

chief
scientists'
manual *RV Southern Surveyor*



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1 INTRODUCTION

1.1 Context

The Marine National Facility (MNF) is owned and operated by CSIRO to provide a research support service to all Australian scientists. The MNF consists of:

- its management, (Marine National Facility Steering Committee (MNFSC));
- technical and other support staff, CSIRO Marine and Atmospheric Research (CMAR);
- the sea-going research platform (the RV *Southern Surveyor*) and its equipment; and
- data products and services provided in collaboration with the CMAR Data Centre.

RV *Southern Surveyor* is a CSIRO workplace and all work undertaken on the vessel must comply with CSIRO policy.

The MNF is capable of supporting research in the following disciplines:

- physical, chemical and biological oceanography;
- marine geosciences;
- environmental science; and
- fisheries science.

The scientific program of the MNF is organised into an annual Voyage Schedule of separate Research Voyages of the RV *Southern Surveyor*. These Research Voyages are of two types:

- **MNF research voyages** – these are allocated competitively by the MNFSC on the basis of scientific excellence and national benefit. Voyages are funded by the Australian Government. The RV *Southern Surveyor* is currently funded to operate for 180 days/year as the MNF.
- **Research charters** – these are Research Voyages of national significance that are undertaken by CMAR and its research partners the National Oceans Office (NOO) and Geoscience Australia (GA).

The independent MNFSC is responsible for the approval of all MNF voyage proposals and for the determination of overall policies of management and finance for the 180 days of MNF time each year. CMAR, in consultation with NOO and GA, is responsible for proposing Research Voyages for the days available for Research Charters. However, the operational management of the scientific program is the same for both types of Research Voyage.

1.2 Management of the *Southern Surveyor's* scientific program

The organisation and management of scientific work on the RV *Southern Surveyor* is logistically complex before, during and after each Research Voyage.

There are four people with the major responsibility for managing the scientific program on *Southern Surveyor*. These are the:

- MNF Operations Manager;
- CMAR Voyage Manager;
- Master of the *Southern Surveyor*; and
- Chief Scientist.

All have their own roles and responsibilities in working co-operatively to ensure the success of each Research Voyage undertaken by RV *Southern Surveyor*. This Manual provides further details of the roles and responsibilities of the Chief Scientist and brief details of the roles of others involved in the management of scientific work undertaken from RV *Southern Surveyor*.

Responsibility for planning, execution and reporting of the scientific program rests with the Chief Scientist. This still applies regardless of the number of projects involved on a research voyage.

In every sense relating to contractual liability, financial control, legal liability, insurance, safety of all scientific personnel and their equipment, operational and logistical decisions, CSIRO is the owner of the vessel. The responsibility and obligations of CSIRO make it necessary on all voyages to provide a CSIRO officer with nominated responsibility for the vessel and its equipment. This person is designated as the CMAR Voyage Manager.

The Voyage Manager is responsible for the efficient use of the vessel as a scientific platform, the safety of the installed scientific equipment of the vessel, and to matters pertinent to the interests of CSIRO. While making sure that every reasonable effort is made to support achievement of the Research Voyage's scientific objectives, the primary role of the Voyage Manager is to ensure that scientific equipment and facilities are used in a safe and proper manner. Safety is the most important consideration under all circumstances.

In summary, the duties of the Voyage Manager are:

- in consultation with the Chief Scientist, allocating cabins and duty watches to scientific personnel;
- providing a voyage briefing shortly after sailing;
- ensuring the safety of all scientific operations at sea;
- supervising MNF support staff;
- providing assistance to the Chief Scientist to ensure that every reasonable effort is made to achieve the voyage's scientific outcomes;
- liaising with the Master and Chief Scientist in relation to any challenges that may develop at sea;
- liaising with the MNF Operations Manager in Hobart;
- liaising with the Chief Scientist and the ship's Master on proposed changes to the Voyage Plan at sea; and
- assisting the Chief Scientist with the disembarkation of samples and equipment at the end of each voyage.

