Getting Started with the EC10

Broadcast Radio

Switch on and turn the **RF GAIN** to maximum. Set the **AF GAIN** about halfway. Make sure the **AGC** button is in. Select a band using **WAVECHANGE** and try **TUNING** around.

Communications Radio

This is Ship-to-Shore, Radio Hams and Volmets.
Turn the **AF GAIN** to maximum. Turn the **RF GAIN** back and get used to the idea of using it as a Volume control.
Set the **BFO PITCH** to Top Dead Centre. Press the **BFO** button and **TUNE** around ***very*** slowly. Fine tune using the **BFO PITCH**.

Being Clever: Little tips to get That Bit Extra.

1. When using the **BFO**, switch off the **AGC** (Button out)
2. To tune a Broadcast Station spot on, set the **BFO PITCH** at Top Dead Centre, press the **BFO** button and set **TUNING** for zero beat.
3. All Hams use **LSB** when operating below 10Mc/s and **USB** above.
4. All professional communicators - ships, air traffic control, etc. - use **USB** only.
5. Set the **BFO PITCH** one mark toward the **LSB** or **USB** side before tuning around and only make small adjustments to *clarify* the signal.
6. Try the **AF FILTER** to cut down noise on voice reception.
7. You will note that the **DIAL LIGHTS** button does not stay on. This is to save the batteries….

Then enjoy…

…Being Nearer My God To Thee

Try for the American Evangelists around 15 - 16Mc/s and 5.5 - 6.5Mc/s in the early morning and evening. Clear channels can be had around 7.3 - 7.8Mc/s at breakfast time.

And The Rest, starting at:

567KHz

RTE Radio 1. As this was being compiled, the threat of peace hangs over this troubled country. To form a true opinion, free from the rhetoric of career journalists, listen here for the news and a gentle style of radio we have not heard since The Home Service became Radio 4.

612KHz

RTE Radio 2. Can pop music be treated intelligently? It can and can be heard as evening gathers. A useful one in the evening.

648KHz

BBC 648 for Europe, if you are lucky. A special service for Europe from Orfordness with opt-outs in German.

873KHz

AFRTS Europe from Frankfurt. The American Forces Radio and Television Service serves a slice of apple pie to the troops in Europe.

1215KHz

Virgin 1215. Poor old Richard Branson. Those who remember Brian Matthew on Saturday Club will recall the upstart Radio 1 starting up here in 1967. They called it 247 metres in those days and even then BBC engineers said this channel had a jinx on it. Louder in Holland than it ever was in the UK, Radio 3 used its experience here as a real case for FM-only during the mid-Seventies. In the meantime, the Radio Authority will have to keep building Richard AM relays in a vain attempt to beat off the night-time joys of Albanian Radio from downtown Lushnje.

1.6 - 1.8

Cordless phones. Not as private as people think.

1.6 - 3.3

The Trawler Band.
Or so it appeared on the radios of my youth. *Bonjour, matelot...*
British Telecom operate a network of Coastal Radio Stations to provide broadcast information to ships and radiotelephone services.

1.8 - 2.0

The 160m Amateur Band.

3.5 - 3.9

The 80m Amateur Band.

3.9 - 4.1

The 75m European Broadcast Band. Early mornings and overnight are the best times for this under-used band.

3.95

BBC World Service from Skelton. This one remains the best for winter evenings, sharing with Budapest Radio.

The 4Mhz Land/Marine Mobile Band

A heady brew of Search-and-Rescue (SAR), out-of-band broadcasters, the RAF speaking peace unto the nation and the shipping forecast..

4.74

RAF Flight Watch: "Architect listening out.." Architect is the Flight Watch callsign.
Despite all the new technology, the main enemy to operations is the weather. This code is given at fixed times and upon request to pilots preparing to fly between British airbases.

4.7 - 5.2

The 60m Tropical Band. Allocated only in the tropics, this band gives up some musical treats in the late evenings.

The 5Mhz Air Traffic Control Band.

One of our aircraft is missing...

There will be those who have come to our hobby from the Services. There will be pilots and ground crew who want to keep in touch. There will be listeners, fascinated by what they have heard on the airband of the domestic radio and have gone on to a fully-fledged airband scanner. They may have something that is bothering them.
The Tower gives them clearance for take off, sees them safely into the wild blue yonder then we never hear from them again...
Don't worry, Chalkie old bean. Our aircraft never die, they simply go trans-oceanic.

