

STARLITE

THE NEWSLETTER FOR THE STOURBRIDGE AND DISTRICT A.R.S.



G6OI
G6SRS



ISSUE: FEBRUARY 2019



G4CVK

STOURBRIDGE & DISTRICT AMATEUR RADIO SOCIETY
INCORPORATING
OLD SWINFORD HOSPITAL SCHOOL RADIO CLUB

MEETINGS HELD AT

OLDSWINFORD HOSPITAL SCHOOL
HEATH LANE
STOURBRIDGE
[8:00 TO 10:00 PM]

VISITORS ALWAYS WELCOME

THE SOCIETY HOLDS ITS FULL MEETINGS
ON THE 1ST AND 3RD MONDAYS EACH MONTH

80TH ANNIVERSARY YEAR

[MARCH 2018 - MARCH 2019]

RSGB AFFILIATED SOCIETY

STARLITE

Telephone Enquiries to:-

Hon. Secretary
John Clarke M1EJG
[01562] 700513

Or by Email to:-
honsec@g6oi.org.uk

StARS Website URLs:-

www.g6oi.org.uk
<http://g6oi.ross-lewis.co.uk/index.html>

StARS Facebook Page:-

<https://www.facebook.com/groups/stourbridge.ars/>

All correspondence/enquiries should
be addressed to the Hon Secretary at:-

StARS
c/o The Mill House
21 Mill Lane
Blakedown
Kidderminster
DY10 3ND

Forthcoming Meetings

February 4 th	On Air. Informal. Digi Modes Group.
February 11 th	On Air. Informal. Digi Modes Group.
February 18 th	Constructors' Competition
February 25 th	On Air. Informal. Digi Modes Group.
March 4 th	On Air. Informal. Digi Modes Group.
March 11 th	On Air. Informal. Digi Modes Group.
March 18 th	Annual General Meeting
March 25 th	On Air. Informal. Digi Modes Group.
April 1 st	On Air. Informal. Digi Modes Group + Committee Meeting?
April 8 th	On Air. Informal. Digi Modes Group.
April 15 th	Main Meeting – Subject t.b.a.
April 22 nd	On Air. Informal. Digi Modes Group.
May 6 th	On Air. Informal. Digi Modes Group.
May 13 th	On Air. Informal. Digi Modes Group.

Editor's Comment

Once again, it has been a very quiet month and, so, nothing to report.

This month's featured article came from Jim G4WAO and concerns the launch of the Fox-1 Cliff CubeSat. I have no idea if anyone in the Society uses satellite communication, but you may find the article of interest.

There was, also, an email from our Hon Sec, John M1EJG, regarding the Foundation Course. I believe there is probably only 1 candidate, but it is still a worthwhile cause to help someone get their ticket. More up-to-date information will be given at a Club meeting in due course. Unless I am mistaken, wasn't the original idea that the candidate would study at home and the Society would arrange the exam?

I have included a "page filler" regarding weather satellites and their transmission frequencies. I found this information some months ago, but I guess it will still be valid.

This space left intentionally blank for your contribution.

There is very little input from the membership, so your Editor has been forced to play radio instead of editing!

Memories, photos, projects, general chit-chat, etc., would all be very welcome.

Please send input to: g4xom@g6oi.org.uk



Foundation Course 2019

Confirming the arrangements for the forthcoming Foundation Course.

The first lecture will commence on 4th February.

The subject for this lecture will be agreed at the club meeting on 28th January. The order of following lectures will be agreed

The week prior to each of the lectures in order to ensure that the club member giving the lecture is available.

The subject and lecturer is as follows :-

Technical basics :	James.
Safety:	James.
Transmitters/Receivers:	Tony / Geoff.
Morse:	Bob Egan.
Operating practice and procedures:	Wayne.
Propagation:	James.
Electromagnetic compatibility:	John Scott.
Licence schedule and Licence Condition:	Tim.
Antennas:	Tony.
Invigilator:	Nick.

This picture would, probably, link into James' safety talk, but we should all be aware of the correct fuse to use in any electrical instance.



AMSAT's Fox-1Cliff Amateur Radio CubeSat Launched Successfully

SpaceX has announced that the SSO-A: SmallSat Express mission carrying AMSAT's Fox-1Cliff CubeSat has been deployed into orbit. A SpaceX Falcon 9 vehicle carried Fox-1Cliff and several other satellites into space from Vandenberg Air Force Base in California, following a 1-day launch delay.



