



NEWSLETTER

ISSUED FOUR TIMES A YEAR BY THE PROJECT OFFICE,
UNDP OFFSHORE MINERAL PROSPECTING IN THE
SOUTH PACIFIC (UNDP & CCOP/SOPAC)

Vol. 1 No. 10

April - June 1982

TRIPARTITE CRUISES

MAJOR ACTIVITIES CONDUCTED BY RESEARCH VESSEL S.P. LEE:

The Research Vessel S.P. LEE, working with CCOP/SOPAC under the Tripartite Programme of Geoscientific Research and Mineral Resources Studies of the South Pacific Region, commenced its activities in the region in March 1982. Tun Maung was co-Chief Scientist for Leg 1 from the 28 March to 20 April 1982. Multichannel and multifold seismic surveys over the southern part of the Tonga Platform were conducted and acquired 2357 line-km of multi-channel seismic data, together with single-channel seismic, gravity and magnetic data. In addition, approximately 1500 line-km of single-channel seismic data together with gravity and magnetic data were acquired while on transit from Pago Pago to Nuku'alofa and from the last dredge site about 30km southwest of 'Eua to Suva. 9 sites were dredged on the southern part of the Tonga Platform.

On the 23 April 1982 the research vessel left Suva to collect single-channel seismic data, bathymetry, magnetics and gravity over Baravi Basin southwest of Viti Levu and along a transect between Fiji and Vanuatu over the North Fiji Plateau. Don Tiffin represented CCOP/SOPAC on board during this work. The transect ended at Port Vila, Vanuatu, on 25 April 1982.

David Falvey (from University of Sydney and representing CCOP/SOPAC) was co-Chief Scientist for Leg 2 from 26 April to 16 May 1982 when survey was carried out from Port Vila, Vanuatu, to Honiara, Solomon Islands. Nearly 2500 line-km of multichannel seismic data were collected in the Vanuatu offshore areas.

Don Tiffin was co-Chief Scientist for Leg 3 from Honiara, Solomon Islands, to Rabaul, Papua New Guinea. 3450 line-km of multi-channel reflection seismic data were obtained over the 'Slot' and nearby areas between 19 May and 9 June. In addition, 40 sonobuoy refraction profiles were run, 10 dredge stations successfully occupied and two gravity cores collected. High resolution seismic profiles, gravity, magnetic and bathymetric data were also recorded.

After the work in the Solomon Islands was completed, the ship proceeded to Rabaul, Papua New Guinea, where a survey of Rabaul harbour was made to assist the Rabaul Volcanological Observatory in the study of seismic activity related to recent volcanism in the area. The survey ended in Rabaul on 11 June.

This work completed the voyages of the R/V S.P. LEE in the South Pacific.

MAJOR ACTIVITIES CONDUCTED BY RESEARCH VESSEL KANA KEOKI:

The Research Vessel KANA KEOKI working with CCOP/SOPAC under the Tripartite Programme of Geoscientific Research and Mineral Resources Studies of the South Pacific Region conducted surveys on the Northern Melanesian Borderland from 31 March to 19 April. Richard Holmes (from MRD and representing CCOP/SOPAC) was co-Chief Scientist for Leg 1. Continuous records



were obtained from 500km of underway air gun reflection seismic and 12 and 3.5 kHz sounding equipment. 40 ASPER refraction sections were recorded on tape. In addition 13 rock dredges and 4 piston cores were taken during survey on and adjacent to Taviuni Bank, Lalla Rookh Bank, Wallis Island, Peggy Ridge, Futuna, Combe Bank, Robbie Bank, Tuscarora Bank, Bayonnaise Bank, Nurakita Bank, the central North Fiji Plateau and Alexa Bank. The cruise successfully completed the principal objectives.

Jim Eade (from NZOI) was co-Chief Scientist and Robert Smith (from MRD) assistant Scientist, were CCOP/SOPAC representatives for Leg 2. From the 23 April to 12 May, surveys were conducted across the central North Fiji Basin triple junction to investigate any zones of hydrothermal activity along active rifts and to examine the existence and distribution of any metalliferous deposits occurring in these active zones using underway geophysics, coring and dredging, bottom photography and water temperature measurement techniques. Bottom samples were obtained at all stations.

On both legs, tracks were run across the Baravi basin at the request of MRD for hydrocarbon assessment.

Neville Exon (from BMR and representing CCOP/SOPAC) was co-Chief Scientist for Leg 3 in the Woodlark Basin-Solomons area, which started in Vila on 15 May and ended in Honiara on 7 June. Altogether single-channel seismic, magnetic and gravity data were obtained along 3600 nautical miles of ship's tracks, four heat flow profiles were measured (3 in the Slot, and 1 in Blanche Channel), 13 areas were dredged for igneous rocks, and 13 cores of bottom sediments were obtained.

This work completed the voyages of the R/V KANA KEOKI in the South Pacific.

RELIEF SUPPLIES FOR TONGA AFTER CYCLONE ISSAC:

From Hawaii, the Tongan Relief Association donated 30 tons of canned food and clothing to help with the aftermath of cyclone Isaac in Tonga. These supplies were transported by the R/V S.P. LEE from Honolulu to Tonga during the survey in Tongan waters.

