that don't even know the HAMSATS exist. Test your equipment. Avoid making more than ONE contact via the FM-only voice HAMSATS or the ISS, and enjoy the event!

This form is designed to allow for easy editing in a Word Processor.

AMSAT Satellite Summary Sheet - 2016

Satellite and number of Voice QSO's  
AO-27 1 (example)

Satellite and number of CW/RTTY/PSK31 etc QSO's  
AO-07 5 (example)

Satellite and Up/Downloads  
UO-11 3 (example)

Score Calculation  
Total Voice QSO's  $\times 1 =$   
Total CW/RTTY/PSK31 QSO's  $\times 3 =$   
Total Up/Downloads  $\times 3 =$   
Grand Total  $=$

Please provide the following information

Your Field Day Callsign

Your Group Name

ARRL Field Day Classification

ARRL Section

Power Source (Select 1)

Emergency

Commercial

Your name and home call

Home address

Any Comments