

# **Diary of Events, Highlights of Achievements**

**Jayapaul D.**

Expedition Leader and Station Commander

## **Launching Ceremony**

The expedition members assembled at Goa on 31 December 2006. The launching function was organized on 2 January 2007 at National Centre for Antarctic & Ocean Research (NCAOR), Goa. Dr. P C Goel, Secretary, Ministry of Earth Sciences was the Chief Guest. Shri Rasik Ravindra, Centre Director, NCAOR, Goa and Shri T V P Bhaskara Rao, Director (Logistics), NCAOR, Goa and various other dignitaries graced the occasion.

## **Boarding the Vessel**

The Ship arrived at the Mormugao Harbour, Goa on the evening of 4 January 2007. The Ship was required to change its Propeller Blades for approaching ice bound areas and planned to carry it out with the help of divers at Goa. However, the work could not be carried out at Goa on account of poor underwater visibility. The Ship set sail on 10 January 2007 at 2000 hrs from Mormugao Port, Goa.

## **Sailing to Mauritius**

The vessel crossed the equator on 14 January 2007 at 0644 hr. A brief ceremony was organized for the members of the Expedition. The vessel reached outer waters of Mauritius on 18 January 2007 at 1230 hr and came alongside for berthing by 1430 hrs.

The Helicopter spares were brought on board on 19 January 2007 and the underwater survey for changing the propeller blades also commenced during the day. After completion of bunkering, the vessel moved to outer mooring point for replacement of propeller blades. The two Helicopters chartered for the expedition flew on board the vessel, while at outer mooring point.

On 22 January 2007, the Captain informed us that the replacement of blades in underwater conditions is not possible at Mauritius due to poor water quality affecting the visibility of the diving team. He was instructed by the Owners to proceed to East London, South Africa immediately.

## **Sailing to East London and Durban**

The vessel sailed for East London, South Africa for Dry Docking and replacement of propeller blades on 22 January 2007 at 1300 hr. However, on 24 January 2007, the Captain informed us that the Owners have asked him to change course and proceed towards Durban, as replacing the propeller blades at East London will take longer time. He also informed us that the Dry Dock is available at Durban on 1 February 2007 and has been booked by Owners. The vessel proceeded towards Durban with both engines operational as per the

instructions from Owners to save voyage time. The vessel reached Durban (outer water's) on 26 January 2007 at 1615 hr. Republic Day was celebrated on board the vessel.

The work on replacement of propeller blades by underwater divers was started on the early morning of 27 January 2007.

The Consul General of the India at Durban with thirty members of the consulate visited the ship and had lunch with us on 4<sup>th</sup> February 2007.

On 7<sup>th</sup> February 2007 the Consul General of India at Durban invited the Expedition team for lunch and a press conference. A presentation on Antarctica was made by Shri Jayapaul D, Leader of the Expedition and Shri Ajay Dhar, Observer of the Expedition.

The work on replacement of propeller blades was successfully completed on 8 February 2007 and the vessel set sail for Antarctica at 2020 hr. The vessel crossed 40° S on 10 February 2007 at 1035 Hrs. on its onward journey to Antarctica.

14 Feb 2007. Crossed 60 degrees S early morning.

#### **Arrival at India Bay and Maitri**

The vessel reached new India Bay (Antarctica) on 15 February 2007. A courtesy visit was paid to Maitri the same evening. The courtesy sortie took off at 1830 hr and reached Maitri at 1915 hr. The Secretary MoES, Dr. P C Goel, Additional Secretary MoES, Shri Anand Kumar and Centre Director NCAOR Sh. R Ravindra were present at Maitri to receive the new team. These dignitaries left Maitri for Cape Town the same night.

The first wintering party flying back home today was dropped at Runway, followed by Secretary & party.

16 Feb 2007: Non-stop flying from 0800 hr till 2000 hr and most of the members and load shifted to Maitri. Some of the Crew members shifted to shelf for mooring.

25 Feb 2007                    All the summer members shifted to ship from Maitri.  
Drilling camp closed and members shifted to Ship.

23 March                    World Meteorological Day 2007 – Celebrated at Maitri – talk by Mr. Niyas, IMD on Contributions of IMD with special reference to Polar Meteorology.

24 & 25 March                    Blizzard.

1 April                    Retrieved trailer with fuel tank from Sankalp which was stuck in water channel. GPS marking from Sankalp to Maitri for night navigation. Aurora sighted

