

R.V. FRANKLIN

NATIONAL FACILITY
OCEANOGRAPHIC RESEARCH VESSEL

CRUISE SUMMARY

R.V. 'FRANKLIN'

FR 4/86

For further information contact

ORV Operations Manager

c/- CSIRO Division of Oceanography

GPO Box 1538, Hobart, Tas. 7001

Telephone (002) 20 6222

Telex AA 57182



R.V. FRANKLIN IS OWNED AND OPERATED BY CSIRO

RJE/NP

24 June 1986

**CRUISE SUMMARY
R.V. 'FRANKLIN'
FR4/86**

SCIENTIFIC PROGRAMME:

WATER MASSES OF THE THERMOCLINE IN THE CORAL SEA

CRUISE SCHEDULE:

Depart Townsville	1000 hrs	Tuesday 20 May 1986
Arrive Sydney	1000 hrs	Sunday 8 June 1986

SCIENTIFIC PERSONNEL

Marine Studies Centre, University of Sydney

M. Tomczak, Chief Scientist
Gu Yuhe (Y.H. Gu), Visiting Scientist, Academia Sinica, Qingdao
J. Padman
J. Sprintall
B. Pillich
D. Large

CSIRO Marine Laboratories

R. Edwards, Cruise Manager
D. Terhell
M. Rayner
E. Madsen
K. Suber

CRUISE OBJECTIVES

1. To collect data on CTD stations along sections in the eastern Coral Sea in order to determine the path of the high salinity Subtropical Lower Water into and within the Coral Sea.
2. To survey, if time allows, a 56 m shallow at about 25.5°S, 159°E near Cape Bank for the Hydrographer of the Navy.

CRUISE NARRATIVE

R.V. FRANKLIN departed Townsville as scheduled at 1000 hrs on Tuesday 20 May 1986 and headed towards 17°S 160°E, the planned position of the first CTD station. Reports from cyclone Namu, which apparently had just devastated most of the Solomon Islands, indicated that it was heading south and likely to reach that position during the next two days. We decided to circumvent Namu in the north and abandoned the first of the planned sections. The ship changed course early on Wednesday 21 May towards 13°S 155°E.

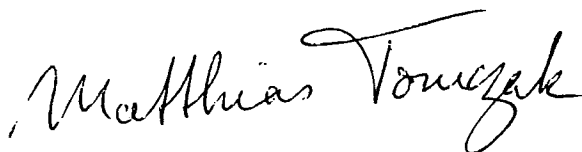
A test CTD station was done on Thursday 22 May, to give the ship the opportunity to sort out the cable layering on the winch caused by cable damage at about 3000 m.

The position for the first scientific CTD station was reached at the early hours of Friday 23 May. CTD stations followed at regular intervals for the next six days.

A problem with the main alternator which developed on Sunday 25 May caused the ship, for about two days, to burn more fuel on stations than usual. As a result of this a port call for refuelling had to be scheduled. Honiara, the nearest port along the planned cruise track, was inoperative due to cyclone Namu. The cruise plan was therefore amended to allow refuelling in Port Vila. The final cruise track is shown in Figure 1.

Port Vila was reached on Thursday 29 May at 0900 hrs and left the same day at 1800 hrs. The delays and loss of station coverage caused by cyclone Namu and the refuelling stop were not severe but resulted in cancellation of the planned survey near Cape Bank.

Station 46, the last station of the cruise, was completed in the early hours of Tuesday 3 June. The ship then headed south toward Sydney and arrived at No. 6 berth Woolloomooloo on Sunday 8 June at 1000 hrs.



Matthias Tomczak
Chief Scientist

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