Cockenzie & Port Seton Amateur Radio Club Elements

Thomas MM0THL at CQWW

In this issue

- 1 Editorial
- 2 Activity Week reports
- 5 From one to the other!
- 6 ACTIVITY WEEK RULES
- 11 Clublog Tables
- 11 Construction Night
- 12 HOW TO IMPROVE YOUR OPERATING SKILLS
- 14 CHRISTMAS NIGHT OUT
- 16 HF Propagation Using Solar Indices
- 18 Club Events

Cockenzie & Port Seton Amateur Radio Club is affiliated to the Radio Society of Great Britain and holds the call signs MM0CPS and GM2T which are used for our special event and contest entries.

The Club was formed by Bob Glasgow BEM GM4UYZ in 1984, to help the local amateurs get to know each other.

Far from being just a local club we have members regularly attending from the Borders, Dumfries, Strathclyde, Fife and Newcastle.

We have supported the British Heart Foundation for many years and to date we have raised £20,036 for them.

The Club usually meets on the first Friday of every month in the Thorntree Inn on the old Cockenzie High Street from 7pm till late.

Club email

cpsarc@gmail.com



Editorial

Not much to report this month.

The club entered the CQWW SSB contest from a new site in Fife and we hope to hear how they got on in due course.

I've uploaded some photos to the website photo gallery.

Bob GM4UYZ is getting back into the swing of things, organising stuff like he's done for 40 years now.

The spreadsheets and rules for the 2026 Activity week are now on the website (I've removed all the old ones which aren't valid any more)

We look forward to seeing you all at Club Night in the Thorntree Inn from 7pm on Friday 7th November. We'll be in the Lounge unless there's a quiz on in which case we'll be in the public bar.

We're planning on holding another Construction Night in the Cockenzie British Legion on Tuesday 11th November from 7pm (subject to confirmation from the RBL)

Our regular plea is for more content for the newsletter, lets hear what you've been doing, any new projects, new gear etc. Don't leave it all to Bob and me to fill the newsletter



Activity Week reports

MM0YCJ Colwyn

October activity week was a busy one where I managed to get out and broadcast from 5 SOTA summits all around the West coast of Scotland.

Saturday 11th October 2025 we were ready near Struy at 09:00 hours to drive up Glen Strathfarrar when the access gate is ceremonially opened for the great unwashed! From here it is a long drive to park at the dam close to Monar Lodge, then a few hours walk on an old stalkers pony track along Loch Monar to climb the Corbett An Sidhean (814m, SOTA ref; GM/WS-163). The Red Deer rut had started and it was cloudy on the top but calm and I was able to make 18 QSOs from the large summit. Only the second time anyone has activated the peak. The first was GM4COX on 20th June 2014 so an 11 year wait, and now I know why! On a Saturday VHF was busier than midweek and 5 QSOs resulted on 145MHz ranging from Burghead in Moray to Stornoway. On HF there were 13 QSOs on 14MHz the furthest being SV3RVJ/P on a Greek mountain 2911Km away. Not bad using an FT817 (5 watts) and a 20m/40m trapped EFHW wire.

Early on Sunday 12th October we parked up at KIllilan near the start of Glen Elchaig. Just beyond Dornie behind Eileen Donan Castle. This was a solo trip using my mountain bike 12km along the glen to Carnach where I locked the bike and walked the final 2-3km to Iron Lodge. There is tarmac for more than half of the private road which made for an easy cycle and return. From here there is a South West ridge that eventually leads to the summit of Aonach Buidhe (899m, SOTA ref; GM/WS-114). Again, there had only been one SOTA activator previously. This had the feel of a remote and lonely summit. I started calling CQ on 145MHz at 12:00 hours (11:00 UTC) about an hour later than planned. I made 5 QSOs FM, using a 2 element YAGI, and as time was tight, that was my total haul.

I packed then headed west to the next summit; Faochaig (868m, SOTA ref; GM/WS-137). Again this traverse took longer than planned and I started radioing at 15:16 hours from the summit. Six VHF contacts over about 20 minutes including a QSO to Colraine in Northern Ireland (283km) and Dunlop in Ayrshire (202Km). Trying not to delay I packed and headed due south over rough country to Carnach where I eventually reached the parked bike at 18:00 hours. From there the final 12Km back to the car park was sweet and easy, arriving just before it got too dark on what was a long and successful SOTA day. I had seen no other person all day!

Monday 16th October I found myself on the Isle of Skye and went up a modest hill behind Portree called Sithean Bhealaich Chumhaing (393m, SOTA ref; GM/SI-115). It was a more leisurely day out with 16 QSOs from this magnificent summit high on the cliffs of the coast of Skye. VHF provided three QSOs, 14MHz SSB only two (furthest

2243Km), and 11 QSOs on 7MHz SSB.

I was up on Skye to help fix the water supply to an off-grid property which was successfully achieved, and we also had time to climb the Dubh Ridge in the Cuillins of Skye (see photo from summit of Squrr Dubh Mor).



The route also involved an abseil (see photo).



On Thursday 16th October I was able to drive to near Sconser on Skye and climb up Meall a'Mhaoil (284m, SOTA ref; GM/SI-158). Again this was late in the day and I used VHF making 2 QSOs on 145MHz FM and 4 on 14MHz SSB. The furthest being OH3GZ a total of 1794Km distant.

So 5 SOTA summits over 4 days in the remote north west of Scotland. The weather had been good which was unusual for so late in the year and I was able to get out for a busy

and successful October activity week.

Bob GM4UYZ

Activity week I was on every day and made a total of 95 QSO's. See the breakdown tables below.

