Engineering & Logistic Activities of Twenty Eighth ISEA

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From 27th ISEA onward NCAOR has been following a new policy of managing the logistic tasks by contract employees on NCAOR payroll. This was the second year of this new policy. I am happy to say that as in its first year, this policy has been tremendously successful in 28th ISEA during its second year also. The logistic team achieved this success while working under guidance from the Leader & Station Commander of Maitri.

The logistic activities started, soon after our arrival at Maitri, by successfully commissioning the new excavator that was there in Maitri in a non functional state from last year. This vehicle played an important role in other logistic activities of this expedition.



"Commissioning of a defunct Hydraulic Excavator"

Pisten Bully workshop and hands on training for two weeks was started with Kasbohrer Engineer from Germany on November 16, 2008. The training was completed successfully on 30th November, 2008.

Maitri is equipped with two sets of water duct lines that are insulated and fitted with trace heat elements. One set of damaged water duct lines required to be changed. We started to change them from 18th November, 2008.



"Damaged pipes of the defunct water duct line"

Planning and execution of LAN layout had started from 8th November, 2008 onwards. It got completed by 23rd November, 2008.

For the sake of safety of scientific instruments fresh earthing connection was provided to Summer Huts on 11th January, 2009.

The long space on the eastern side of the station was found suitable for conversion into Eastern Lounge. This was done on 17th January, 2009 to provide one corner of the station that the participants may find refreshing & relaxing.

Snowmobiles were commissioned on 2nd February, 2009 to facilitate faster mobility around Maitri particularly during Polar winters.

Between 18th February & 15th March all the logistic supports were provided to the 28th ISEA Summer Team. Cargo was unloaded from MV Emerald Sea. 400 KL of fuel was decanted and transferred to the storage tanks on shore. Summer Team had erected one Wind Mill at Bharati on 27th January. On 6th March the first Wind Mill was erected at Maitri. Finally the second Wind Mill of Maitri was erected on 17th March after the departure of the Summer Team.



"Two Wind Mills installed at Maitri campus"

On 2nd March, 2009 during a particularly sudden & strong blizzard one Helicopter got damaged while it was parked and anchored on the He-lipad 1 at Maitri. This was a big blow to the expedition activities because after this the mobility of the team got drastically restricted.



"Damaged Helicopter being loaded on the ship"

Logistic team faced its toughest challenge on the evening of 3rd March, 2009. While returning back to Maitri from DG, near India Bay, it encountered a crevasse and was on the verge of almost losing a vehicle with its load. Fortunately every member of the team acted in a disciplined manner with restrain that allowed the Voyage Leader Shri Ajay Dhar to guide the entire convoy to safety.



"Encounter with a crevasse"

Summer Team had a very exciting departure on 11th March due to bad weather. They carried the damaged Helicopter with them in the convoy to the Ship.

Salient logistic activities during the wintering period were:

Bringing the Provisions and Fuel from the shelf by convoy was completed by our Logistic team members by 21st May 2009. While conducting the convoys some oil leakage was noticed from the wheels of newly purchased Canadian made TIS Axle Trailers. Our mechanics ascribed it to some problem with the oil seal and the wheel hub. While repairing the defect they noticed that the wheel hubs of these brand new trailers were fitted with one bearing less on each wheel hub which led to the damage and leakage of oil from the oil seal. Specifications and diagrams provided by

the company also confirmed that the inner bearing on each hub was missing. The issue was documented with photographs and a complaint was lodged with The Director NCAOR on 14th May 2009, for further follow up with the Canadian Company as these trailers were still within the warranty period. The Canadian company accepted the fault and agreed for compensation of the damage and the damaged parts on 22nd August 2009, during the tenure of 28th ISEA. The credit of this goes to the Director NCAOR and The Program Director Logistic of NCAOR and emphasizes the point that a coordinated, vigilant and quick intervention can result in dramatic results, even in Antarctica.



"Logistic personnel trying to find the defect in the Wheel Hub of TIS

Axle Trailers"

One wind mill was incapacitated on July 12 during a very severe and long lasting blizzard. It was brought down and then the second wind mill was also decommissioned on 31st July, 2009.



"Damaged Wind Mill"

In the true spirit of International Cooperation our mechanics went to Novolazarevskaya from 22nd July to repair one of their Everest vehicles in their workshop. In the same spirit of International Cooperation and in ac-

cordance with DROMLAN agreement our logistic people supported and helped in maintenance of the Airstrip at Novolazarevskaya Airport in October 2009.



"Logistic personnel repairing the Everest vehicle at Novolazarevskaya



"Support for Maintenance of ALCI Airstrip"

Veteheia Hill outpost was established on September 10, 2009. This was done by renovating and transporting Satpura hut from Maitri campus on to the Veteheia Hills at an appropriate location to provide the scientists an alternative living accommodation for carrying on their activities.



"Veteheia Outpost"

Sankalp and Banjara living modules for Scientific & Logistic activities were renovated during the months of October and November. This was necessary for continuation of field activities of the scientists and logistic personnel.

In November 2009, it was time to reopen and organize the Summer Camp for the new arrivals of members of the 29th ISEA. First batch of 29th ISEA arrived at Maitri on 12th November 2009. By this time all the logistic tasks were done and now it was our turn to handover the responsibility of Maitri Station in the capable hands of the members of 29th ISEA