7 April:	Observed International Health Day. Dr. IB Udaya delivered a talk on Alcoholism followed by a quiz on general anatomy and some medical/hygiene aspects conducted by Dr. GS Chaudhari and Dr. IB Udaya.
13 April	Skuas depart from Maitri.
14 April	Dr. GS Chaudhari delivers a talk on food habits, Obesity and Health aspects.
27 to 30 April	Clearing/cleaning all junk accumulated in Kuber complex. The serviceable items have been segregated and stacked properly.
1 to 6 May	Clearing/cleaning operations of all the junk accumulated at Kuber continued. Twenty personnel and one crane were deployed for the above job from 0900 hrs to 1300 hrs. Three containers have already been filled with metal scrap of Kuber for backloading. The serviceable items have been segregated and stacked properly. Conducted fire drill on 1 May.
7 May	Celebrated 47 Border Roads Organization Raising Day.
9 May	Alternate fuel tank (10KL) for Boiler room placed outside the station between generator complex and Maitri. This facilitated in increasing the capacity of storage of fuel as well as enhancing the safety to the station. The fuel tank in the Boiler room will be used for storing water Attended Victory Day Celebrations with some members at Novo station.
1 June	Commenced lecture series on Antarctica and Antarctic Science. Talk by Shri K Jeeva, Scientist, IIG on “Exploration of Antarctica.”
8 June	Talk by Shri HS Gusain, Scientist, SASE on “Snow Avalanches and its Mitigation Techniques”.
21 June	Mid Winter Day celebrations at Maitri. Hosted Table Tennis Tournament between the Indian and Russian Antarctic teams. The Indian team won the tournament.
28 to 30 June	Talk by Shri GS Srinivas, Scientist NGRI on “Antarctica some general aspects and scientific work carried out by NGRI.
15 August	Flag Hoisting at Maitri and Independence Day celebrations. Blizzard continues since 03 00 hrs.
4 Sept	Janamasthami celebrated at Maitri.

9 to 10 Sept.	Examined site for the location of the Antenna for the Earth Satellite Station at Maitri and sent a note to Director NCAOR along with the location map.
11 Sept.	Observations/photographs taken during the Partial Solar Eclipse.
26-28 Sept. 2007	Shri Jayapaul D, Leader and Lt. Surg. I B Udaya went to Russian Bay along with the Russian convoy team for making observations on the shelf for habitation of Penguins/Seals and surveyed the area to the east and west of Russian Bay. Assessed the condition and the position of the containers and fuel tanks of the Indian Antarctic Expedition to be back loaded to India in March 2008.
17-25 Oct. 2007	<p>The sixth convoy of the expedition, the first after the Polar Winter commenced from Maitri on 17 October 2007 at 0700 hrs. and reached the India bay at 2000 hrs. Work was hampered due to blizzard on 21 and 22 Oct. The following tasks were accomplished.</p> <ul style="list-style-type: none"> <li>(a) Unloading 6 containers and one half bin with backload items.</li> <li>(b) Repairing and load testing of the 18 Tonne MANTIS Crane which was unserviceable on the ice shelf for the last three years. The repairs were successful and the crane was made operational.</li> <li>(c) Recovery of 10 nos. of 24 KL 19 nos. of 20 KL fuel tanks which were completely buried under the snow with the help of crane and snow vehicles. An old towing sledge was repaired and made operational.</li> </ul>
	<p>The convoy moved to the Russian Bay on 23 Oct. at 1100 hr. and reached at 1630 hr. In the Russian Bay six containers and six half bins with backloaded items of the 24<sup>th</sup> ISEA were realigned by pulling towards the Shelf to facilitate easy loading to the ship. The return convoy started on 25 Oct. at 0650 hrs. and reached Maitri at 2000 hr.</p>
11 Nov. 2007	<p>The Seventh convoy started at 1100 hr. and reached India bay at 2300 hr. The convoy was taken up with the following objectives:</p> <ul style="list-style-type: none"> <li>(a) To familiarize the Convoy route to the new team.</li> </ul>

- (b) To impart training to the new team on navigation using GPS.
- (c) To brief the new team on the terrain realities of the India bay.
- (d) To place in position three snow vehicles with trailers in the shelf to facilitate the loading/unloading activities (to and from the ship) during Feb.2008.

### **Highlights and Achievements**

The important tasks carried out other than convoy during the winter period:

- (a) Preparing the demand of various logistic items.
  - (b) Cleaning the general area of 'Maitri Complex' which had accumulated with scrap and other unserviceable items since last 7 yr.
  - (c) Overhaul of generators.
  - (d) Complete external painting and necessary internal painting of the station.
  - (e) Renovation of the toilet block.
  - (f) Flooring works in the gymnasium & kitchen.
  - (g) Welding works in the main entrance to prevent accumulation of snow in front of the main entrance to the station.
  - (h) Leveling an area of 45mtrs x 40 mtrs to facilitate the installing of Imaging Riometer for the IIG Department.
  - (i) One Pisten Bully Vehicle which was lying unserviceable at the shelf for the last one year was made serviceable by putting a new engine in the vehicle. In mainland such major repairs are carried out in big workshops equipped with all facilities. Here the complete repair was done in the open shelf in adverse weather condition. The entire logistic team worked continuously for 96hrs to make the vehicle serviceable. Such a successful major repair has been done for the first time in the open shelf in the History of Indian Antarctic Expedition.
  - (j) The existing 2500 ltrs fuel tank in the boiler room was converted to water storage tank and a new tank of capacity 10 KL installed outside the station for storing the same fuel. This modification has enhanced the safety of the station and increased the storage capacity of water in the station. This task has been a long pending issue since several expeditions.
  - (k) Assisted the 27<sup>th</sup> ISEA team in the erection of Satellite Earth Station at Maitri.
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