Total QSO's Per Day Day of the Total MODE Week Q50's cw DATA AM FM Sat Sun Mon Tue Wed Thu Fri

20 M was $87\%,\,40 M$ was $2\%,\,18 Mhz$ was 9.4% was 15 Mhz where I made the QSOs.

This month decided to do just DATA. Data modes were a bit easier this month, so it looks like the bands are getting better, thankfully. Hope it is like that from now on.

Best QSO on FT4 = KO4ZML @ 6340Kms

Best QSO on FT8 = UB3DQR @ 2467Kms

MODES	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Tota
Data (unknown Mode	0	0	0	0	0	0	0	0
Data PSK31 Mode	0	0	0	0	0	0	0	0
Data PSK63 Mode	0	0	0	0	0	0	0	0
Data JT9 Mode	0	0	0	0	0	0	0	0
Data JT65 Mode	0	0	0	0	0	0	0	0
Data RTTY Mode	0	0	0	0	0	0	0	0
Data FT8 Mode	3	6	0	0	0	0	2	11
Data FT4 Mode	14	7	13	13	13	13	11	84
Data MSK144	0	0	0	0	0	0	0	0
Data JT6M	0	0	0	0	0	0	0	0
SSTV	0	U	U	0	0	U	0	U
Data IS8Call (IS8)	0	0	0	0	0	0	0	0
			of the state of					95

Band	1.8Mhz	3.5MHz	5MHz	7MHz	10MHz	34MHz	18MHz	21MHz	24MHz	28MH
AM	0	0	0	0	0	0	0	0	0	0
CW	0	0	0	0	0	0	0	0	0	0
DATA	0	0	0	2	0	83	1	9	0	0
FM	0	0	0	0	0	0	0	0	0	0
SSB	0	0	0	0	0	0	0	0	0	0
Dand	50Mhz	70MHz	144MHz	432MHz	1296MHz	2300MHz	3400MHz	5700MHz	10000MHz	Dotal
AM	0	0	0	0	0	0	0	0	0	. 0
CW	0	0	0	0	0	0	0	0	0	0
DATA	0	0	0	0	0	0	0	0	0	. 95
FM	0	0	0	0	0	0	0	0	0	9:
SSB	0	0	0	0	0	0	0	0	0	8

MM0IVR Ronan

I was up in Glen Lyon on Sunday the 12th for a SOTA activation of Meall Buidhe (GM/CS-040). It's a fairly easy hill at the West end of the Glen and this would be my fourth time at the top and my third SOTA activation. My first SOTA attempt, back in 2021, had been a bit of a fail, with only one contact on 2m FM. The second attempt in 2023 was better, with 27 in the log on 20m CW. This time, I decided to go old-school and try again with just a 2m handheld. My usual Yaesu FT5D wasn't up to the task as its plastic housing had a large section cracked off, making it no longer weather-proof. Lots of people have had exactly the same issue with this radio, with cracks in identical places, although Yaesu won't admit it. End of grumble... I decided to take the FT2D and a flowerpot antenna for 2m. These were both reliable and pretty much bomb-proof.

Once up on the summit, I switched the radio on and there was Colwyn, MM0YCJ/P calling "CQ SOTA" from another hill, GM/WS-137 Faochaig (sounds painful). I swear that man must own a helicopter as he's seldom below 3000ft. I believe that was his second hill of the day. We exchanged reports and I moved away to a free channel to try and work a few more stations. There was quite a lift on 2m that day and I could hear stations all over the place but that didn't seem to help me much. It took a good 20 minutes to get my four QSO's in the log. Some of the hills in that area are MUCH easier to activate on HF than on 2m.

RESTART OF RECORDING ACTIVITY WEEK QSO's from January 2026

Well as I now am feeling 100% better, I am starting to look at doing some of the stuff I did before I took ill.

The major one that I want to do again is recording all the Activity Week logs and creating statistics from them. I find this fascinating and interesting. What I am now looking for is for you to send me a copy of your logs at the end of the Activity week so I can extract the data.

I would also like to see more people taking part. For me personally it forces me to at least operate. This is my aim for you all... we are radio amateurs aren't we!!!

The log to use is the following 2026-ACTIVI-TY-FULL-WEEK-LOGSHEET-V1.10.xlsx which can be downloaded from the club website. For everyone remember to set up the Information Tab on the spreadsheet as the data here gets prefilled on the monthly tabs.

A Full set of rules 2026 New Monthly Activity Day Rules V6.pdf can also be downloaded to help you. It gives a bit of history of the Activity Week event started to where we are now. If you are new to the event, then I recommend you download and read it. Note: Any questions or queries just get in touch by sending me an email to bob.gm4uyz@talktalk.net

Thursday of that week was delivery day for a new Xiegu X6200 radio which I bought for portable use. I was looking forward to testing it out that afternoon as I was off work. Unfortunately, after only one QSO with Wlad, US7IGN, the radio started to act very oddly. It looked like a hardware issue so I phoned Waters & Stanton up to arrange its return. They were pretty swift in sorting out a full refund, so I can't complain about their service. I ordered a second X6200, which arrived today and is working very well. I'm looking forward to taking it out and about /P.



Xiegu X6200

STATS: only 12 QSO's - 4xFM, 2xSSB, 6xCW. Best distance KA2DDX 5376km on 10m with 5W CW

That's about it for this time. Catch you next month.

Cheers, Ronan

So starting January I look forward to receiving your logs. No matter what if you were on just one day or a few days or all week I still want the log.

Many, many thanks for participating and having some fun. Good DX to you All

From one to the other!

I suppose that like so many of us when I passed the amateur radio exam I cannot remember being afforded the luxury of choosing a callsign or perhaps I just missed it! Of course, it is not that I had anything in mind, regarding a suffix etc, and at the time I just assumed that one took what one was given from the powers that be!

