



**Ben Nock's**

# valve & vintage

The military and marine equipment on show indicates that Ben Nock is representing the 'Kidderminster Kollection' again.

**A** big 'Hello' to you all once again, as it's my turn to man the V&V 'shop'. Hopefully, the bad weather is behind us and many of you are looking forward to the rallies and other events throughout the year. It's been a good start to the year for the 'Kidderminster Kollection', there have been several new additions already, so I'll waste no more time and press on!

## German Man-Pack

When I attended the big German Hamfest in Friedrichshafen back in

interesting man-pack finally arrived in the collection in 2010 at a fraction of the price! The SE-6861 transceiver or, to give it the full title, AEG SE 6861/12 mod, was apparently built in the 1980s by Telefunken Systemtechnik-Deutsche Aerospace for the German military.

The set is a 20W single sideband (s.s.b.) or Morse (c.w.) transceiver covering 1.5 to 29.9999MHz. The frequency selection via six push-button decade switches giving a tuning resolution down to 100Hz.

The transceiver has a double conversion receiving system with a first intermediate frequency (i.f.) stage at 40.09MHz with an 8kHz crystal filter. The second i.f. is at 9.910MHz with a 2.4kHz filter. The radio can be powered from either a 30V 1.8Ah rechargeable NiCad battery or a 39.2V 10Ah non-rechargeable Lithium pack. A multi-pin socket on the side of the set allows charging of the internal batteries (if fitted) and operation

from an external supply of between 22.5 and 38V.

The set, **Fig. 1**, came packed in its quite substantial haversack but I understand a more usable bag for carrying the set is available. A handset and three metre long whip antenna completed the station but other accessories include a loudspeaker, Morse key and a vehicle mounting tray. For base station use a 100W amplifier and external tuning unit are also available.

Another interesting feature of this set is that the control head of the transceiver, **Fig. 2**, the whole top section which houses all the switches, can be removed and mounted away from the actual body of the transceiver. A very large cable then connects the two units together.

In use the set is very nice indeed. The received audio is very crisp and clear, the filters doing a very good job in today's crowded Amateur bands. Frequency selection, **Fig. 3**, is certainly easier than with the likes of the Racal Syncal 30 or PRC-320 man-packs whose knobs are that small they are difficult to turn but the reliability of the decade push switches must be in doubt.

A similar choice was used on the FT-70G portable by Yaesu and there have been many reports



**Fig. 1:** The SE6861 transceiver and handset with 30V battery pack attached.

2007, I noticed a very nice military man-pack being offered for sale but was taken aback by the price being asked, if I recall it was around €1800. I did attempt to haggle but, fortunately as it turned out, the seller wouldn't budge. However, as **Violet Fane** said in her poem *"Tout vient à point à qui sait attendre"* ("Ah, all things come to those who wait,") and indeed they do!

So, first seen in 2007 this



**Fig. 2:** A cover protects the tuning selector switches.



Fig. 3: Close view of the tuning and function controls.

of them needing to be replaced. Maybe though, the Germans have perhaps used better (military) quality switches?

Additional push switches on the front panel select volume level and up to four pre-set channels can be stored and selected via a five-position push switch. A standard rotary switch selects between high (20W) or low (5W) power output fed to either the 50Ω BNC socket or via the built-in antenna tuning unit to the whip mount. A small push button in the centre of this switch illuminates all the push switches for operations in the dark.

The function switch has four positions, upper and lower sideband for voice and upper and lower sideband for Morse code. In the Morse position an additional filter is inserted reducing the bandwidth to 500 Hz. The transceiver with the basic battery pack is just 300mm high by 80mm by 285mm wide and weighs 8.5kg. Hopefully during the summer I'll enjoy trying the set out in the portable role.

### The Mk128 Transmitter-Receiver

I mentioned the little Mk128 transmitter-receiver station back in November 2003 – but another example of the transmitter arrived recently, which I married up with a spare receiver that had been on the shelf for some time. This little combination, often referred to incorrectly as a 'Spy Set', covers 2 to 8MHz in two bands and provides

around 1W of c.w. on transmit while the receiver, with a switched beat frequency oscillator (b.f.o.), can cope with receiving amplitude modulated (a.m.) stations as well as c.w. transmissions.

