

SAGAR KANYA



CRUISE SK - 226 B

(15th July 2006 to 17th July 2006)

Cruise SK- 226 A

National Institute of Ocean Technology

Deep Sea Technologies & Ocean Mining Group.

Embarkation : Chennai : 11.07.2006
Disembarkation : Chennai : 14..07.2006

Area of operation : Off Chennai

Participants:

1. M. A. Atmanand - Chief Scientist
2. C. R. Deepak - Dy. Chief Scientist
3. N. R. Ramesh
4. M. K. Babu
5. S. Ramji
6. B. Raja
7. P. Guruswamy
8. A. Umapathy
9. V. Chandran
10. B. O. Viswanath
11. K. Ashok Kumar
12. V. S. Suresh
13. R. Vikram
14. D. Rajan
15. J. Logesh
16. A. K. K. Najumideen
17. S. Alwar
18. I. M. L. Raja
19. A. C. Thommai
20. K. J. A. Robert
21. S. A. S. Selvam
22. D. Parthiban
23. D. Thibursian

- 28.06.06 All items were taken in. Loaded crawler and accessories. Prepared for Honourable Minister's visit .
- 10.07.06 Honourable Minister's visit was later postponed. Did soak test at part and cleared for operations in Sea.
- 11.07.06 Signed in and sailed by 6.30 p.m. Held check list meeting with team members and ship crew. Sailed to location 13.25 N, 80.7E. Identified a site and started coring operation. It was heavily raining and wind speeds were high.
- 12.07.06 Coring operations were completed by early morning. Soil strength was not adequate for landing Crawler. Hence, decided to proceed with test without touching sea bottom.
From 7.00 a.m., started checking DP operation. DP was fully operational with DGPS signal.
Preliminary launching was done at a depth of 5 m. Vessel was on DP. The depth was 583 m. Actual launching commenced at 3.15 p.m. All systems including slurry pump was tested at about by 150 m, each time for about 10 minutes and it was successful. Stopped launching at 510 m & 11 p.m. and did operations includes slurry pumps successfully. Location was 13^o 18.62', 80^o, 40.37', weather was getting bad by night with high wind speeds of the order of 25 knots.
- 13.07.06 While repeating the operation at 510 m later at 12 mid-night, found that HPV was not building up pressure. However slurry pump was successful. Hence started lifts at 1 a.m. in between there seemed to be problem with 24 V DC supply of crawler electronics and hence data acquisition could not proceed. This was later rectified. Wind speed reduced a little towards early morning. Crawler was back on deck by 5.15 a.m. Sailed back to Chennai in the afternoon and berthed by 8 p.m. A large floating net approached vessel, it was dangerous as vessel was on DP. It was caught & removed by ship crew with the help of NIOT helpers.
- 14.07.06 Unloaded all items.

M. A. ATMANAND
CHIEF SCIENTIST
ORV "SAGAR KANYA"

Cruise SK-226 B

NATIONAL INSTITUTE OF OCEAN TECHNOLOGY ROSUB Group

Embarkation : Chennai : 15.07.2006
Disembarkation : Chennai : 17.07.2006

Area of Operation : Off Chennai.

Participants:

1. Dr. G. A. Ramadass - Chief Scientist
2. Mr. Shijo Zachana
3. Mr. Ch. Srinivasa Rao

15.07.06 Signed on. Equipment GPS array, ADU electronics and frame for GPS array have been loaded.

GPS array frame was erected on balloon deck and calibration was carried for 1 hour while ship was berthed. Appropriate place and orientation were identified. Ship sailed at 20.00 hrs.

16.07.06 Calibration during the cruise was attempted. Frame has been slotted and firmed up to receive signals from satellites.
After successful calibration, ship was manoeuvred to obtain 90⁰ and 180⁰ turns and data were logged.

17.07.06 After berthing, position data was logged for 30 minutes and frame was dismantled. All equipment was unloaded as signed off.

G. A. RAMADASS
Chief Scientist
ORV SAGAR KANYA

SK – 226 C

Embarkation : Chennai : 18.07.2006
Disembarkation : Shriharikota : 27.07.2006

Area of operation : Off Shriharikota (SHAR)

PARTICIPANTS:

1. Dr. M. Sudhakar - Chief Scientist (NCAOR)
2. Shri. V. S. Rajaraman - Norinco Pvt. Ltd.
3. Shri. Biju V. Naik - "
4. Shri. Praveen R. Rodrigues - "
5. Shri. Lajil Nadukkandy - "
6. Shri. H. Rahman - "

DIVING TEAM:

1. Shri. Karl Breitkopf -
2. Shri. J. S. Bhatti
3. Shri. M. Fernandes
4. Shri. T. D' Souza
5. Shri. Gyan Singh
6. Shri. Rameshwari Rai.
7. Shri. R. J. Dias
8. Shri. J. Singh
9. Shri. G. Janakiraman - NIOT

ISRO represented by:

1. Shri. R. Venkatraman
2. Shri. P. A. Saravana Perumal
3. Shri. J. Subbanathan
4. Shri. Arun Kumar
5. Shri. Muthuraj

The objective of the expedition was to locate and retrieve L 40 strap on engines of GSLV (INSAT - 4 C) failed on 10th July, 2006.

Two engines (F-02/S2 and S3) have been recovered before the vessel sailed back to Chennai.

S3 - recovered on 20.07.2006

S2 - recovered on 27.07.2006

The following operations were carried out:-

1. Side Scan Sonar Survey.
2. ROV sea floor viewing.
3. Dredging at one location.
4. Three Vanveen grab operations.

Operational depths are within 20m contour.

Diving was carried out with the help of other platforms Sagar Purvi, Sagar Paschimi, Boris Petrov/Boat (Survey).

Sagar Kanya was released due to next cruise commitments.

It is first time in Indian history as per Dr. P. S. Goel, Secretary, MoOD during a telecom that India has ever recovered rocket parts from sea. It was done by French Guyana about 20 years back.

I am extremely happy and satisfied with the mission accomplished till today under my leadership.

We are looking forward to recover the failure strap on engine - S4 as per ISRO scientists which is very critical for their failure analysis.

Chief Scientist
ORV "SAGAR KANYA"