The non scientific management and crewing of the vessel is provided by an operating contractor – P&O Maritime Services. The operating contractor is required to act under the direction of CSIRO alone. The Master of RV *Southern Surveyor*, who is an employee of P&O, has the ultimate authority for conduct, discipline and safety for all persons on board RV *Southern Surveyor*. The Master is also directly responsible for the supervision of all marine crew.

CMAR has responsibility for the operational management of the vessel. Each Research Voyage will have a nominated Operations Manager who will be the primary MNF contact with the Chief Scientist for that voyage.

For each Research Voyage the Operations Manager is responsible for:

- liaising with the Chief Scientist on planning and logistics;
- coordinating MNF technical support for the scientific program;
- managing the preparation of MNF equipment;

- liaising with the Department of Foreign Affairs (DFAT) on clearances for operations in foreign waters;
- liaising with the Voyage Manager to resolve any challenges that arise during the Voyage; and
- receiving Voyage Reports from the Chief Scientist, Voyage Manager, Master and MNF technical personnel after the completion of the Research Voyage.

1.3 Contacts

At sea, the first point of contact for the Chief Scientist in regard to any challenges that may arise is the Voyage Manager. At other times, before and after the voyage, the first point of contact is:

Southern Surveyor Operations Manager
CSIRO Division of Marine Research
GPO Box 1538, Hobart TAS 7001

Phone: (03) 6232 5205 or 5234

Fax: (03) 6232 5191

Mobile: 0419 348 486 or 0419 534 771

2 ROLES AND RESPONSIBILITIES OF CHIEF SCIENTIST

2.1 Introduction

The Chief Scientist plays a key role in the planning, conduct and reporting of scientific programs undertaken on the research vessel RV *Southern Surveyor*. Once appointed, the Chief Scientist will be the principal point of contact for the MNF Operations Manager.

Prior to the voyage, the Chief Scientist will work closely with the MNF Operations Manager to plan and prepare for the Research Voyage. All enquiries from the Project Leaders and other scientific personnel on the Research Voyage relating to equipment, logistics and ship operations should be directed to the Chief Scientist who will consult with the MNF Operations Manager.

2.2 Summary of responsibilities

In summary, the responsibilities of the Chief Scientist are:

On notification of appointment:

- respond in writing to either the MNFSC (MNF Research Voyages) or Director, Research Vessel (Research Charters); and

Prior to each research voyage to:

- inform (in writing) the MNFSC or the Director, Research Vessel of any circumstances that will prevent you taking up your position as Chief Scientist;
- for MNF Research Voyages, request approval from MNFSC for any proposed changes to your scientific program;
- in liaison with the Operations Manager develop and submit the Voyage Plan describing the proposed scientific program;

- read the *Southern Surveyor Participant's Manual* and distribute to all non-MNF Scientific participants (www.marine.csiro.au/nationalfacility/participants/index.html)
- ensure any plans for specific activities to be undertaken on the Research Voyage are submitted to the Operations Manager;
- provide any information required for foreign clearances;
- obtain any permits needed to operate in Australian or State/Territory protected waters;
- coordinate the preparation and timely return of required voyage documentation for all non-MNF scientific personnel; and
- ensure the timely arrival of non-MNF scientific personnel and equipment at the vessel.

At sea to:

- oversee and coordinate execution of the scientific program as defined by the Voyage Plan;
- supervise the activities of all non-MNF scientific personnel; and
- liaise with the Voyage Manager and Master on any modifications to the Voyage Plan or challenges that arise during the voyage.

After each research voyage to:

- ensure the timely disembarkation of scientific personnel and equipment from the vessel; and
- provide the Voyage Reports required by the MNF.

The specific responsibilities and tasks of the Chief Scientist are set out in more detail in section 3.

2.3 Limitations on the authority of the Chief Scientist

The Chief Scientist is not authorised to implement changes to the approved Voyage Plan without the agreement of the Voyage Manager and the Master. The Chief Scientist is not authorised to instruct the Master or other personnel aboard the vessel to undertake any action that is prejudicial to the interests of CSIRO or the Marine National Facility.

