

deed. The calibrator, which is, incidentally, an optional extra, provides signals at 25kHz intervals and is pulsed at a rate of two or three times a second to assist identification.

On SSB, the speech quality provided by the *Argosy* when used with the model 700 hand microphone was generally liked by the stations worked. The model 700 is an electret mic, and is fitted with an internal 9 volt battery which, the manufacturer's states, should last for about a year in normal operation. It seems strange that the operating voltage was not derived from the *Argosy* itself. However, it is not necessary to use the model 700 with the rig, and any high impedance microphone can be used. In practice, the lack of a speech processor was felt, especially in view of the comparatively low power of the *Argosy*, but again this is available as an optional extra. The notch filter was effective and was useful in eliminating heterodynes. Receive audio quality was good, despite the position of the internal loudspeaker.

Power supply

The *Argosy* requires a supply of 13.8 volts at 9 amps, and a mains power supply, model 225, is available for base station use. The two are obviously tailored to each other, the connection between them being made via a four way ribbon cable which carries not only the DC supply but also the live side of the mains to and from the ON/OFF switch on the *Argosy*. The circuit is so wired that this switch is in series with the one on the power supply, so that if the PSU switch is left in the ON position the switch on the *Argosy* will turn the PSU on and off. It does not, however, control the DC, so that if the *Argosy* is used with any other power supply its ON/OFF switch will be inoperative. For mobile use the model 1125 circuit breaker is inserted into the DC lead; this unit functions as both ON/OFF switch and overcurrent protection.

There is very little else to say about the power supply arrangements, except that the model 225 became very hot after the rig had been switched on for some hours, when its thermal trip tended to operate on peaks, despite the fact that the transceiver was operating



ARGOSY LAB TEST RESULTS

All tests were carried out using the equipment in the upper sideband mode

RECEIVER SECTION

Receiver sensitivity for a measured receiver SINAD of 12dB. All voltages quoted as PD.

3.5MHz.	0.22uV
7MHz.	0.22uV
10MHz.	0.9uV
14MHz.	0.25uV
21MHz.	0.25uV
28MHz.	0.4uV
29MHz.	0.4uV

Test for dynamic range of equipment. The intermodulation performance was measured by connecting two signal generators through a 3dB hybrid combiner. Generator 1 was set to 7.051MHz and generator 2 to 7.101 MHz. The receiver section was tuned to 7.000MHz and the generator levels were increased until an intermod product was observed equivalent to an S4 (1.4uV) received input signal.

The generator output levels required to induce this condition were 4.5mV. This is equivalent to an uncorrected dynamic range of 70dB. The corrected figure, for a 12dB SINAD intermod level and with the hybrid taken into account, would be 77dB. The noise blanker circuitry on the review set did not affect the intermodulation performance.

Susceptibility to internally generated spurious signals.

With a 50ohm load connected to the aerial socket, the receiver was tuned over the entire range. Birdies were noted at the following frequencies:

3.58MHz.	below AGC
3.9MHz.	below AGC
14.4MHz.	below AGC
21MHz.	S2
21.3MHz.	below AGC
21.49MHz.	below AGC
28.9MHz.	S4
30MHz.	S6

S meter characteristics

Meter	input level	dB change
S1.	0.63uV	0
S3.	1.2uV	5.5
S5.	2uV	4.5
S7.	3.6uV	5
S9.	10uV	9
+20dB.90uV	19
+40.	2.5mV	29

The review set was loaned by KW Electronics of Dartford, Kent.

TRANSMITTER SECTION

Unfortunately, the testing facility encountered difficulties when it came to the testing of the TX portion of the equipment. The results of the two tone intermod test indicated that there was a linearity fault causing IM products of only 8dB below a single tone.

A real signal at this level of IM product would splatter all over the band causing complaints from other users several 10's of kHz away. As it happened, the received signal reports which we achieved in the practical part of the review drew no criticism whatsoever.

The importers, KW Electronics also tested the review sample for a TX fault and drew a blank. They said it was working fine. As it happens, we've also seen a full test report of the *Argosy* in the American magazine Ham Radio which showed no design defect. We therefore assume that something went wrong in the our test laboratory.

When we tested the set, the two tone generator level was arrived at by looking at the peak microphone output on a scope (15mV) and using that as the base. In the event, it seemed to have been too high. Excessive test tone level at the mic input seems to be the only thing which can account for the shocking intermod figures which we recorded. Since we think that they are junk, we are not going to print them.

OUR CONCLUSIONS

The Ten-Tec *Argosy* feels very different to the normal run of amateur radio gear. Perhaps this is because it originates in America rather than the Far East. Having used the review equipment for a day, I'm not sure how much I like the difference but...

Performance appears quite satisfactory although the dynamic range on receive is not outstanding. Against this, G3TDL reckons on the *Argosy* as being excellent in this area and I would rather trust him than a pair of signal generators.

Given the reasonable £399 price tag, the *Argosy* appears to be good value for money.

G4JST