LASER RETROREFLECTOR ARRAY (LARA) FOR IRS MISSIONS

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PRESENTED

13TH INTERNATIONAL WORKSHOP ON LASER RANGING
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SUMMARY

• ISRO IS PROVIDING TTC SUPPORT TO MULTIPLE REMOTE SENSING SATELLITES USING ITS GROUND STATIONS WITHIN AND OUTSIDE INDIA

• ISRO IS ALSO OPERATING A PRARE STATION AND A P-CODE GPS RECEIVER AT THE SAME CAMPUS, BANGALORE

• ISRO HAS LONG EXPERIENCE IN OPERATING THE FIRST GENERATION LASER SYSTEM AT KAVALUR, INDIA FOR MORE THAN A DECADE

• ISRO CAN REVIVE SLR PROGRAM IN INDIA AND BECOME PART OF THE GLOBAL SLR NETWORK

• NECESSARY INFRASTRUCTURE, EXPERTISE IN HARDWARE, SOFTWARE, ROUND THE CLOCK OPERATION, ORBIT DETERMINATION ETC. ARE AVAILABLE IN ISRO

• ISRO HAS OPERATIONAL EXPERIENCE IN ORBIT DETERMINATION/POD FOR MORE THAN TWO DECADES

• BANGALORE CAN BE ELEVATED AS ONE OF THE FUNDAMENTAL REFERENCE STATIONS FOR SPACE GEODESY

• ISRO CAN COLLABORATE WITH RESEARCH AND ACADEMIC INSTITUTIONS TO EVOLVE A STRONG AND VIBRANT SCIENCE GROUP
• ESTABLISHING SLR STATION AT BANGALORE WILL FULFILL THE LONG STANDING GAP IN THE SLR NETWORK AT THE INDIAN SUB-CONTINENT

• ISRO HAS PROPOSAL TO CONDUCT INTERNATIONAL WORKSHOP ON SPACE GEODESY TO BRING THE EXPERTS ON A COMMON PLATFORM

• ISRO HAS PLANS TO FOSTER SPACE GEODESY IN INDIA BY ESTABLISHING A SPACE GEODESY CENTRE. TOWARDS THIS, A GEODESY DIVISION IS ESTABLISHED RECENTLY

• TO GET ACCURATE GROUND IMAGERIES FROM REMOTE SENSING SATELLITES, ISRO HAS PROPOSED TO PUT RETROREFLECTORS TO ITS FUTURE IRS MISSIONS

• A DETAILED INTERNAL DESIGN REPORT IS MADE IN THIS RESPECT.

• THE REFLECTOR ARRAY IS SIMILAR TO ENVISAT, 9 CUBES ON CONICAL ARRAY