REGIONAL CONFERENCE OF SENIOR PLANNING OFFICERS:

Cruz A. Matos, Project Manager, attended the Regional Conference of Senior Development Planners held in Suva, Fiji, in June 1982. The subject of the conference was "Development Issues, Strategies and Marine Resources". He described CCOP/SOPAC activities and participated in the conference discussions.

CONSULTANT ON SHORT-TERM PROJECT:

In June 1982, Russell Howorth conducted a survey on shore erosion in Kiritimati (Christmas) Island and prepared a report on the findings together with recommendations. He also visited Tarawa to update the coastal erosion monitoring programme previously established.

EIGHTH SESSION OF THE ICG FOR THE TSUNAMI WARNING SYSTEM IN THE PACIFIC:

The Eighth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific was held at SPEC headquarters in Suva, 13-17 April 1982. Communication of tsunami warnings and other hazards was discussed. CCOP/SOPAC expressed concern at communication difficulties in developing nations with many small islands and strongly recommended a study of possible ways of financial support to the communication of tsunami warnings. Don Tiffin represented CCOP/SOPAC at the meeting.

WORK CARRIED OUT BY PROJECT PROFESSIONAL STAFF:

Garry Gauss was one of the lecturers at the Concrete from Coral Workshop in Rarotonga, Cook Islands, from 31 March to 6 April. The workshop was sponsored by the Concrete Research Association and Dept. of Scientific and Industrial Research, New Zealand, and by CCOP/SOPAC-ESCAP.

Garry Gauss at the end of June visited Solomon Islands to initiate a mineral sands survey on San Jorge Island.

From the 1-10 May 1982, Tun Maung visited Tonga together with U.S. Geological Survey geologists, David Scholl and Tracy Vallier and Australian National University organic geochemist, Mark Sandstrom. Samples were taken from two oil seeps on Tongatapu for analysis at the Australian National University and Mineral Resources Department, Fiji. The group also visited 'Eua and carried out field geology studies. About 52 samples were collected and sent to U.S. Geological Survey in Menlo Park, California, for analysis.

BATHYMETRIC TRAINING COURSE:

An advanced bathymetric training course was completed by two MRD trainees, Tulia Tamani and Anand Pratap, at the end of June under the supervision of the bathymetric draftsman, Phillip Woodward.

In July, Henry Teloto from the Solomon Islands and Joe Rau from Papua New Guinea will arrive in Suva to attend the bathymetric training course. The course will run for 3 months, finishing in September.

DATA ON NON-LIVING RESOURCES IN THE OCEANS:

During his home leave, C. Jouannic visited IOC in Paris in order to discuss the co-operation in data handling between CCOP/SOPAC and the newly established IOC Task Team on "Data on Non-Living Resources in the Oceans". C. Jouannic has been nominated as CCOP/SOPAC representative to this Task Team.

CARTOGRAPHERS CONFERENCE:

Phillip Woodward attended the Australian Institute of Cartographers conference in Canberra from the 17-24 April. He also visited Port Moresby on his return to Fiji.

RETIREMENT OF TECHNICAL ADVISER TO CCOP/SOPAC:

John E. Wright, Assistant Director, Head, Continental Shelf Division, will retire in early 1983 and his successor will be Robert McQuillin, Head, Marine Geophysics Unit, Continental Shelf Division.

NEW MAJOR EQUIPMENT:

A Geomarex Vibrocorer system was delivered to the Technical Secretariat in May. Trials were carried out in June and the system will be operational once modifications recommended as a result of the trials are completed.

INFORMATION FOR READERS:

The University of Aberdeen, Scotland, advises that the annual International Training Course on "Environmental Impact Assessment" (EIA) will be held from the 4-17 July 1982. Interested readers who would like to obtain more information

should write to the following address:

Course Organizer
University of Aberdeen
Dept. of Geography
High St.
OLD ABERDEEN, AB9 2UF
Scotland

(Telex No. 73458)

VISITORS TO CCOP/SOPAC - APRIL-JUNE 1982:

L. Kroenke, S. Warlop (HIG, Honolulu), J. Eade (NZOI, Wellington), R. Howorth (Victoria University, Wellington), S. Wallace, T. Vallier, D. Scholl (USGS, California), J. Daniel, B. Pontoise (ORSTOM, Noumea), S. Tongilava, S. Soakai (Lands, Surveys & Natural Resources, Nuku'alofa), D. Falvey (University of Sydney, N.S.W.), R. Herzer (Geological Survey, Wellington), N. Exon (BMR, Canberra), M. Sandstrom (ANU, Canberra), K. Hansen (UNDP, Copenhagen), P. Sotutu (UN ESCAP, Nauru), J. Bender (BGR, Fed. Rep. of Germany), R. Fellerer (Fed. Rep. of Germany), R. Pollock (Geomarex, La Jolla), D. Daguise (Geomarex, Tahiti), G. Giermann (Polar Inst., Fed. Rep. of Germany), I. Oliouline (IOC).