The Chief Scientist is not authorised to conduct, or to approve the conduct of, media activities in relation to the vessel, its activities or activities conducted aboard or in conjunction with the vessel, without first obtaining permission from the MNF.

At sea the master of the vessel has ultimate responsibility for all decisions relating to the safety of both the vessel and all persons aboard.

2.4 Ownership of data

All data collected from *Southern Surveyor* while operating as the MNF is the property of the MNFSC. However, the MNFSC places a two year embargo on the release of data collected during the course of a Research Voyage. Until the two year period has expired the Chief Scientist and other Principal Investigators will have exclusive use of this data. After a period of two years, the data is placed in the public domain.

The embargo does not apply to underway data, that is, information collected as a matter of course by ship's instruments when the vessel is underway. It includes such variables: as temperature; salinity; depth; position; and meteorological data. As part of Australia's international scientific responsibilities this information will be made available to GOSUD immediately that the data is processed. Exemption from release may be sought.

3 SPECIFIC TASKS

3.1 Before the research voyage

3.1.1 Voyage agreements

If the offer of time in the Voyage Schedule is accepted, the sponsoring organisation, that is, the lead organisation responsible for supporting the scientific program, will be required to enter a Voyage Agreement with CMAR.

The Voyage Agreement will set out the terms and conditions of operations for both the sponsoring organisation and CMAR, the owner of the RV *Southern Surveyor*.

3.1.2 Development and submission of a voyage plan

It is the responsibility of the Chief Scientist to prepare and submit a Voyage Plan in which the timetable, vessel track, scientific objectives, personnel and technical resources are detailed. The Voyage Plan provides the framework for the successful completion of the proposed scientific program.

A voyage plan pro-forma will be sent to you by the MNF Operations Manager prior to calling a voyage planning meeting.

If more than one research project is to be undertaken on the voyage, it is the responsibility of the Chief Scientist to work with all project leaders to develop a comprehensive Voyage Plan which addresses the requirements of all Research Projects.

You should discuss with the MNF Operations Manager any special requirements for equipment for any of these projects.

For MNF Research Voyages, the Voyage Plan must conform to the information provided about the scientific program in your original application for use of the MNF. This is the scientific program that has been assessed and approved by the MNFSC. Substantial changes to this program can only be approved by the MNFSC. If you are seeking to alter your approved program you should seek the advice of the MNF Operations Manager on the procedure.

3.1.3 Voyage plan submission deadlines

The following deadlines are set to ensure that mandatory conditions can be met to obtain clearances to conduct activities under the requirements of:

- United Nations Convention on the Law of the Sea (UNCLOS), and
- Australian Commonwealth and State Regulatory agencies.

The deadlines also allow sufficient time for the organisation of logistics necessary for each Research Voyage.

Voyage in Australian or international waters: No later than three (3) months prior to the sailing date.

Voyage in foreign waters: No later than seven (7) months prior to the sailing date.

Failure to observe a deadline may lead to cancellation of the voyage or failure to obtain clearance for the work to be undertaken.

3.1.4 Foreign clearances

The Chief Scientist must provide any documentary material required by the Australian Department of Foreign Affairs and Trade to seek clearance for work in foreign waters. The MNF Operations

Manager will liaise with DFAT on clearances for your Research Voyage.

You will be asked to provide further more detailed information (such as the Voyage Plan) at a later date. Clearances under UNCLOS require that any request to a foreign government for clearance to work in their waters, must be submitted at least six months before the work is scheduled to be undertaken.

Refer to the MNF application papers for more information.

Chief Scientists are also responsible for ensuring that all their scientific personnel have a current passport and appropriate visas if their Research Voyage will be working in foreign waters or will be visiting foreign ports. Further details are given in the *Southern Surveyor Participants' Manual*.

