

# R.V. FRANKLIN

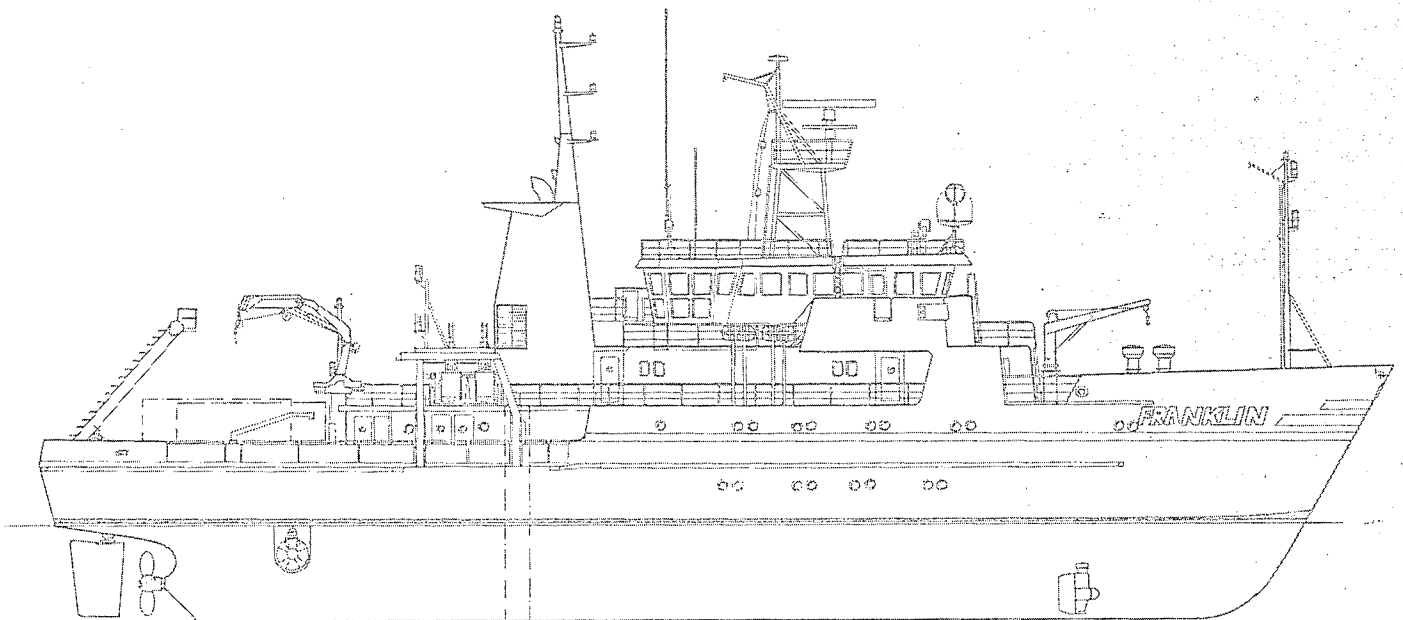
NATIONAL FACILITY  
OCEANOGRAPHIC RESEARCH VESSEL

REVISED

CRUISE PLAN

R.V. 'FRANKLIN'

FR 8/87



Diane Furlani  
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Hobart Tasmania 7001

For further information contact  
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R.V. FRANKLIN IS OWNED AND OPERATED BY CSIRO

BFP/NP

7 August 1987

**REVISED  
CRUISE PLAN  
R.V. 'FRANKLIN'  
FR 8/87**

**ITINERARY**

Depart Fremantle:	1600 hrs	26 August 1987
Arrive Fremantle:	1800 hrs	10 September 1987

**SCIENTIFIC PROGRAM**

1. Ecology of the late stage phyllosoma larvae and puerulus stage of the western rock lobster.
2. Satellite sea surface temperature validation.
3. Collection of larval fish, particularly tuna.

**PRINCIPAL INVESTIGATOR**

1. Dr B.F. Phillips  
CSIRO Division of Fisheries Research  
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NORTH BEACH WA 6020  
Tel: (09) 447 1388
2. Dr J.D. Penrose  
Dr M.J. Lynch  
Centre for Marine Science and Technology  
Curtin University  
Kent Street  
BENTLEY WA 6102  
Tel: (09) 350 7380

**CRUISE OBJECTIVES**

- 1a. Collect plankton samples over 48 hours at three selected stations using a surface net and with the EZ sampler.
- 1b. Collect associated data on light levels, temperature salinity, through the water column in which the samples are collected (in the upper 400 m off the continental shelf and from surface to the bottom on the shelf).

- 1c. Measure water currents from surface to maximum sampling depth in area of sampling.
- 1d. To make evaluation of distribution of potential food materials (oceanic particulate) for Phyllosoma in the water column.
2. Make measurements of surface and near surface water temperatures using a thermistor array. Measurements of wind speed, humidity and air temperature (ship's sensors). Radiometer measurements of the sea surface: infra-red signature. Radiosonde releases may be undertaken.

### **CRUISE TRACK**

The ship will steam to an area to the south of the Abrolhos Island and then make a cross-shelf transect of the Leeuwin Current. The sampling stations will be made outside, within and on the shelf inside the Leeuwin Current. If rough weather occurs the ship will shelter in the lee of the Abrolhos Islands.

### **O.R.V. EQUIPMENT**

Navigation  
EZ Net (Real time mode)  
CTD  
Rosette sampler  
Towing winch  
Biological container  
Thermosalinograph  
Instrumental towing block (with tension)  
Doppler Profiler

### **EQUIPMENT PROVIDED BY USERS**

Sample bottles  
Preservative  
Demountable boom  
Towed thermistor, radiometers and data acquisition system  
Radiosonde release facility and conditioning cabinet (possibly)

### **PERSONNEL**

#### CSIRO Division of Fisheries Research

B. Phillips (Chief Scientist)  
F.B. Griffiths  
J. Isabel  
S. Braine  
D. Wright  
C. Crossland

CSIRO Core Staff

D. Vaudrey (Cruise Manager)  
D. Edwards  
R.J. Griffiths

Curtin University

J.D. Penrose  
M. Snell

CSIRO Division of Atmospheric Research

I. Barton

This Cruise Plan is in accordance with the directions of the National Facility Steering Committee for the oceanographic research vessel RV 'FRANKLIN'.



A.D. McEwan  
CSIRO Division of Oceanography



D.H. Green  
National Facility Steering Committee