



The top of the transmitter in position of the after-bulkhead of the cabin. The dynamo giving the plate supply for the transmitter is seen in the locker at the bottom left. The receiver is below it.

—Photo., W. M. Dawson.

All in the day's work. This picture, taken by Mr. F. J. Bennell, in mid-Tasman, shows Mr. Monks, the radio operator, at the masthead making adjustments to the aerial.

FRESH proof that British hearts still throb with that spirit of adventure which spurred on the Vikings of old is still forthcoming. May we, as sea-bound isles, be duly thankful that this spirit still lives—even to the extent that mature business men voluntarily forsake the comforts and luxuries of home life for the tang of the salt-sea breeze, the cramped quarters, buffeting, and other discomforts of an ocean voyage in a tiny sailing craft.

The modern adventurer wisely enlists the aid of practical science, and so it is that practically every soundly-planned venture of this description nowadays counts in radio as an indispensable adjunct.

It is evidence of prudent preparation, therefore, that the Melbourne yacht Oimara, which with its crew of five has just completed the outward leg of a visit to New Zealand, was equipped for the voyage with complete radio transmitting and receiving plant.

The Oimara is a ketch-rigged craft of some 43ft. length, and being of beamy and sturdy build is well fitted to come through the stormy Tasman Sea to Wellington with flying colours, and all ship-shape.

Divided by two bulkheads into three sections, the forecabin or foremost of these provides sleeping accommodation for two members of the crew. Amidships is the cabin with bunks for three more, and numerous racks and lockers for the crockery and the multifarious items needed to satisfy the cravings of five apparently very healthy appetites, over a period of three months.

IN the clear, the cabin must approximate 12ft. x 7ft. 6in., with ample head room for even a tall man to stand upright.

Aft of the cabin is a comparatively spacious engine-room which houses a 20 horse-power Diesel engine, used as an auxiliary means of propulsion.

We return again to the cabin, however, for it is here that our main interest lies—namely, the radio equipment.

The transmitter is a two-valve crystal-controlled job, built up by VK3GT of the Technical Staff of the "Listener In," an Australian contemporary.

Modern Vikings enlist the aid of Modern Science

A small suitcase houses all the gear, while the transmitting key is secured to the inside of the lid, so that when the transmitter is lifted down from its shelf on to the operator's bunk, and the lid of the case opened, the key is in a convenient operating position—the set may, however, be operated in its position on the bulkhead, so that it is always ready for use.

The transmitter power supply is from a bank of 12-volt lead-acid batteries packed in wooden boxes next the operator's bunk and partly under the cabin table.

Filament current comes direct from the batteries through heavy cable flex, while for high-voltage plate supply the 12-volt current is led in at one end of a "dynamotor" to emerge at the other end of the machine as direct current of some 500 volts potential; this high voltage being led to the transmitter in rubber cable flex.

THE crystal control feature keeps the transmitted frequency constant, even though the yacht be tossing heavily in a seaway. Just out of the picture is an equally important item in any radio installation—the receiver—this being a Philips type 2802 all-wave model, with plug-in coils covering all wavelengths from 10 to 2100 metres.

Four valves are provided, the first being a screened grid radio frequency amplifier, followed by a regenerative detector, one of straight audio-frequency and a pentode. The latter valve was not used, though a loudspeaker is fitted, as reception was so good that all traffic was worked on three valves while many distant short-wave broadcast stations all over the world were heard on the trip.

In addition to personal messages, a considerable amount of Press traffic was transmitted via the Sydney station, VIS, to the "Herald," the Melbourne newspaper which had loaned the transmitter for the voyage.

Mr. Bennell stated that some Dunedin amateurs had been of assistance to the yacht's crew in transmitting weather reports to the Oimara. Mr. S. Perkins, ZL2GK, had also sent out weather reports to the yacht. In the case of the Dunedin station, a stiff blow was being experienced at the time, and the boat would probably have been hove-to for a period had not the weather report indicated that they had just crossed the centre of the depression, and accordingly the yacht carried on to take full advantage of the favourable winds while they lasted.

All on board conceded that their radio results had been very much worth while. The call-sign VJNY was allotted, and the radio installation thus placed on a commercial basis.

In addition to the owner and radio operator (Mr. Monks) and the owner (Mr. F. J. Bennell), the Oimara carried other interesting personalities, the skipper being Captain H. J. Symonds, a professional seaman of long experience in sail (Continued on page 29)