

ARMCHAIR SAILING MADE EASY

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"Mercury" Correspondent

CAPE TOWN.—An intricate system involving the use of radio, teleprinters and computers has been devised for plotting the daily positions of yachts in the Cape-to-Rio race.

But the end result has now been reduced to a simplified code which will enable the public to keep track of each yacht after it has reported its position each day.

While members of the race committee are plotting the positions on a chart in the operations room of the race headquarters — SAS Unitie, in Table Bay harbour, members of the public will be able to do the same, with the aid of facsimile charts now being printed.

A total of 130 000 charts will soon be available throughout the Republic.

Mr. Gordon Burn Wood, chairman of the race committee, explained that after the individual yachts have transmitted their daily position and weather reports to the naval guard ship, these will be retransmitted to the naval radio station at Youngsfield, and telexed through to the computer centre of a large trawling company.

RELAY

A coded tape will be fed into the computer, which within seconds will come up with not only the yachts' geographical positions but also their distance from Rio de Janeiro and their position on a great circle course — that is, the shortest possible distance — and their position on handicap at that stage.

That information will be on the basis of the yachts' time correction factors which will have been fed into the computer.

The information will then

be transmitted to the operations room as SAS Unitie, and to the SABC in Johannesburg which will use some of its most powerful transmitters to relay the processed information back to the yachts.

This transmission at about 1 a.m. each day South African time will be so powerful that even a small transistor radio will be capable of picking it up in mid-Atlantic.

It is expected that the processed position reports will be available at Unitie by 11 p.m. daily.

CODE

Basically, this is how the plotting of the yachts' positions will be done:

The master chart at Unitie and the facsimiles of it, consist of a series of concentric rings, each representing a radius of 160km (100 miles) intersecting the concentric from Rio. Horizontal lines rings, indicate the shortest distance to Rio.

The yachts' reported positions will be reduced to a simple code related to the lines on the charts.

A straight red "base line" has been drawn between Cape Town and Rio, and each horizontal line north and south of it is identified by a letter.

The vertical concentric circles are each marked with the mileage from Rio, so that after the positions have been determined, these will be relayed to the public in a simplified manner.

Anyone sitting at home with one of the facsimile charts can keep as accurate an overall picture of the progress of the race as the people doing the plotting on the master chart.