The set, Fig. 4, is powered from batteries for the heaters and high tension (h.t.), a supply of 1.5V is needed for the directly heated filaments, consuming 150mA on receiver and 250mA on transmit while the h.t. battery of 135V providing just 6mA on receive and 25mA on transmit. You should note that the heater supply is only connected when the headphone jack is inserted, this prevents the batteries running down when the set is put away.

A search on the web reveals various bits of information on the set but there is general lack of real hard facts as to the sets use. It's believed the set has been used by the likes of the Special Air Services (SAS) and maybe the Special Boat Squadron (SBS) but its very low power output rules out any real 'Spy' use in my opinion.

There are two main ways of transporting the set, the original Mk128 was carried in a wooden chest with a drop down door on the front, which also had compartments for the accessories. The Mk128B, a slightly later version has a special canvas rucksack with pockets on the sides for the various accessories and batteries.

Many of the earlier '128 sets were modified to the '128B version by

### Ben Nock G4BXD

62 Cobden Street  
Kidderminster  
Worcestershire DY11 6RP  
E-mail: military1944@aol.com



Fig. 4: The Mk128 transmitter (top) and receiver.

adding the front mounted plugs and sockets that connect the units and the battery together. The two units shown here were '128 sets that have been altered to the '128B version. You can see just to the left of the power lead on the transmitter where an on/off switch has been removed. This would have switched on a small lamp, that would have plugged into a socket (where the lead now exits) for operations in the dark.

The Mk128 is an odd set though. It's hard to see just how and where it would be used. The lack of any whip mounting on the box or canvas carrier means a thrown out wire antenna would be needed which would make it cumbersome, requiring wire, poles, earth wire or dipoles etc. Not what you would expect for a special forces set.

### Eddystone Variation

As regular readers will know, I really do like the Eddystone range of receivers and so it's always nice to get another example for the collection. The latest to come my way was an EC-10 variant known as the *Seaguide* or EC-10M. This model, Fig. 5, is actually badged by Marconi Marine and has an added feature of a direction finding (d.f.) capability.





Fig. 5: The Seaguide marine receiver.

The standard EC-10 covered 550kHz to 30MHz with an i.f. of 465kHz. There was then the EC-10A/2 that covered 300-550kHz and 1.5 to 30MHz with an i.f. of 720kHz and had a fixed crystal controlled facility on 2182kHz, the International Distress Frequency. **Note:** I then found some time ago another model, badged as the EY-11, which looked like an EC-10 MkII but with the same frequency coverage as the A/2.

The EY-11 has the b.f.o. tune

control replaced with a switch marked **DF/Normal**. This *Seaguide* receiver also has a d.f. facility, **Fig. 6**, but retains the b.f.o. tune control. The d.f. switch is located below the waveband switch and has three positions, normal, d.f. and sense. The d.f. facility seems to be only operational on range 5, 150–350kHz and range 3, 1.5–3.5MHz.

On the rear of the set are three antenna sockets and two potentiometers marked **Sense 3** and

**5** along with a headphones and high-impedance output sockets. While I have tested the receiver and found it to be working, I have no information as to what sort of d.f. antenna system could be used. So, if any reader has the handbook for this model, circuit diagram or any other information I would very much like to see it.

### And Finally!

I'm sure many of the readers of this column will know of the excellent books by **Louis Meulstree** entitled *Wireless for the Warrior*. There are four large sized volumes covering in great detail many of the sets that have been mentioned here over the years.

Louis has a new edition out called *Compendium 1* which covers British Army Military sets from 1910 to 1948 but in a much smaller format, ideal for slipping in the pocket when visiting rallies and acts as an excellent reference book for identifying that particular bit of junk spotted under a table. Further information can be found at <http://wftw.nl/wftw/compendium1uk.html>

Well that's about it for this stint at the V&V 'shop'. I hope you have enjoyed the selection I have bought you and there are more pictures at [www.qsl.net/g4bxd](http://www.qsl.net/g4bxd) As always I can be contacted at my E-mail address: [military1944@aol.com](mailto:military1944@aol.com) Cheerio for now!



Fig. 6: The Direction Finding control.