Going Transoceanic

As the VHF only provides a local service, they use HF on the long haul Stateside. Having come under control of its nearest ATC (Air Traffic Control), the aircraft sets its heading and calls the ACC (Area Control Centre) before requesting trans-oceanic clearance via the OACC (Oceanic Area Control Centre) on HF. We shall deal only with this HF traffic in these pages, but for completeness the full chain of command on radio follows this pattern;

1. Obtain take-off permission from the Tower and local weather conditions either from the Tower or regional Volmet on VHF.
2. Establish flight level and heading on leaving our airspace on VHF.
3. Establish contact with nearest ACC on HF.
4. On leaving range of ACC, establish contact with OACC on HF.
5. Request trans-oceanic clearance.
6. Establish contact with nearest ACC in your country of destination, HF circuits at present favouring Atlantic routes.
7. Establish contact with recognised air lanes over that country via local ATC on VHF.
8. Establish contact with airport tower on VHF.
9. Request landing clearance and put down on allocated runway.

Aircraft don't fly high enough to avoid the effects of the ionosphere, so provision is made at 3, 5, 8 and 13Mhz to allow for the daily changes in reception and the longer term seasonal changes.

Our most audible OACC in the UK is at Shannon in Southern Eire. Signing as "Shanwick", the 5 and 8Mhz transmissions listed below are a good starting point during daylight conditions.

5.450

RAF Volmet: "This is Royal Air Force Volmet..." from West Drayton, the RAF Weather Service. "Volmet" has its root in French and appears officially as Meteorological Information for Aircraft in Flight. These are read by a talking computer around the clock throughout the year. It is not a pure speech synthesis system, but a playout of real voice samples cued by the computer. It even has an Oxbridge accent. When announcing maximum visibility one night, we were half expecting:

"Moonlight can be cruelly deceptive, Amanda..."

Visibility	Status Colour	3 Octa Cloudbase
8Km	Blue	2500 feet.
5Km	White	1500 feet.
3.7Km	Green	700 feet.
1.8Km	Yellow	300 feet.
0.9Km	Amber	200 feet.
Less than 0.9Km	Red	Below 200 feet.
Hazard!	Black	

Airfield Status Table

The Other Volmet

"Shannon Volmet" is a weather service. Announced in computerised speech like the RAF service, regular listening will show a fixed pattern to these broadcasts. Temperature, dewpoint - the temperature at which water vapour condenses back to water - wind speed and direction are followed by QNH. This is the ground setting for the altimeter. Cloud cover at fixed flight levels are given in "octas". Consider, if you will, the pilots field of vision to be from the centre of a large cake split into eight slices. Then "three octa" would be three eighths cloud cover at that height. The CAA would like to hear from any listener reporting "Hundreds and Thousands at one o'clock". Stable weather conditions will be reported as "No-Sig" at the end of the bulletin. This is short for No Significant Change.

The catchy heading of "Information in Plain Language Concerning Certain Meteorological Phenomena" or SIGMET is usually given in a single word, "Snow", "Rain", "Sleet", a plague of boils or what have you.

5.50

Shannon Volmet.

5.59

Shannon ATC. Secondary calling on 8.9

5.6

Shannon ATC. Secondary calling on 8.8

5.64

Shannon ATC. Secondary calling on 8.87

5.68

Plymouth and Edinburgh Rescue Co-ordination Centres.

5.8 - 6.3

The 49m Broadcast Band.
The major European broadcast band. Good during the day, the darkness hours will only bring increasing interference as those used to higher frequencies move down the bands to hold their audiences as we approach the sunspot minimum.

5.95

Radio Netherlands Network Europa.

5.99

Radio Canada from BBC Skelton

6.04

The Voice of America, evenings.

This may be just another anecdote, but the boys at VOA assure me there is a sign on the wall of the transmission planning department that reads,
"I shot a signal in the air, where it landed we know not where."

6.06

Radio Sweden.

6.15

Radio Austria.

6.16

Swiss Radio International.

6.17

Radio France International.