Anyhoo, along came MM3XXW and I hated it from the get go despite there being a passing nod to my favourite tipple, so not too bad I thought, then upon deciding to keep the suffix (seemed the easy route at the time) through the ranks until MM0XXW was achieved and tally-ho off I went on my HF adventures.

Now one aspect I quite enjoyed was contesting and despite having a few minor successes my callsign is sooooooo long I spent more time repeating myself than scoring. I found the same thing happened when trying out cw, dah dah – dah dah – dah dit dit dah seep before I got to the end of that as were most, and who could blame them, of the folks on the other end. Unfortunately the letters making up my call are all soft consonants there is no hard edges and trying to enunciate using different phonetics didn't help so dogged determination became my shack buddy!

Well fast forward 20 years and things have come along in leaps and bounds, the advances in our radio equipment makes your head spin and it's frightening to open them to fault find nowadays. The modern radio is more computer and the components so small that you've probably more chance of finding the Mars rover with a half decent telescope! On a reflector I recently read about one chap who is being charged over \$2000 dollars to repair a bricked Icom, that's heart-attack territory for me!

So fast forward to today and fairly recently Ofcom decided to offer newly licensed hams the opportunity to choose from a bank of unused/recycled callsigns which were no longer in use. G2, G3 & G4 calls were being snapped up by newly licensed operators who, in my humble opinion, didn't really deserve them and currently the M8 & M9 series seems to be popular so the prefix-hunters are having a field day.

Now in it's infinite wisdom Ofcom decided that pretty much anyone could apply for a 'new' call and to that end I did and here was my thinking! For me the GM prefix has always been synonymous with Scotland so I started with that, obviously I didn't put the work in to deserve a G0, G3 or G4 call however Ido believe that if I had pursued my radio career earlier (when I first started with radio in 1982/3-ish) a GM1-series (Class B licence) call would have been well within my reach. So, after settling on the GM1 prefix I scratched my head a bit trying the think of a suffix which will a) be easy to repeat and b) mean something to me personally thereafter **GM1CPS** was born!

In homage to all the hard work Bob, Cambell, John, Gary and everyone puts into the club, and especially for dragging my lardy butt through all 3 exams, for the many laughs and consummate welcomes at the Thorntree Inn this is my nod to you all and my appreciation to all you guys do for us lesser mortals!

Going forward my radio journey continues with GM1CPS being the amateur formerly known as MM0XXW!

Oh and just as a small footnote my cw hasn't improved any I'm just not nodding off halfway through sending my call!

Martyn GM1CPS (ex MM0XXW)

ACTIVITY WEEK RULES

ACTIVITY WEEK RULES AND SPREADSHEET INITIAL CONFIGURING V6

HF/VHF/UHF - ALL MODES MONTHLY ACTIVITY DAYS - 2026

(1)	Date	See Dates below
(2)	Time	00:00 to 23:59 Local Time
(3)	Modes	SSB/AM /FM /CW/ DATA
(4)	Bands	1.8, 3.5, 5, 7, 10, 14, 18, 21, 24, 28, 50, 70, 144, 432 MHz 1.2, 2.3, 3.4, 5.7, 10 <i>G</i> Hz
(5)	Power	As per your licence Full=1000W, Intermediate=100W and Foundation=25W
(6)	Your Locator	Worldwide Locator (WWL) i.e., IO85MX
(7)	Eligible Entrants	Open to anyone who wishes to take part
(8)	Transmit Exchange	Report (RST)
(9)	Receive Exchange	Report plus Contacts WWL
(10)	Closing Date	Closing Date for the Logs is 4 days after the selected Month-Week-Ending-Date (will be the Friday)
(11)	Return Logs to	Bob Glasgow GM4UYZ, 7 Castle Terrace, Port Seton, Prestonpans, East Lothian, EH32 OEE Email: bob.gm4uyz@talktalk.net
(12)	QSO's not Eligible	Any HF/VHF/UHF QSO's via a repeater do not count

2026 Dates (Any selected day Saturday to Friday)

DATE	COMMENTS	DATE	COMMENTS
10 th to the 16 th January	Single Day or Days or every day of the week	11 th to the 17 th July	Single Day or Days or every day of the week
7 th to the 13 th February	Single Day or Days or every day of the week	8 th to the 14 th August	Single Day or Days or every day of the week
7 th to the 13 th March	Single Day or Days or every day of the week	5 th to the 11 th September	Single Day or Days or every day of the week
11 th to the 17 th April	Single Day or Days or every day of the week	10 th to the 16 th October	Single Day or Days or every day of the week
9 th to the 15 th May	Single Day or Days or every day of the week	7 th to the 13 th November	Single Day or Days or every day of the week
13 th to the 19 th June	Single Day or Days or every day of the week SUMMER SOLSTICE	12 th to the 18 th December	Single Day or Days or every day of the week WINTER SOLSTI<i>C</i>E

<u> History:</u>

For a few years we tried running our own "small" contest on the nearest Wednesday to mid-summers day. We started at first using 10M but as the sunspot cycle started to fall it was moved to the 20M band but sadly over the years it was not well supported. Many of the comments that came back after the event are, "it is a "Contest". Why not change the event to an Activity Night"? To that end it changed to just that an Activity Night. Up to 2012 this event was run just at the Summer Solstice and starting in December 2012 we tried the same activity at the Winters Solstice. In 2013 we did both the Summer and Winter Solstice dates. It was interesting to see the differences. Another change is that it now includes all

Bands from 1.8MHz up to 10GHz to allow those who have no HF equipment to take part by submitting their VHF/UHF/SHF contacts. Developing this activity night further starting in January 2014 it will be run monthly throughout the year to try and encourage club members to go on and operate even if it is just one night a month. Further development starting January 2016 after lots of requests was to make it any day within a selected week. This allows more flexibility for those who cannot make a specific day by letting them choose a day that they are available to operate.

