

Cost:	£225 plus P&P
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On Parade...

The President Lincoln 28MHz Multi-mode Transceiver

Keen 10 metre operator Jon Wheeler G0IUE was surprised when he was asked to review the President Lincoln 28MHz transceiver on behalf of PW. However he said "I didn't need to be asked twice"!

- Heading photograph: When he was 'on parade' with the President Lincoln transceiver Jon Wheeler G0IUE enjoyed the experience so much he bought the rig!

Now that single band 28MHz (10 metre) transceivers have been de-regulated and are legal for use in the United Kingdom, the President Lincoln is one of those available for Amateur use. The original prohibition dated back to the late 1980s, when a restriction order was placed on such equipment which also included the prohibition of converting 27MHz multi-mode radios to the 28MHz Amateur band.

Regretably, this latter piece of needless legislation has never been rescinded and unfortunately remains in force, despite the efforts of many Amateurs - including the Editor of *PW* who has frequently raised this point in his Keylines editorials. However, I'll get off of my own soapbox and on to the review now!

The Radio

The President Lincoln is a 28MHz multi-mode transceiver, capable of transmitting on the c.w., a.m., s.s.b. (l.s.b. and u.s.b.) and narrow band f.m. (n.b.f.m.) modes between 28 and 29.7MHz. The radio is clearly aimed at the world-wide CB market, however, in this country it's supplied to cover only the 10 metre Amateur band allocation.

The manufacturer's specification states a transmitter output of 10W on a.m., c.w. and n.b.f.m. and 21W on s.s.b. It comes complete with a noise cancelling microphone with up/down frequency selection. Also included are a mobile mounting bracket, power lead, and detailed multilingual instruction book which includes a circuit diagram. The heading picture and the photographs in **Fig. 1**, and **2** clearly demonstrate how neat the transceiver is inside.

Front Panel

Let's look at the all important front panel. There are a host of functions available to the user and all are accessible from the front panel either

by means of several rotary knobs or by simply pushing in/out buttons.

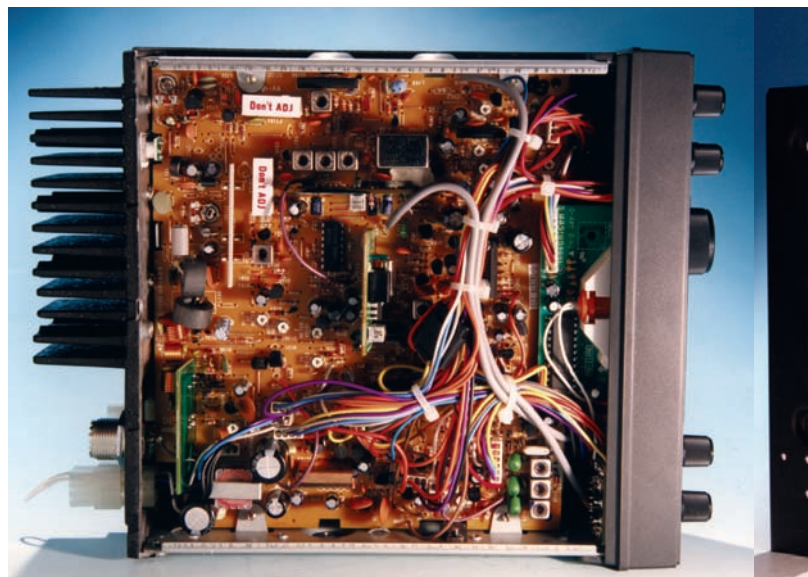
A clear, but not overly large, orange tinted background liquid crystal display shows frequency, channel number, band display (indicated as four banks of 50 channels and displayed as blocks A, B, C and D). Also available on the main display are an standing

wave ratio (s.w.r.) function indicator and modulation meter.

Away from the display is the rotary mode control allowing the user to switch easily between the c.w., a.m., s.s.b. and n.b.f.m. modes. An RIT function allows the user to adjust the receive frequency $\pm 2.3\text{kHz}$ whilst the transmit frequency remains unaffected. This is particularly useful when in a QSO with a station whose transmit frequency doesn't quite match your own.

Power output can be varied between 1 and 10W in c.w., a.m. and n.b.f.m. modes only. Useful perhaps when driving a low input power amplifier.

There are the universally recognised volume and squelch rotary controls. The squelch has a useful function referred in the handbook as auto squelch, this basically sets the squelch at a preset level and would I suppose have its uses in a mobile scenario on either the a.m. or n.b.f.m. modes.



- Fig. 1: Inside top view of the transceiver, showing efficient heat-sinking arrangements, the neat layout and warnings not to tamper!



Scan Functions

Other useful facilities include a scan function that scans through all 50 channels of the selected block. Also available is a **Dim** button that allows the user to reduce the brightness of the display (I preferred it in the brighter position myself).