6.19

BBC World Service from Skelton/Rampisham.
From 1500. Recent correspondence with BBC Transmission Planning shows they have all but given up on frequencies to recommend for the UK. Take heart, mon brave, this is some use to us - although in the winter months, the evenings bring a curious echo as delayed signals arrive from Antigua or even Kranji.

6.2 - 6.5

Hobby Pirates
Looking back over previous editions of The Guide, we always found it necessary to mention radio piracy. If there was any real fun in being a threat to nearby Distress frequencies, then new Europe-wide laws have put paid to all that. With new radio services filling the gap left by Radio Caroline and the like, hobby pirates spend their Sundays lost in nostalgia for a cause already lost. Perhaps we are older and wiser now. My only trace of rebellion these days is to sit meekly in restaurants wearing a small badge that reads:
"Red wine with fish".

6.62

Shannon ATC. Secondary calling on 8.83

7.0 - 7.1

The 40m Amateur Band

7.1 - 7.6

The 41m Broadcast Band.
Across Europe and into the States in the early mornings, this band is soon to share the problems faced by 49m:

7.26

Sudwestfunk, Baden-Baden, Germany.
Real radio as a public utility. Nothing but a rich mix of pop and rock from albums, news, weather and travel information.

The 8Mhz Marine and Air Traffic Control Band.

8.82

North Atlantic Control.

8.84

New York Radio. Secondary calling on 6.57.

8.8 - 9.0

Shannon Air Traffic Control.

8.95

Shannon Volmet.

9.4 - 10.4

The 31m Broadcast Band.
Granted a recent extension to allow the out-of-band broadcasters above some protection, this band is the great all-rounder;

9.4

BBC World Service from Skelton, Rampisham and Woofferton.

9.53

Swiss Radio International.

9.57

Radio Medi 1, Morocco. East meets west in this excellent commercial venture.

9.83

Croatian Radio. News heard at 0800GMT

11 - 11.4

USAF Operations Net and RAF Control.

11.6 - 12.2

The 25m Broadcast Band.

11.62

All India Radio.

11.91

Georgian Radio.

11.99

Radio Prague.

12.09

BBC World Service from Skelton and Woofferton.

The 13Mhz Long Distance Marine and Air Traffic Control Band.

The major world-wide mobile communications band;

13.14

Portishead Radio. Traffic and Weather on the hour.

13.27

New York/Gander Radio.

13.5 - 13.9

The 22m Broadcast Band.

13.64

Zagreb Radio. Croatian Radio News heard at 1300GMT

13.71

VOA Africa from Botswana Relay

13.73

Radio Austria.

13.83

Zagreb Radio. Croatian Radio News at 2100-2110.

14 - 14.5

20m Amateur Band.

15.1 - 15.7

The 19m Broadcast Band.
The last staging post for good reception during the next few years. Reception that will be marred by the need for all those users who have traditionally worked on 16m and above to find new frequencies lower down. Add to this Middle Eastern jamming and you get;

15.2

VOA, Tangier, Morocco

15.39

UAE Radio, Dubai. Worth it for the weather reports...

15.4

BBC World Service from Ascension

15.45

Radio Austria.

15.57

BBC World Service. This sender in Cyprus is suggested by Bush House as good for the UK during the day. Good around mid-day, subject to deep fades.

17.4 - 18.1
The 16m Broadcast Band.

17.63
Africa Numero 1, Gabon.

17.64
BBC World Service from Ascension.

17.87
Radio Canada.

18.06 - 18.16
WRAC Amateur Band

18.9 - 19.02
The new 15m Broadcast Band.

21 - 21.45
The 15m Amateur Band lower limit.

21.45 - 21.8
The 13m Broadcast Band.
Very variable and prone to sudden ionospheric disturbance, best when the sun is at its highest;

21.6
UAE Radio, Dubai.

21.66
BBC World Service from Ascension.

21.72
Radio Australia.

21.77
Radio Australia North/South-East Asia Service.

21.8
Ukraine Radio, CIS.

24.89 - 24.9
WRAC Amateur Band.

25.6 - 26.1
The 11m Broadcast Band.

27.6 - 28
The upper limit of the UK CB Band.

28 - 29.7

The 10m Amateur Band.

Now It's Your Turn:

Station	GMT	Mc/s	Date	Log

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