Aim:

The aim of the event is to:

- Encourage everyone to operate at least once a month
- Go on the air and work as many stations that you can in the allotted period
- Upload your contacts to Clublog and have them added to the club's DXCC table.
- Most of all have some fun.

Using the Worldwide Locator (WWL) system as part of the exchange gives the ability to measure the distance between your location and the contacts location and it also offers the challenge to obtain the remote contacts WWL. I have certainly noticed that over 98% of all QSL cards that I receive have the stations locator written on the card so obtaining one should, hopefully be quite easy. Note: I will accept the locator as 4 characters (FN32) if that is what the station gives you but please try to obtain the full 6 characters as this will give a fully accurate distance. If 4 characters are given, I will use the centre of the square which is LL to make the locator FN32LL

Lastly, we are Radio Amateurs after all, and we are supposed to get on the air and make contacts so come on then let me see you doing it.

SETTING UP CPSARC ACTIVITY FULL WEEK LOG SHEET _ ENTRY LOGSHEET

Thanks to:

I would first like to thank Brian MORNR who has developed the EXCEL Spreadsheets for the original "Pick a Day" and now the "FULL WEEK". As much as I have done various additional recording Brian has various areas locked down which I cannot access but he continues to support the development when any of the hidden data or formulas need adjusting. The 2026-ACTIVI-TY-FULL-WEEK-LOGSHEET-V1.10.xlsx is the latest version and is downloadable from the club's website http://cpsarc.com/downloads Open the Activity Days folder and the file can be found under this.

Note: Please DO NOT USE ANY PREVIOUS VERSIONS, thanks as they are no longer applicable.

Follow the rules below to set-up the spreadsheet and once it is done save a copy on your PC or Laptop and you can use it throughout the year by updating the monthly tabs. If this is not done some functions of the spreadsheet do not work so it is necessary, this section is completed. The spreadsheet has been created to help you fill out your log as quickly as possible by using "dropdown" selections.

Note: Please use the latest version as some of the earlier versions had some "bugs" in them which have now been fixed.

Note: Please DO NOT USE ANY PREVIOUS VERSIONS, thanks as they are no longer applicable.

Completing the Log

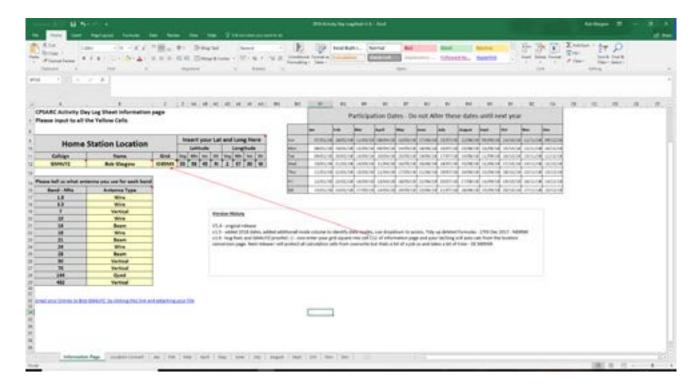
Copy of a blank log **2026-ACTIVITY-FULL-WEEK-LOGSHEET-V1.10** can be downloaded from the club's website, and I would appreciate if you would use this for your submission as earlier versions had some "bugs" in them which have now been fixed:

http://cpsarc.com/downloads/

Open the spreadsheet and click on the information tab. $\label{eq:continuous} % \begin{center} \begin{centario} \begin{center} \begin{center} \begin{center} \begin{centen$

You need to complete all the yellow cells and input

- 1. Your callsign (cell "A12")
- 2. Your name (cell "B12")
- 3. Your locator square (cell "C12")
- 4. The antenna you use for each band, if you don't have an antenna for that band, leave the cell blank



Note the details here are prefilled from the Log for the relevant Day in the month of the Activity (Information for GM4UYZ Use Only)

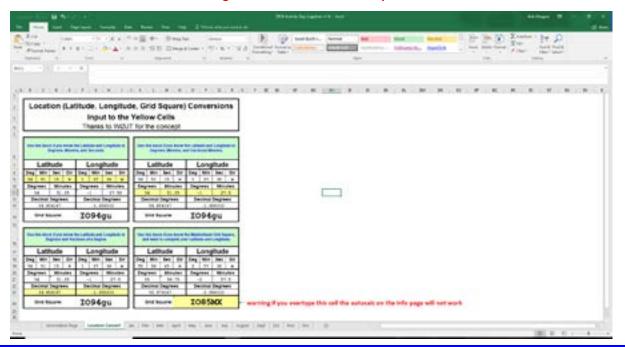
Calculating your Lat and Long

The next tab – location convert, gives you a tool to calculate either your locator square (if you know your latitude and longitude but don't know your locator) or your latitude and longitude if you know your square.

Enter the locator square in the yellow cell and it will calculate your Lat and Long in Degrees, minutes and seconds, and input the latitude and longitude into the info page exactly as calculated. This is extremely important as the spreadsheet uses your latitude and longitude to calculate the distance between locator squares.

Or enter your latitude and longitude and it will calculate your locator square

Note: Do not overwrite the Grid Square Cell that is in yellow as this is prefilled from the Information Page. If overwritten the auto calculation on the Information Page does not work this Grid Square Cell



After the Event:

After the event can you send me a copy of your log to (bob.gm4uyz@talktalk.net), example below so that I can write up some report on what you all managed to achieve plus why not update the Clublog club tables and show everyone else what you achieved.

