into an SWR close to 1:1. However, shorter periods of operation did not produce this effect.

Model *670* keyer

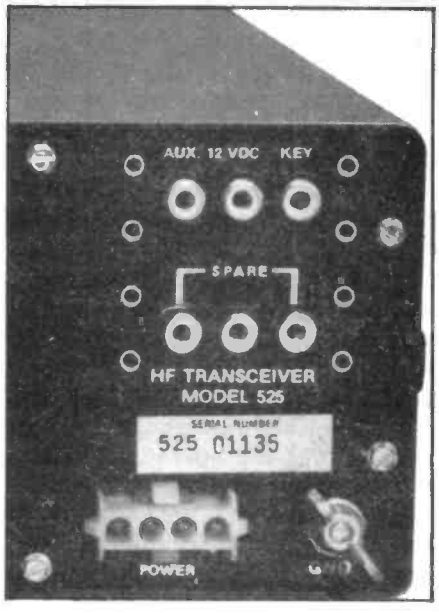
Most types of keyer can be used with the *Argosy*, and the handbook gives guidance as to suitable types. Ten-Tec themselves, of course, produce two suitable keyers, the model *645* dual paddle with dot and dash memories, and the model *670* single paddle which is a basic 'elbug'. Both types are designed to draw their power from the auxiliary sockets on the back of the *Argosy*. The *670* was supplied with the review transceiver, and was used by the reviewer throughout his operational tests. It operates satisfactorily, the only criticism being that the feel of the paddle is rather spongey, resulting in some sending errors since it was not obvious whether the paddle had been pressed over far enough to make contact. The writer's CW speed is not very fast (about 12 wpm) and it was thought that this problem would assume an even greater significance at higher speeds. The *670* is about the same price as other similar units on the market. Side-tone, adjustable both in volume and pitch, is provided by the *Argosy* itself.

Model *228* ATU

Like most transistor transmitters the *Argosy* is broadband tuned, so no PA tuning adjustments appear on the front panel. The PA is designed to work into a 50 ohm load and this means that full output wil not be obtained into any other impedance; in practice it will be necessary to use an ATU with the rig, unless one is able to use a separate dipole for each band. Ten-Tec produce two suitable units, models *227* and *228*, the only difference being that the *228* includes an SWR bridge whereas the *227* does not. The units are well constructed and provide for the matching of a variety of aerials, both balanced and unbalanced. The tuner is in the form of a T-match, all three elements being variable, and is very easy to use, the inductor first being set for minimum reflected power and the match then being trimmed by varying the two capacitors. The matching unit is unbalanced and is obviously designed for coax-to-coax matching, but facilities are provided for the connection of a single wire aerial or a balanced line, the latter being converted to unbalanced by a built-in balun. This feature, however, is one of the two minor shortcomings of the unit, since the balun is unable to cope with lines having a high SWR without becoming lossy, and this sets a limit to the range of impedances which can be matched, particularly at low frequencies. A maximum value of 500 ohms is quoted in the instruction leaflet, and this strikes the writer as being rather low in terms of the impedances likely to be encountered on open wire feeders; however, this limitation does not apply to the unbalanced configuration. A useful feature of the unit is the ability to select any of the three aerials plus a dummy load (not supplied) by the use of a front panel mounted switch. One position bypasses the tuner and routes the transceiver direct to Aerial 1. Connections to these three aerials, the dummy load and the transceiver are all made by S0239 connectors on the back of the ATU. Additional screw terminals are provided for the single wire and balanced feeder for Aerial 3 only. The writer would have liked to see the switch arranged to earth the aerials not in use, but this is a minor point. The only other minor criticism is that the SWR bridge is rather insensitive; it was necessary to be radiating about 5 watts to obtain a full scale power reading, whereas the author likes to tune up at milliwatt levels.

Handbook

The *Argosy* handbook is very good; whilst not as 'glossy' as those for some Japanese rigs it is well written (with no Japanese English) and comprehensive, including circuit diagrams, very good layout photographs, complete parts lists, voltage measurements and circuit descriptions of all modules. There is also a two page essay on the virtues and vices of solid state power amplifiers! The quality of the handbook combined with the simplicity of design of the *Argosy* (due to the absence of synthesisers, microprocessors and digital displays), and the neat, uncluttered construction of the transceiver means that the rig should be quite easy to service, a point to be borne in mind in these days when most rigs are so complex that they need to be returned to the manufacturer in the event of a breakdown.



Rear connections, except aerial socket at other side

Conclusions

To summarise, the *Argosy* performs well and is easy to operate. The receiver performance is particularly impressive. As a general purpose rig it does not represent better or worse value for money than its Japanese competitors, although the ability to buy the basic rig and to add extra facilities at a later date is useful, particularly for someone starting in amateur radio for the first time. One point where the *Argosy* does score over its competitors is as a CW rig, as it is possible to customise it for a top flight CW performance at a much lower price than other rigs, since one does not have to pay for improved SSB performance at the same time. A further, though hidden, cost saving feature is the ease of maintenance, since it is unlikely that a competent amateur would ever need to return it to the manufacturers for repair. This saving is further helped by the simplicity of design which will, of course, increase reliability; and by the very conservative rating of the PA, which can operate into a considerable mismatch without damage. All in all, the writer has thoroughly enjoyed reviewing the *Argosy*; it was a great wrench to have to give it back. ●