“Successful deployment of four microsats and the upper and lower free flyer with additional payloads for Spaceflight SSO-A: SmallSat Express confirmed. Follow [@SpaceflightInc](#) for further mission updates,” SpaceX tweeted this afternoon following the launch.

In addition to Fox-1Cliff, the SSO-A mission carried several other Amateur Radio satellites, including FUNcube on ESEO, JY1-SAT, K2SAT, and ExseedSat.

Fox-1Cliff carries the Fox-1 U/v FM repeater, AMSAT's L-Band Downshifter, the flight spare of the AO-85 Vanderbilt University Low Energy Proton (LEP) radiation experiment, and the standard Fox-1 Penn State University-Erie MEMS gyroscope experiment. Virginia Tech provided a video graphics array camera that's similar to the one on AO-92 but which will provide images at a higher 640 × 480 resolution.

The Fox-1Cliff downlink for FM voice and data-under-voice (DUV) is 145.920 MHz. Uplinks are 435.300 and 1267.300 MHz.

Fox-1Cliff is named in honor of long-time AMSAT member, contributor, and benefactor Cliff Buttschardt, K7RR (SK), who died in 2006. His contributions to AMSAT and other Amateur Satellite programs — including his service as an adviser during the initial development of the CubeSat specification at California Polytechnic State University — earned him the Lifetime Achievement Award from Project OSCAR in 2006.

In November as the launch was pending, AMSAT asked Amateur Radio satellite enthusiasts to listen for Fox-1Cliff's telemetry for the initial 72 – 96 hours as on-orbit checkout gets under way. The first station to successfully receive and submit telemetry to the AMSAT server will receive a special 3D printed QSL card acknowledging their contribution.

“If you are capturing telemetry with *FoxTelem*, please be sure that “Upload to Server” is checked in your settings and your Ground Station Params are filled in as well,” AMSAT has said. In the initial Safe Mode or Beacon Mode after startup, the transmitter is limited to 10 seconds on time followed by a 2-minute off cycle. “You will hear Veronica announcing ‘Fox-1Cliff Safe Mode,’ while in Beacon Mode,” AMSAT said.

AMSAT has said that the on-orbit check-out procedure will be similar to Fox-1D. “It is very important, not to mention just plain good Amateur operating practice, to refrain from using the transponder uplink, so we can do the on orbit tests, including when we turn on transponder mode for testing,” AMSAT said. “AMSAT will make it broadly known when the tests are complete and the transponder is available for all to use.”

Currently Active Weather Satellites and Frequencies

www.geo-web.org.uk

Polar APT/LRPT Satellites

Satellite	Frequency	Status	Image Quality
NOAA 15	137,6200 MHz	On	Good
NOAA 18	137,9125 MHz	On	Good
NOAA 19	137,1000 MHz	On	Good ¹
Meteor M N1	137,0968 MHz	Off	Dead ³
Meteor M N2	137,9000 MHz	On	Good

Polar HRPT/AHRPT Satellites

Satellite	Frequency	Mode	Format	Image Quality
NOAA 15	1702,5 MHz	Omni	HRPT	Weak
NOAA 18	1707,0 MHz	RHCP	HRPT	Good
NOAA 19	1698,0 MHz	RHCP	HRPT	Good
Feng Yun 1D	1700,4 MHz	RHCP	CHRPT	None: Device failure
Feng Yun 3A	1704,5 MHz	RHCP	AHRPT	Off ²
Feng Yun 3B	1704,5 MHz	RHCP	AHRPT	Active ²
Feng Yun 3C	1701,4 MHz	RHCP	AHRPT	Active ²
Metop A	1701,3 MHz	RHCP	AHRPT	Good
Metop B	1701,3 MHz	RHCP	AHRPT	Good
Meteor M N1	1700,0 MHz	RHCP	AHRPT	Dead? ³
Meteor M N2	1700,0 MHz	RHCP	AHRPT	Good

Notes

1. LRPT Signals from Meteor M N2 may cause interference to NOAA 19 transmissions when the two foot-prints overlap,
2. These satellites employ a non-standard AHRPT format and cannot be received with conventional receiving equipment.
3. On 20 March 2016, Meteor M1 suffered a catastrophic attitude loss, frequently pointing its sensors towards the sun. The following day all signals ceased, it seems highly probable that this satellite is now incapable of imaging the Earth.

YOUR COMMITTEE



PRESIDENT
VICE PRESIDENT
SECRETARY
TREASURER
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