Copy of a blank log 2026-ACTIVITY-FULL-WEEK-LOGSHEET-V1.10 can be downloaded from the club's website, and I would appreciate if you would use this for your submission:

http://cpsarc.com/downloads/

The Log now has drop down menus for Band, Mode and Data Mode Used

- 1. Date Enter the date that the QSO was made
- 2. Day This is automatically prefilled with the day of the week. No requirement to enter anything in this column.
- 3. Band Click the arrow and pick the band for the QSO
- 4. ANT The spreadsheet will pull through your antenna based on the information you provided in the table on the Information Page
- 5. Power Enter the power in watts as a number so for 400w enter 400
- 6. Mode click the arrow and enter the mode of the QSO
- 7. Data Mode If you selected Data for your mode then click the arrow to select what data mode was used
- 8. Enter the callsign of the station worked
- 9. Your Locator Once you enter a callsign the spreadsheet will enter your locator
- 10. Their Locator enter the locator square of the station worked
- 11. Distance this is a calculation and there is now no need to look up the distance using a website
- 12. Time enter the time of the QSO
- 13. On completion save your spreadsheet example: GM4UYZ 2026-ACTIVITY-FULL-WEEK-LOGSHEET-V1.10.xlsx then click the hyperlink on the information page to generate an email to Bob GM4UYZ
 - a. Note use the same spreadsheet throughout the year by selecting the MONTH Tab and filling out your log. It is your Activity Week History for the Year.

Example of Filling out the above Log sheet

Note the details here are prefilled from the Information Page for the relevant month of the Activity

Days of Operating & No: QSO's per Day						
Sun	29	Thu	0			
Mon	0	Fri	0			
Tue	0	Sat	31			
Wed	0	Total	60			

Date of the Event:	09-15/07/2025
Call Sign:	GM4UYZ
Name:	Bob Glasgow

Do not Touch this area - Designed to help GM4UYZ Compiling Activity Day Report

Band	1.8Mhz	3.5MHz	5MHz	7MHz	10MHz	14MHz	18MHz	21MHz	24MHz	28MHz
AM	0	0	0	0	0	0	0	0	0	0
CW	0	0	0	0	0	60	0	0	0	0
DATA	0	0	0	0	0	0	0	0	0	0
FM	0	0	0	0	0	0	0	0	0	0
SSB	0	0	0	0	0	0	0	0	0	0
Band	50Mhz	70MHz	144MHz	432MHz	1296MHz	2300MHz	3400MHz	5700MHz	10000MHz	Totals
AM	0	0	0	0	0	0	0	0	0	≥ €<
CW	0	0	0	0	0	0	0	0	0	>60 <
DATA	0	0	0	0	0	0	0	0	0	≥ક<
FM	0	0	0	0	0	0	0	0	0	>6<
SSB	0	0	0	0	0	0	0	0	0	≥ક<
						·				60

QSO	Date	Day	Band	Ant	Power (W)	Mode	Data Mode Used	\times	Station Worked	Your Locator	Their Locator	Distance (Kms)	Time
1	09/07/2022	Sat	14	Vertical	100	CW		X	OH2BAH	IO85MX	KP20np	1705	11:18:00
2	09/07/2022	Sat	14	Vertical	100	CW		X	OK1DOL	IO85MX	JN69os	1281	11:17:00
3	09/07/2022	Sat	14	Vertical	100	CW		\times	UA3ABJ	IO85MX	KO85ss	2490	11:15:00
4	09/07/2022	Sat	14	Vertical	100	CW		X	LZ3ZZ	IO85MX	KN22qo	2507	11:11:00
5	09/07/2022	Sat	14	Vertical	100	CW		\times	YL7A	IO85MX	KO26fx	1676	11:09:00
6	09/07/2022	Sat	14	Vertical	100	CW		\times	EM5HQ	IO85MX	KN59rb	2423	11:05:00
7	09/07/2022	Sat	14	Vertical	100	CW		\times	S59N	IO85MX	JN76dg	1609	11:04:00
8	09/07/2022	Sat	14	Vertical	100	CW		\times	OH2T	IO85MX	KP20kf	1688	11:03:00

If their locator is not given, then using QRZ or QRZCQ can be used to either get the Locator Square or the stations Latitude and Longitude and using the links below will enable you to get a Locator

QTH Locator Calculator

http://www.giangrandi.ch/electronics/radio/qthloccalc.shtml

NOUK's Maidenhead Grid Distance & Bearing Calculator

https://www.chris.org/cgi-bin/finddis

Look forward to a massive turnout for all the activity days ...

^{**} Distance between the two stations in Kilometres (Note: Use the Locator Calculator within the links below to calculate the distance but it should be automatically calculated in the spreadsheet).

^{**} If you do not have the means to calculate the distance please leave blank.

Clublog Tables

The 2025 table has now started, please carry on uploading your logs so we can see how you are all doing.

At the time of writing, Brian MORNR in the lead with 179, followed by Martyn MM0XXW on 169 (and his new callsign GM1CPS making a strong start on 85.

I've left the contest call GM2T out of the commentary as it always makes loads of contacts

It's also great to see GM4UYZ making an appearance in the table after spending half the year in hospital.

There's time to join in over the year so if you'd like to see your results in the table please submit your logs

Club members can join in at any time, simply sign up at clublog.org, submit your log and apply to join the CPSARC club there, once you're approved your entry will appear in the list (club members only, random applicants will be refused)

John MM0JXI



Construction Night

We're planning to hold another construction night on 11 November in the Cockenzie British Legion, subject to getting confirmation of access.

We'll start at 7pm

It's the usual format, buy a kit (as complex as you like) and bring it along to build it in a supportive atmosphere. We'll have tools and soldering irons if you need them

HOW TO IMPROVE YOUR OPERATING SKILLS

This subject that we as radio amateurs should always be trying to improve, it could mean the difference of making that "elusive" DX contact or not. When we are operating from home, normally with a very restricted set-up, it comes even more prevalent as we normally must work harder to make contacts compared to a full-blown contest station with its mono-band aerials, linears and general set-up.