3.1.5 Australian protected waters

The Australian Commonwealth, State and Territory Government has responsibility for managing all Australian waters. These governments place restrictions on activities undertaken in particular areas (Marine Protected Areas, restricted fisheries zones etc) or in the habitats of protected or endangered species. The Chief Scientist is responsible for obtaining any clearances or permits to conduct research in Australian, State or Territory waters from the appropriate government authority. The primary source of information of restrictions in Commonwealth waters is the Department of the Environment and Heritage (DEH) web page at: www.deh.gov.au.

The first point of contact with State or Territory Governments is the department with responsibility for environmental policy.

3.1.6 Biological samples

If your voyage requires the collection of any biological samples whatsoever, a permit will be required from the Australian Fishery Management Authority (AFMA). AFMA permit forms can be found at www.afma.gov.au/information/publications/forms/licencing.

3.1.7 Voyage personnel documentation

The *Southern Surveyor Participant's Manual* contains important safety information and mandatory documentation. The Chief Scientist is responsible for distributing this document to all non-MNF scientific participants and for collating and managing the timely return of all mandatory forms (no later than three weeks prior to the voyage) to the MNF Operations Manager. The *Participant's Manual* can be found at www.marine.csiro.au/nationalfacility/participants/index.html

The required voyage documentation consists of:

- Personal Contact Details;
- a short Medical Declaration giving details of the participants' current state of health;
- Passport Details if the Research Voyage will be working in foreign waters or visiting foreign ports;
- an Indemnity Form to be signed by each participant and his or her organisation; and
- a Medical Assessment, to be completed by a registered doctor, if the voyage is for more than five days duration and the participant does not have a current Medical Assessment.

3.1.8 Manifests of equipment and chemicals

The Chief Scientist is responsible for returning completed Manifests of Equipment for all items of equipment that your scientific team intends to bring on board the RV *Southern Surveyor* no later than three weeks prior to the voyage. The Chief Scientist is also responsible for liaising with other Project Leaders to ensure Manifests are submitted for their equipment. For safety and logistic reasons, Manifests of all chemicals, reagents and preservatives brought on board the ship must also be submitted.

The Manifests assist MNF in the proper handling and storage of equipment and chemicals your scientific team will bring on board the RV *Southern Surveyor*.

3.1.9 Transport of equipment

The Chief Scientist must ensure the timely arrival of all equipment, chemicals and consumables that his or her scientific team will provide for the Research Voyage at the port of embarkation.

3.1.10 Allocation of cabins and duty watches

The Chief Scientist liaises with the Voyage Manager on allocating cabins to members of the scientific team. The Chief Scientist and the Voyage Manager will also develop a roster of duty watches for non-MNF scientific personnel prior to the voyage.

Either the Chief Scientist or the Voyage Manager will inform scientific personnel of the allocations when they first board the vessel.

3.2 At sea

3.2.1 Execution of the scientific program

The Chief Scientist is responsible for managing the scientific program from the RV *Southern Surveyor* as detailed in the Voyage Plan. In discharging these responsibilities the Chief Scientist will be working closely with the CMAR Voyage Manager. The Voyage Manager is responsible for the efficient use of the vessel as a scientific platform, the safety of scientific personnel and installed scientific equipment of the vessel, and to matters pertinent to the interests of CSIRO.

The Chief Scientist will also:

- allow sufficient time at the beginning of the voyage for mandatory inductions and briefings, including a toolbox meeting before every operation as required;
- allow sufficient time before the end of the voyage for all demobilising equipment to be prepared for removal from vessel;
- in the case where more than one research project is being undertaken, coordinate the activities of each research project, and where required, arbitrate on any matters where conflict arises between projects;
- work with the Voyage Manager and the Master to coordinate daily routines including schedules and watches in support of the voyage's science mission; and
- ensure that data is collected in accordance with established quality protocols.

3.2.2 Changes to the voyage plan during the voyage

During the course of a Research Voyage it might become necessary to revise the scientific objectives and modify the agreed Voyage Plan. This could be due to circumstances such as changes in weather conditions or equipment failure. In such cases the Chief Scientist might propose changes to the Voyage Plan.

