

Giant Metrewave Radio Telescope, Khodad National Institute Of Radio Astrophysics Tata Institute Of fundamental Research 11th Plan Progress Report for Mechanical Group As on 21-02-2012

1. Procurement of New Gear Boxes From M/S. Rexorth Germany

- A) Azimuth Gear Box Qty-03 nos
- B) Elevation Gear Box Qty -03 nos

<u>Progress:</u> Original manufacturer M/S Rexorth Germany no longer producing the gear boxes which we are using. It has been decided by the appropriate authority to develop Indian vendor. Accordingly work order was placed to M/S Magtorq. Vendor already send gear boxes (2 nos each) to us. Gear boxes are awaiting for performance testing and final acceptance by GMRT.

2. Spare for Azimuth and Elevation Gear Box

<u>Progress:</u> Original manufacturer M/S Rexorth Germany no longer producing the gear boxes which we are using. They are not in a position to supply spares for the same. After that it has been decided to get the spares manufactured from Indian vendor (M/S Innotrans). M/S Innotrans has taken the dimensions of various parts of Azimuth and Elevation gear boxes and carried out material testing to find out material of the parts, hardness and heat treatment process for various parts. They are preparing detail drawings for various components and started manufacturing spares. Some spares already send by them and balance are yet to come. Based on performance of the spares further action will be taken.

3. Feed Gear Box with High Torque /Planetary Gear Box:

Progress: Order has been placed for Design and supply of this gear box to M/S Innotrans.

4. Theodolite Mount in Antennas fabrication in SS

Progress: Drawing & sample prepared, work order to be placed.

- 5. Workshop Machinery
 - A) Milling Machine: Qty 1 No

Progress: Purchase order placed material expected by March'12.

B) Drilling & Tapping machine: 2 Nos

Progress: 2 nos Drilling and Tapping M/C received.

- C) Plasma Cutting Machine
- 6. Thickness Gauge Measuring instrument: 02 Nos

Progress: I no received and working satisfactorily. Balance 1 no to be purchased.

7. Tension meter: 02 Nos

Progress: 2 nos received and working satisfactorily.

- 8. Spare for exiting High Lift Platform
- 9. Procurement of New High Lift Platform Mounted on Truck: 02 Nos

Progress: Quotation received. Technical & commercial review under progress.



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10. Antenna Door Replacement: For 30 antennas

Progress: Completed for 21 Antennas. Work Order to be placed for balance 09 Antennas. For these 09 antennas supply & erection are expected to be completed by next MTAC.

11. Antennas Surface reconstruction work

- A) P-3 Item manufacturing in SS material Turnbuckle etc
- B) Fixture for making Panel
- C) Fixture for making wire rope sling
- D) Fixture for removing Turnbuckle
- E) Sector Proto type model making at NCRA
- F) Working platform of 28mtr Height
- *G) P-3 Item installation*

cal Group **Progress:** Replacement of turnbuckle completed for two sectors in W5 as sample basis. Antenna reflecting surface checked to match the best fit parabola and found in order. Changing welded mesh will be done on sample basis during next MTAC on one antenna (S4).

12. Inner Octagonal ring water proofing work

Progress: Completed.

13. Elevation Pinion - 6 Nos

Progress: Received.

14. Turnbuckle manufacturing in stainless steel material- 1000 Nos

cimi Metromane Rami **Progress:** First lot received & replaced on W5. Work order for 2nd lot placed for 250 nos.