The key areas covered are as follows:

- Your "ears"
- Radio Controls
- Antennas
- Logging software
- Keyboard skills
- Propagation
- Strategy

Your "Ears":

Basically Listen first and see what is happening because if you can't hear the stations then you certainly cannot work them. Your ears are the best decoders going and are far better than any software decoders. They can pick out something that no decoder will. Good advice as well is to use a good set of headphones i.e. HEIL headsets as this concentrates, you're listening plus they can cut out any local background noise.

Radio Controls:

From the transmitter side the main controls are Mike Gain and Power Output. It is important that the Mike Gain is set properly and is good advice to set it as per the manufacture's recommendation. Do not overdrive the radio by too much gain or by too much power as this can cause distortion, unreadable signals and interference, basically we want our signal to be clear and clean so that we can be heard. If people do not hear you then they can't work you.

On the receiver side there are various controls that can help you receive a signal better. There are Dual VFO's to allow fast switching between frequencies for both Receive and Transmit. The RF Gain and DSP can be used to adjust the signal level to bring out that signal that you want. Then there is AGC and here people have their own preferred setting, but the consensus of opinion is set it Fast for CW and Slow for SSB. This controls the signal level through the IF of the radio with an aim to make it easy listening. Lastly there are filters. Depends on what mode you are receiving

in to whether by default the IF filters will be wide or narrow. Normally Wide for SSB and narrow for CW but by adjusting these no matter what the mode they can be used to bring out that elusive signal.

Lastly on the radio side there are headsets and a PTT foot switch. Certainly for contesting the recommendation is the HEIL headset with a minimum of a 5 insert as this produces a good contest signal but to be truthful, they are ideal for home shack use as well. The advantage with headsets and using a foot switch for the PTT is that it allows hands free operating. It is also important to mention that if a headset is used that the radio's mike gain is checked and adjusted if required.

Antennas:

There is a wide range of antennas from wire, verticals, Multiband Yagi's and Monoband Yagi's. What you choose will really depend on what your effective aim is. For example in the CQWW contest the best antennas are the Monoband Yagi's whereas if the requirement is to work "local G's" then the best would be low slung dipoles. The bottom line is to decide on your requirement and use the correct antenna. I know that for many the antenna is what we have at home and that is that as we don't have the luxury of the contest level set-up. Then the answer is making the best with what you have. Regarding the club's activities we certainly have the luxury of using any of the antennas in the list so when we are out and about, we decide what we need and then set that up.

Logging Software:

There are many on the market all with their own advantages and disadvantages. As a club we have gone for Win-Test as it covers all the contests and activities that we are involved in. The major advantage is that only one program must be learned rather than numerous. It offers then slicker operating. Another major advantage it offers is the network of computers in a Multi-Multi scenario and if a "computer crashes" then there is no worry as it fully recovers the log, believe you me that is a fantastic step forward.

Keyboard Skills:

It is marvelous if you have already got good keyboard skills and can touch type as it speeds up the logging process. If you do not have this the golden rule is when logging, "single finger" mode is that you type as you speak i.e. logging GM4UYZ then type "G", say "G", then type "M" then say "M", etc, etc in that way you control the logging. Speed

and knowing the keyboard comes the more you type.

Propagation:

The lonosphere layers which we use for DX contacts and when they are available during the day affects the transmitted frequencies to use, basically frequencies up to 10MHz are Nighttime bands and frequencies from 10MHz to 30MHz are daytime bands regarding HF propagation. Know what bands are open and when, so that maximum advantage can be taken of them. The use of the "Grey Line" to make long distance contacts when one place is at dawn and another place in the world is at dusk is a technique that is used and is always studied by those wanting to work DX stations

Strategy:

The strategy concentrates on dealing with a contest. Important points that need to be stressed is the reading of the rules, manpower, working as a team, role of a manager for decision making and crisis management and the aim of the contest.

Reading the rules needs to be done by everyone and not by a few so everyone knows what needs to be achieved, basically we are all singing from the same hymn sheet. A suggestion of a "Role Manager" was made which we have to a certain degree with his responsibility ensuring that the right bands are being used and when and what mode. At the end of the day the person is the principle decision maker. One thing from our own experience it is important that we all work as a team because without it the aim will never be achieved. The aim is to win the contest ultimately, but I see it really is to always try and improve on where you reached before. It is also important that everyone enjoys themselves because without that you may as well have not taken part.

The above is just a guideline and an insight and you may see things differently or maybe can offer other advice, but I think there is something in it for everyone from the casual operator through to the experienced operator

CHRISTMAS NIGHT OUT

SATURDAY 13th DECEMBER @ 19:00

I know it is a few months away yet, but I am just starting to look at our Christmas Night Out on Saturday 13th December. Believe you me to get where you want takes it to be booked early. This year I have decided to return to the Cuddie Brae at Newcraighall for two reasons

Everyone who went in 2024 raved about it and said how accommodating the restaurant was, etc.

I missed it due to unfortunate circumstances i.e. being seriously ill

I hope you are all acceptable with my decision.

I have booked our Christmas Night Out at the Cuddie Brae, Newcraighall (next to the Premier Inn) for Saturday 13th December @ 19:00. The choice is only the Christmas Fayre Set Menu Meal at the cost of £28.99 per Person. I have booked for 25 people as this is average to the number that goes. To that end I have had to pay a £10 deposit per person which is £250. Hope you all go as the deposit is non-refundable, and I don't want to be out of pocket!!!!! The Cuddie Brae is on the Fort Kinnaird bus routes plus on the Galashiels railway line has a stop at Newcraighall just across from the venue. Advantage of the Cuddie Brae is we won't have to wait long on drinks orders an issue we can find at the Ravelston. I think it as well, nice to try other places, hope you all agree.