The Chief Scientist cannot implement changes to the approved Voyage Plan without the agreement of the Voyage Manager and the Master. The Chief Scientist is not authorised to direct the Voyage Manager, other CMAR or MNF personnel aboard the vessel to undertake any action that is prejudicial to the interests of CSIRO. He or she is also not authorised to direct the marine crew in any matter – this remains the responsibility of the Master.

At the discretion of the Voyage Manager, in circumstances where agreement is not reached aboard the vessel in relation to a proposed course of action, the matter shall be referred to the MNF Operations Manager, by the most expedient method of communication available.

3.2.3 Supervision of staff

The Chief Scientist is responsible for supervising the activities of all non-MNF scientific personnel in their project team and also liaising with any other Project Leaders on supervision of people in their teams. The Chief Scientist is not authorised to instruct any MNF support staff or ship's crew to undertake any actions without the agreement of the Voyage Manager and/or the Master or deck officer respectively.

MNF support staff are there to assist the scientific program on each Research Voyage. While they will provide all reasonable assistance to the Chief Scientist, they are employees of CSIRO and are under the supervision of the MNF Voyage Manager. The Chief Scientist must consult with the Voyage Manager on any specific tasks they would like support staff to undertake.

MNF support staff have a primary responsibility to ensure the effective operation of the ship's installed scientific equipment. They are able to assist with training other members of the scientific team in the use of scientific equipment, however, they are not responsible for providing operational support for the Chief Scientist. Sufficient personnel must be provided by the Chief Scientist to provide operational support for all planned activities.

Ships' crew are not members of the scientific team. They will operate ship's equipment and provide other non-technical support for the scientific program and are under the direct authority of the Master.

3.3 After the research voyage

3.3.1 Unloading equipment and samples

The Chief Scientist is responsible for the removal of all equipment and samples belonging to scientific projects conducted during the Research Voyage. They are also responsible for the removal of waste and unused chemicals brought on board by the scientific team. The Voyage Manager will provide assistance with these activities.

If the vessel has previously docked in a foreign port, the Voyage Manager will assist the Chief Scientist to provide

a full list of foreign samples to be offloaded, where they are going and what for, to the Master. This is for Australian quarantine clearance.

3.3.2 Housekeeping

The Chief Scientist must ensure that all scientific work spaces, laboratories, and cabins are left clean and tidy. Failure to comply will result in commercial cleaning charges being levied to the Chief Scientist.

3.3.3 Reporting on the voyage

The Chief Scientists' reports form part of the permanent record of the MNF's activities. The Voyage Summary will be published on the Marine National Facility web page. Material contained in the reports of the voyage may be used in MNF and CSIRO published material such as Annual Reports.

The Chief Scientist is responsible for providing two reports on the completion of the voyage.

a) Chief Scientists' operational report

The Operational Report should be lodged with the MNF Operations Manager within one week of the completion of the voyage.

This report is to:

- identify any issues affecting the voyage that need to be addressed by the vessel's management;
- record information on the performance of the vessel and its equipment; and
- record information on the staff support provided by the Marine National Facility and the vessel's crew.

The MNF Operations Manager will forward you a pro-forma Operational Report for your voyage.

b) Chief Scientists' voyage summary

This report is a permanent record of the scientific activity undertaken from the voyage. The Voyage Summary must be submitted to the MNF Operations Manager no later than one month after the completion of the Research Voyage.

To assist in the accurate recording of the Research Voyage it is recommended that the Chief Scientist complete the Voyage Summary on a daily basis while at sea.

The MNF Operations Manager will forward you a pro-forma Voyage Summary for your voyage.

c) Notification of published material

The MNFSC expects that details of all scientific work undertaken on board the RV *Southern Surveyor* will be published in refereed journals or otherwise distributed publicly. It requires that it be notified in writing of all publications of scientific work supported by the MNF, including:

- articles in peer-reviewed journals and publications;
- un-refereed articles in: professional journals; newspapers; magazines;
- material broadcast on television or radio, or otherwise distributed electronically;
- conference proceedings and papers;
- published reports; and
- theses leading to postgraduate degrees (Honours, Masters, PhD and DSc).