There's also a **Roger Beep** for those that want it. And there's a facility I found particularly useful: the frequency lock function. This allows you to lock the radio to a frequency of your choice – especially useful during this review when my five year-old daughter **Emma** decided to venture in to my shack and spin the v.f.o. knob to see what it did (luckily nothing as the frequency had been locked).

Public Address (PA) and **Noise Blanker (NB)** facilities are also available and 10kHz incremental steps can be selected via the up/down channel buttons. This made changing frequency while operating on n.b.f.m. much easier.

The most useful function for me was the v.f.o., allowing fine-tuning down to 100Hz, something not available on the Albrecht AE485s reviewed in *PW* a few months ago. This made operation (particularly mobile operation) so much easier.

There are no memory or repeater shift functions on the radio. This is disappointing because you can neither store your favourite channels/frequencies nor can you easily work through any of the 28MHz repeaters often heard so strongly when band is open. Whizzing the v.f.o. backwards and forwards between the input and output of a repeater is a tedious task and one you'll get fed up with in a hurry!

Rear Panel

The rear panel sports the usual SO239 connector, and a two-pin power lead connection. There's also a very unusual 9-pin accessory connector, which can be seen in **Fig. 3**.

Being used to jack plugs it came as a surprise to be confronted with a 9-pin block that **requires wires to be inserted across pins to obtain functions such as an extension speaker, Morse key and PA speaker**

connections. Although unusual it does work and is something I would get used to with time. Mounted on the underside panel is a 4W speaker. In my shack it was perfectly adequate, however, the addition of an extension speaker in a noisy (perhaps mobile) environment would be an advantage.

On The Air

For my on-the-air tests I connected the radio to my G5RV antenna, via my antenna tuner but with it switched to by-pass as the G5RV matched so well, and switched on just after it had got dark one April evening and tuned across 28MHz. The band seemed dead until I tuned up to the n.b.f.m. section and found two local stations **Kevin Romang G4SKN** and **Martin Yallop G4YNT**, both in the Corsham area of Wiltshire, in QSO together on 29.550MHz.

I quickly took the opportunity to call in and spent the next half an hour having an enjoyable QSO with Kevin and Martin on a seldom used part of the 10 metre band (for local QSOs that is). I received favourable reports from both stations although it was implied that my audio level was "a little down" it was in no way a major criticism. On reflection it became apparent that I hadn't been speaking directly in to the microphone and the lack of audio was down to me, not the radio!

The following evening, again connected to my G5RV, I replied to a CQ from **Rui CT3GV** in Portugal on 28.508MHz s.s.b. He replied first time and gave me a 5-9 report. I was particularly impressed with the receive audio, which was very clear and in no way tinny.

More QSOs were made on the evening of the 26 April with **LW9EOC** in Argentina, and **PY1NEZ** in Brazil. Both stations were worked on s.s.b. Incidentally...both stations were surprised that I was only running about 20W and my report on both occasions was 5 by 5.

A trip up to 29.600MHz netted **Juan EA8AGQ**, in Las Palmas Gran Canaria, who amazingly gave me 5 & 9 plus on n.b.f.m. Although he was running 40W, I could only give him 5 by 7 in return. And at this point I quickly set up my Yaesu FT-920, fitted a change-over switch between both radios and connected my 2-element beam.

To be honest there wasn't a vast difference in what I heard between the two rigs. Yes, the FT-920 **was better**, it has better receive options (DSP, Noise Reduction, etc.) but the Lincoln held its own and marginal signals on the '920 were still copyable on the President Lincoln – so there's no doubt the review model had a pretty good receiver.

Product

The President Lincoln 28MHz multi-mode Transceiver

Pros & Cons

Pros: Simple and easy to use, has v.f.o. tuning to 100Hz, sensitive receiver, good transmit audio reports, built in VSWR meter, frequency change possible from the microphone and a comprehensive manual that includes a circuit.

Cons: Low output power, no jack plugs for extension speaker/Morse key, no repeater shift, no memory facility and bulky size in a mobile set-up.

Summary

All in all, it was a pleasure to test this monoband 28MHz transceiver. The President Lincoln gets a definite thumbs up from me, so much so that I've decided to buy the review model. What more can I say - other than "See you on ten metres"?

Price

Normally **£225 plus £9 p&p**, however Nevada have arranged a **special offer price of £199** for *PW* readers (plus p&p) for the on sale period of the July issue.

Thanks

Thanks to **Nevada of Unit 1, Fitzherbert Spur, Farlington, Portsmouth, Hampshire PO6 1TT. Tel: 023-9231 3090, FAX 023-9231 3091, for the loan of the review model.**

● Fig. 2: Inside view of the underside of the chassis. When in use the loudspeaker is mounted underneath the unit.