So Total cost is £30 (rounded up from £28.99) Now the criteria... Meal booked under my name...

Venue: CUDDIE BRAE

Address: 91 Newcraighall Rd, Musselburgh EH21 8RX

Telephone No: 0131 657 1212

Date of Meal: Saturday 13th December 2025

Time: 19:00 Location: Restaurant

Meal Type: Christmas Fayre Menu

£30 Meal

Note: Like last year I will collect the Christmas Night out Meal money. Regard drinks this is up to you in the sense you pay your own drinks. I believe this worked exceptionally well last year.

MY CRITERIA...

PLEASE RESPOND AS IT IS VERY DOWN HEARTENING WHEN PEOPLE DON'T. IT MAKES IT A LOT HARDER FOR THE PERSON WHO IS TRYING TO ORGANISE AN EVENT

Are you going ---- YES or NO

(Can you respond to me at bob.gm4uyz@talktalk.net whichever way you decide, ASAP)

If YES, then I need from you the following:

- How many are going 1 or 2 or how many?
- First Names

For EVERYONE GOING

- DEPOSIT of £10/HEAD or FULL PAYMENT as soon as possible to confirm going.
- O YOUR DEPOSIT HAS TO BE PAID TO ME BY THE 21/10/2025
- o Note: You can pay the rest up after the deposit by using the payment methods below, but I need to have the Full total by the 18th November
- The full amount £30 needs to be paid to me by the 18th November as I need to confirm the booking with the restaurant on the 18th November

Payment methods

- CASH
- CHEQUE made payable to Robert Glasgow
 Post to 7 Castle Terrace, Port Seton, Prestonpans, East Lothian EH32 0EE

PayPal

Go the club's Website

Click on the "Large" Donate button It will display a photo of me and underneath it will say Robert Glasgow @cpsarc bobglasgow, Port Seton, Prestonpans, East Lothian Click on Send

Enter your amount

Add your to Callsign and XMAS Meal to the NOTE Field Click on Continue

Bank Transfer

Send me an email and I will give you the account information

It is important that you let me know your decision as soon as you can plus help me get the money in as I just hate chasing people. Thanks in advance for all your help here.

CHRISTMAS MENU

I have a copy of this so see below:

Now the restaurant is requesting that everyone makes their choice, and a list of what people want to be handed into the restaurant which I will give to them on the 25th November so your help again would be appreciated.

Pick a

- A Starter
- A Main Course
- A Dessert

Send your choices to me at bob.gm4uyz@talktalk.net

I will collate your replies and produce the paperwork to give to the restaurant.

MENU (Trimmed down to show the individual items only but will send out a full copy to you if you are going)

STARTERS

- Chef's Homemade Spiced Vegetable Minestrone Soup (v)
- Crispy Chicken Goujons
- Baked Mini Camembert & Chutney (V)
- King Prawn Salad

MAIN COURSES

- Hand Carved Roast Turkey
- Beyond Burger (ve)
- 8oz Rump Steak with Brandy Peppercorn Sauce
- Woodland Mushroom Bourguignon Wellington (v)
- Turkey & Ham Hock Sage Pie
- Brie & Cranberry Beyond Burger (v)

SIDES (extra price on top of £28.99 meal cost_

Duck Fat, Rosemary & Garlic Roast Potatoes£1.99Yorkshire Pudding (v)£0.99Pigs in blankets£1.69Baby Roast Potatoes (ve)£1.99

DESSERTS

- Cherry & Chocolate Eton Mess (v)
- Christmas Pudding (v)
- Golden Biscuit Cheesecake (v)
- Tripple Chocolate Brownie (v)
- (v) Vegan option available

That is everything so if you can help me with regard the DEPOSIT firstly and then payments up to the £30/head plus your choice of meal then that would be fantastic.

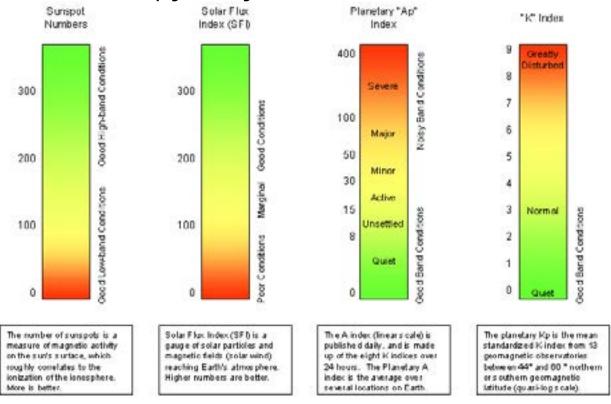
HF Propagation Using Solar Indices

"I put this together in 2015 and I thought it might be useful for new licences. I get quite often confused with this, so I refer to it regularly."

When I was new to Amateur Radio, I kept on hearing people talk about the A & K indexes regarding propagation and it used to puzzle me what on earth they were talking about. Doing a search on the internet I found below which I thought explained it nice and simple. Thanks to Peter Greene N2LVI for allowing me to use the following data.

Website link: http://www.qsl.net/w2vtm/hf_solar.html

N2LVI's Quick Guide to HF Propagation Using Solar Indices



Copyright @ 2003 Pete Greene, N2LVI

SOLAR FLUX INDEX (SFI)

While increasing SFI may be good for HF propagation, it also tends to correspond with high Ap and K indices, which cause D-Layer absorption and noisy band condition. Solar flux is measured in solar flux units (SFUs). It is the amount of radio noise or flux emitted at a frequency of 2800 MHz (10.7 cm hence is it also called the 10.7 cm flux index).