The MNFSC also requires that any published material contains due acknowledgement that the scientific work was undertaken on the RV *Southern Surveyor* and supported by the MNF, its equipment and staff.

3.4 Media activities

The Marine National Facility, agencies and organisations sponsoring research aboard the vessel, Chief Scientists and CSIRO each have interests in conducting and managing media activity in conjunction with:

- RV *Southern Surveyor*, its voyages and activities
- Research activities conducted on, from and in conjunction with RV *Southern Surveyor*;
- The result(s) arising from research conducted on, from and in conjunction with RV *Southern Surveyor*;
- The Sponsoring Agency warrants that any literature, information paper, electronic, audio-visual or print article or any other marketing or informational material issued by the Sponsoring Agency in respect of the Voyage will not prejudice any of MNF rights or immunities or increase MNF liabilities;
- All media activities on or in conjunction with the vessel will be reviewed by MNF communications staff and require the express approval of MNF.

In particular it is agreed that:

- any literature, information paper, electronic, audio-visual or print article or any other marketing or informational material in relation to the Voyage shall be submitted by the Sponsoring Agency for MNF approval prior to publication, such approval will not be unreasonably withheld;

- MNF reserves the right to amend any part of, or the entirety of any material which may be released to the media or for marketing or informational purposes where it refers to the vessel or activities conducted aboard or in conjunction with the vessel;
- the Sponsoring Agency will obtain MNF approval for any and all public relations or media activities which are planned to take place aboard or in conjunction with the vessel, such approval will not be unreasonably withheld;
- MNF reserves the right to send a representative to any media activity to be held aboard or in conjunction with the vessel and/or to supply information to be provided at that media activity;
- MNF may supply the Sponsoring Agency with a brief information statement which must be supplied to the media as a part of any media release, or media activity; and
- Sponsoring Agencies, Chief Scientists, Research Project Leaders and other researchers are forbidden from using, or providing permission to use, any image of the Vessel, or activity aboard or in conjunction with the Vessel, without the express approval of MNF, such approval will not be unreasonably withheld.

4 REGULATIONS APPLYING TO SPECIFIC CHEMICALS, TECHNIQUES OR ACTIVITIES

4.1 Introduction

As discussed above some scientific activities require the submission of specific plans for MNF approval or to meet special conditions. The Chief Scientist is responsible for ensuring that all required plans are submitted.

You should consult the MNF Operations Manager on the requirements for any of the following activities intended to be undertaken on the Research Voyage:

- the use of radioactive substances;
- requirements for using chemicals on board (including formaldehyde);
- scientific diving;
- working at heights; and
- working alone.

4.2 The use of radioactive materials

The RV *Southern Surveyor* is an Australian Government workplace and is covered by the regulations of the Australian Radiation Protection and Nuclear Safety Act (ARPNSA). As a result of these regulations all research involving the use of radioisotopes onboard the RV *Southern Surveyor* must be approved prior to the Research Voyage.

You should consult the Operations Manager for details of the information you will be required to submit at least two months prior to your voyage.

It is the responsibility of users of the RV *Southern Surveyor* to comply with their own State/Territory legislation with respect to working with radioisotopes.

In general these legislations should accord with the ARPANSA requirements and this information should already be available to the researcher.

The Chief Scientist is required to ensure that all radioisotopes and all contaminated waste is removed from the vessel at the end of the voyage and for checking that the vessel is not contaminated in any way. As such it is recommended that you are aware of, and comply with the regulations that apply to the storage and disposal of radioactive wastes both at sea and on return to port.

Before departure, users will be required to confirm in writing that they, and their sponsoring organisation, accept these responsibilities.

4.3 Use of chemicals

For every chemical brought on board, the Chief Scientist is responsible for collating and submitting a Manifest to the MNF Operations Manager.

Each Manifest must include appropriate Material Safety Data Sheets (MSDS).

