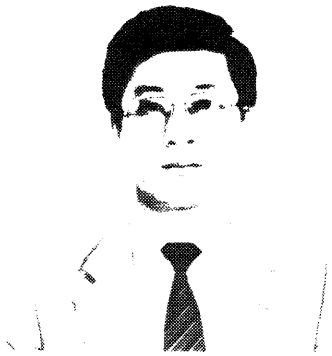
Japanese Expert to Malaysia



Mr Tomotaka ITO

Mr. Tomotaka ITO, Oceanographic Data Research Officer, Japan Oceanographic Data Center, Hydrographic Department of Japan was dispatched to Directorate of Survey and Mapping, Malaysia, as an expert in tides. He took over the responsibilities of Mr. Fumiaki KUWAKINO, former expert in tides dispatched to the Directorate. Mr. Ito is scheduled to stay there for two years until October 1987.

TECHNICAL INFORMATION

Japanese Geodetic Satellite GS-1/EGP

A Japanese first geodetic satellite GS-1/EGP (Experimental Geodetic Payload) is scheduled to be launched at Tanegashima Space Center of Japan National Space Development Agency (NASDA) in August 1986.
The Hydrographic Department of Japan has been proceeding with a project on "Establishment of Marine Geodetic Controls of Japan" since 1980. In recent years, with the advent of the era of new maritime regime, it has become more important for the Department to determine and represent the accurate positions of Japanese islands on the charts. When the satellite has been launched successfully, the project will make another step forward. In this project, the marine geodetic network is constructed with the following four types of datum stations:

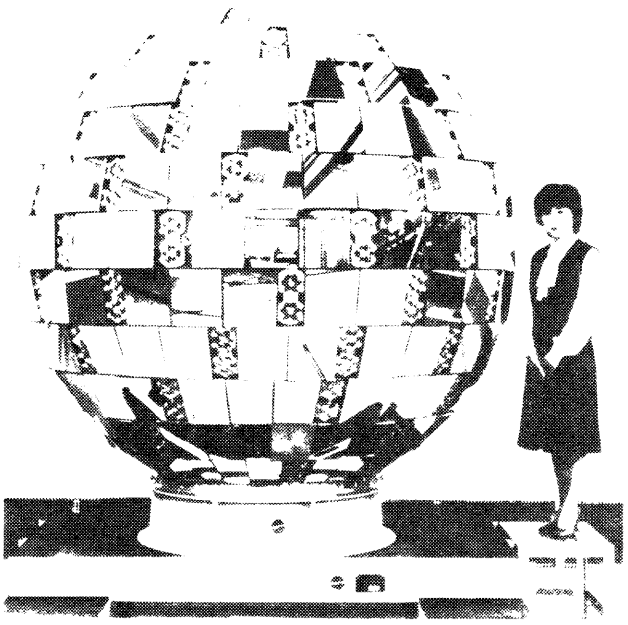
1. Mainland Station (known point): Located at Simosato Hydrographic Observatory, in which satellite laser ranging observations to the US satellite LAGEOS are carried out. At this station the Tokyo Datum has been connected to the World Geodetic Datum.

2. Primary Stations: Ten stations will be established at major off-lying

islands. The relative position of these stations (unknown points) to Mainland Station (known point) will be determined by simultaneous observation of the satellite GS-1 at Mainland and these primary stations.

3. Secondary Stations: 48 stations will be established at off-lying islands located around the primary stations. The positions of these stations will be determined by simultaneous observation of NNSS in Translocation Method at two or more primary stations and these secondary stations.

4. Tertiary Stations: The relative positions of these stations to secondary stations will be determined by triangulation, traversing, etc.



The GS-1/EGP is a spherical ball 2.15 meters in diameter, providing 120 sets of laser reflectors and 318 mirrors on its surface. Specifications of the satellite are as follows:

Orbit : About 1500 km in altitude and 50° in inclination.

Shape : A polyhedron touching internally in a sphere 215 cm in diameter.

Weight: 685 kg.

Spin rate : About 40 rpm.

Reflection of sun light: 1.5 - 4 star magnitude.

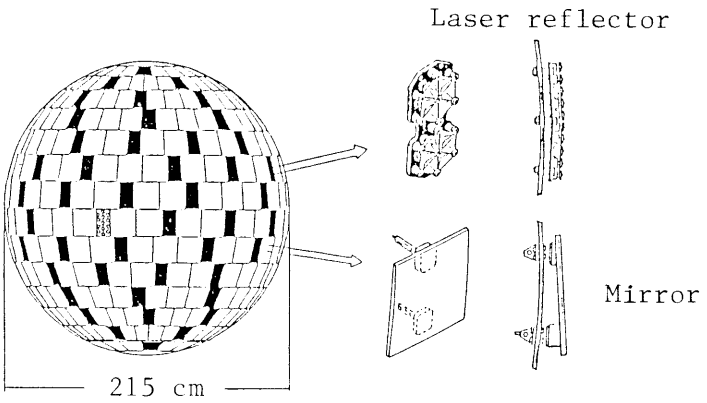
Flashing duration: About 5 msec.

Flashing interval: About 2 times/sec.

Number of mirrors: 318 mirrors.

Curvature of mirror surface: 8.4 - 9.0 meters.

Laser reflector: 1436 reflectors.



EXPERIMENTAL GEODETIC PAYLOAD