NOAA broadcasts geophysical alert messages over <u>WWV</u> at 18 minutes after the hour and from <u>WWVH</u> at 45 minutes after the hour. The messages are less than 45 seconds in length and are updated every 3 hours (typically at 0000, 0300, 0600, 0900, 1200, 1500, 1800, and 2100 UTC).

PLANETARY Ap INDEX

The subscript "p" means planetary and designates a global magnetic activity index. The following 13 observatories, which lie between 46 and 63 degrees north and south geomagnetic latitude, now contribute to the planetary indices: Lerwick (UK), Eskdalemuir (UK), Hartland (UK), Ottawa (Canada), Fredericksburg (USA), Meannook (Canada), Sitka (USA), Eyrewell (New Zealand), Canberra (Australia), Lovo (Sweden), Brorfelde (Denmark), Wingst (Germany), and Niemegk (Germany).

THREE-HOUR-RANGE INDEX K

K indices isolate solar particle effects on the earth's magnetic field; over a 3-hour period, they classify into disturbance levels the range of variation of the more unsettled horizontal field component. Each activity level relates almost logarithmically to its corresponding disturbance amplitude. Three-hour indices discriminate conservatively between true magnetic field perturbations and the quiet-day variations produced by ionospheric currents. K indices range in 28 steps from 0 (quiet) to 9 (greatly disturbed) with fractional parts expressed in thirds of a unit. A K-value equal to 27, for example, means 2 and 2/3 or 3-; a K-value equal to 30 means 3 and 0/3 or 3 exactly; and a K-value equal to 33 means 3 and 1/3 or 3+. The arithmetic mean of the K values scaled at the 13 observatories listed above gives Kp.

EQUIVALENT AMPLITUDE

The a-index ranges from 0 to 400 and represents a K-value converted to a linear scale in gammas (nanoTeslas, nT) – a scale that measures equivalent disturbance amplitude of a station at which K=9 has a lower limit of 400 gammas.

K 0 1 2 3 4 5 6 7 8 9 a 0 3 7 15 27 48 80 140 240 400

HOW TO READ PROPAGATION NUMBERS

SFI index [HIGH is GOOD]

70 NOT GOOD 80 GOOD 90 BETTER 100+ BEST

The measure of total radio emissions from the sun at 10.7cm (2800 MHz), on a scale of 60 (no sunspots) to 300, generally corresponding to the sunspot level, but being too low in energy to cause ionization, not related to the ionization level of the lonosphere.

Higher Solar Flux generally suggests better propagation on the 10, 12, 15, 17, & 20 Meter Bands; Solar Flux rarely





affects the 30, 40, 60, 80, & 160 Meter Bands.

The A index [LOW is GOOD]

1 to 6 is BEST 7 to 9 is OK 11 or more is BAD

Represents the overall geomagnetic condition of the ionosphere ("Ap" if averaged from the Kp-Index) (an average of the eight 3-hour K-Indices) ('A' referring to amplitude) over a given 24-hour period, ranging (linearly) typically from 1-100 but theoretically up to 400.

A lower A-Index generally suggests better propagation on the 10, 12, 15, 17, & 20 Meter Bands; a low & steady Ap-Index generally suggests good propagation on the 30, 40, 60, 80, & 160 Meter Bands.

K index [LOW is GOOD]

0 or 1 is BEST 2 is OK 3 or more is BAD 5 is VERY, VERY BAD

The overall geomagnetic condition of the ionosphere ("Kp" if averaged over the planet) over the past 3 hours, measured by 13 magnetometers between 46 & 63 degrees of latitude, and ranging quasi-logarithmically from 0-9. Designed to detect solar particle radiation by its magnetic effect. A higher K-index generally means worse HF conditions.

A lower K-Index generally suggests better propagation on the 10, 12, 15, 17, & 20 Meter Bands; a low & steady Kp-Index generally suggests good propagation on the 30, 40, 60, 80, & 160 Meter Bands.

The following is what you will find often displayed. John MM0JXI has chosen a different format for the CPSARC Website and that is shown below. It is continually changing as the the SFI, A & K index values change. As you can see with this example it also provides a massive amount of data as well as the indexes with the useful bit showing what to expect the propagation will be like on each of the bands.

Remember these are guides but as true Amateurs we would actually go and listen and call on the bands to get their true condition.

I hope this short article will at least give you a small insight to what is a very, very complex subject but give you an idea what these indexes actually mean.

Club Events

7 November 2025	Club Night
8 - 14 November 2025	Activity Week
11 November 2025	Construction Night - Cockenzie Royal British Legion 7pm
5 December 2025	Club Night
6 - 12 December 2025	Activity Week
12 December 2025	Club Xmas Night Out
9 January 2026	Club Night
6 February 2026	Club Night
10 February 2026	Radio Check Night
6 March 2026	Club Night
3 April 2026	Club Night
12 April 2026	Blackpool Rally
1 May 2026	Club Night
8 May 2026	1st 144MHz DF Hunt (TBC)
5 June 2026	Club Night
26 June 2026	Club Night (early to avoid RSGB VHF Field Day)
14 August 2026	Junk Night / Mini Rally

Club Attire

The club has a design for Club T-shirts, Poloshirts, Sweat-Shirts, Fleeces and Jackets and all of these can be obtained from Patricia Bewsey Designs

When making an order please quote 'Cockenzie & Port Seton Amateur Radio Club' to ensure that the Club Logo will be placed on the required garments.

Cost will depend on garment and should cover the garment and logo, call sign addition will be extra.

If you wish to add your call sign to the logo then please ask at the time of the order.

Order from:

PATRICIA BEWSEY DESIGNS,

Tel/Fax: 01620 850788 Mobile: 07970 920431

Email: patricia.bewsey@gmail.com

Note: the shop at Fenton Barns is now closed