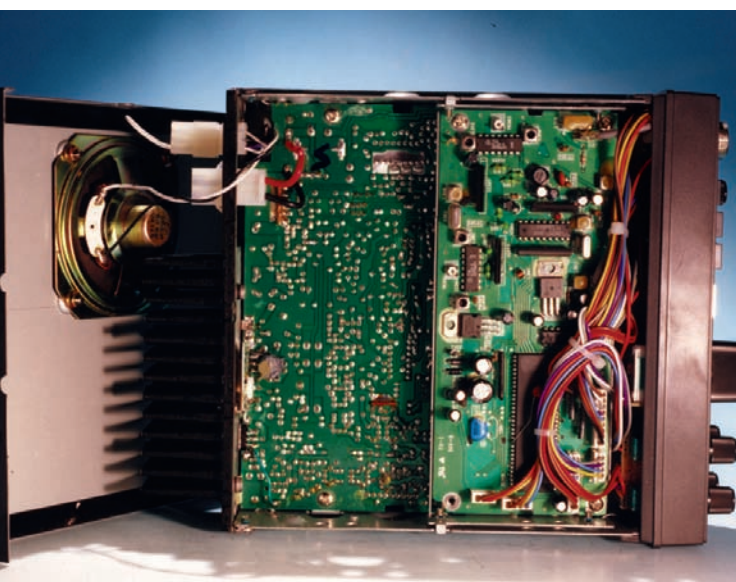


Fig. 3: The rear panel - complete with unusual 9-pin socket (see text for comments).

Going Mobile

The next day was actually a sunny one and it luckily coincided with a day off work for mobile tests. For these I looked out an old K40 CB antenna (shortened for 28MHz operation) fitted it on the roof of the car and installed the Lincoln on the passenger seat.

At this point I must confess that I'd invited Kevin G4SKN along with me as he had a digital camera and if any photos of this part of the review are shown they are down to him. Thanks Kevin!

The President Lincoln is a little bulky compared to some mobile rigs on the market today. It's roughly the same size as the Icom IC-706 but has no remote head facility. For the purpose of the review I parked the car in a lay-by on high ground near Corsham, and because it was warm and sunny I placed the radio on the roof of the car next to the K40 antenna and called CQ on s.s.b..

At first there were no responses and although the band was open, conditions weren't that good. But a few minutes later we were called by **Yura US5EAU**, in Dnepr Ukraine. Yura gave me a 5 by 6 report and I replied with the same.

At this point I was happy with that and was preparing to put the transceiver back inside the car when we thought we heard a JA (Japanese) station. Kevin said give him a call.

I called "QRZ from G0IUE Mobile" and a reply of "the mobile station again please, this is JA7DYJ in Northern Japan" wow...we'd got him! Contact was established and



I worked **Sato** for a full five minutes on s.s.b. He was very surprised to hear where I had mounted the radio and that I was only running with about 21W.

Sato gave me a 5 – 5 report; he was 5 by 8. There was an enormous pile up for him as soon as we'd signed so I guess I just timed my call right! Both Kevin and I were in a state of shock after that and once we'd picked ourselves up off the floor, we

departed from our vantage point, more than content with the results.

No Nonsense!

The President Lincoln is a no nonsense transceiver with enough functions to keep most people fully occupied. The lack of repeater shift and memory facilities wasn't too much of a problem to me but may be to some operators.

The front panel is well designed and easy to use. The l.c.d. display is clear and easy to view (I would have preferred it to be slightly larger though). The 9-pin block on the rear panel is clearly unusual for this type of radio and is something you would just have to live with I'm afraid.

The reports I had on the transmitted audio were very good and the receiver held up well when compared to my FT-920. I didn't try the rig on a.m. or c.w. but you should be able to read how much we enjoyed s.s.b. and n.b.f.m!

DNW

Fig. 4: Jon Wheeler G0IUE enjoyed using the President Lincoln 28MHz transceiver so much that he bought the review model! (Photograph courtesy of Kevin Romang G4SKN).

MANUFACTURER'S SPECIFICATIONS

General	
Channels:	170
Modes:	c.w., a.m., s.s.b., n.b.f.m.
Frequency range:	manual quotes 26 to 29.7Mz. (Review model only 28 to 29.7MHz)
Antenna Impedance:	50Ω
Power supply:	13.2V
Dimensions (in mm):	185 x 250 x 60
Weight:	2kg
	Accessories supplied: Microphone with support, mounting cradle, screws and fused power lead.
Transmitter	
Frequency deviation:	±300Hz
Carrier power:	10W c.w., a.m., n.b.f.m., 21W s.s.b.
Audio response:	300Hz – 3kHz a.m., s.s.b., n.b.f.m.
Microphone Sensitivity:	6mV
Current drain:	4.5A (with modulation)
Receiver	
Maximum sensitivity:	0.5µV – 113dBm (a.m./n.b.f.m.)
	0.4 µV – 115dBm (s.s.b.)
Frequency response:	300Hz to 3kHz in a.m.; s.s.b., n.b.f.m.
Maximum audio power:	4W
Image rejection rate:	>70dB
Receiver (with signal)	1A nominal