4.4 Use of formaldehyde

Formaldehyde is a toxic chemical, potent irritant, sensitising agent and a probable human carcinogenic. On the RV *Southern Surveyor*, the storage and use of formaldehyde is restricted to the after deck and the fish and photo preservation laboratories. The other laboratories and holds are not to be used at any time for storage. Formaldehyde is not to be used in the General Purpose Lab as it contaminates the laboratory for future live plankton work.

Where possible, all manipulations are to be carried out in the open air. Users are required to clearly mark all bulk supplies, and sample boxes or containers that contain formaldehyde.

All bulk supplies are to be kept in appropriate strong containers, suitably restrained in the open air. Several small containers are preferred. All formaldehyde is to be removed at the end of the voyage.

You should consult the MNF Operations Manager if you have any questions on the use of formaldehyde on the RV *Southern Surveyor*.

4.5 Regulations on scientific diving from the vessel

The RV *Southern Surveyor* is an Australian Government workplace and complies with requirements of the Australian Standard for Scientific Diving (AS2299.2). All research programs which include a diving component must submit a full dive plan together with details of the qualifications and experience of each of the divers. These plans must comply with the requirements of the Scientific Diving Code or equivalent regulations.

The dive plans must be submitted to the MNF Operations Manager for assessment and approval at least two months prior to the commencement of the voyage. Generally, plans that include decompression diving will not be accepted unless special arrangements have been made.

5 CHIEF SCIENTIST'S CHECKLIST

You must do the following on notification of appointment:

- respond in writing to either the MNFSC (MNF Research Voyages) or Director, Research Vessel (Research Charters) **within two weeks of receipt of the written offer.**
- **At least 8 months before the voyage:** make contact with the MNF Operations Manager.

You must do the following prior to each research voyage:

- **As soon as possible:** request approval from MNFSC for any proposed changes to your scientific program.
- **As soon as possible:** confirm to MNF Operations Manager that any clearances needed to operate in Australian or State/Territory protected waters have been obtained.
- **7 months prior to voyage:** provide any information required by DFAT for foreign clearances.
- **3 to 6 months prior to the voyage:** the MNF Operations Manager will contact you to arrange a voyage planning meeting during which a draft voyage plan will be developed.
- **3 months prior to voyage:** develop and submit to the Operations Manager the Voyage Plan describing the proposed scientific program.
- **At least 3 months prior to voyage:** inform (in writing) the MNFSC or the Director, Research Vessel of any circumstances that will prevent you taking up your position as Chief Scientist.
- **2 month prior to voyage:** submit the required plans for the use of radioactive materials or scientific diving.
- **At least 3 weeks prior to voyage:** coordinate the preparation and return of required voyage documentation for all non-MNF scientific personnel.
- **At least 3 weeks prior to voyage:** provide manifests for each item of your equipment and chemicals to be used in all research projects intended to be used during the Research Voyage.
- **Liase with MNF Operations Manager:** manage the transport, installation and operation of your equipment to and on the RV *Southern Surveyor*.
- **Within 1 week of voyage:** in consultation with the Voyage Manager, allocate cabins and watches to scientific personnel.
- **Before vessel sails:** ensure the arrival of all non-MNF scientific personnel and equipment at the vessel.

You must do the following at sea:

- **First day and as required:** allow sufficient time at the beginning of the voyage for mandatory inductions and briefings, including a toolbox meeting before every operation as required.
- **Regularly:** oversee and coordinate execution of the scientific program as defined by the Voyage Plan.
- **Regularly:** supervise the activities of all non-MNF scientific personnel.
- **As soon as possible:** liaise with the Voyage Manager and Master on any modifications to the Voyage Plan or challenges arising during the voyage.
- **Near the end of the voyage:** allow sufficient time before the end of the voyage for all demobilising equipment to be prepared for removal from the vessel.
- **Regularly:** update your voyage summary as the voyage progresses.

You must do the following after each research voyage:

- **As soon as possible:** manage the removal of all samples and non-MNF equipment and chemicals and their transport back to the home organisation.
- **As soon as possible:** ensure that all scientific spaces and cabins are left clean and tidy.
- **Within 1 week after voyage:** provide Operational Report.
- **Within 1 month after voyage:** provide Voyage Summary.