



AECENAR

Association for Economical and Technological Cooperation in the Euro-Asian and North-African Region

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



منصات للإتصالات
platforms for communication

TEMOLeb-SatellitePlatform

(Communication Satellite Platform) نظام قمر اصطناعي للإتصالات

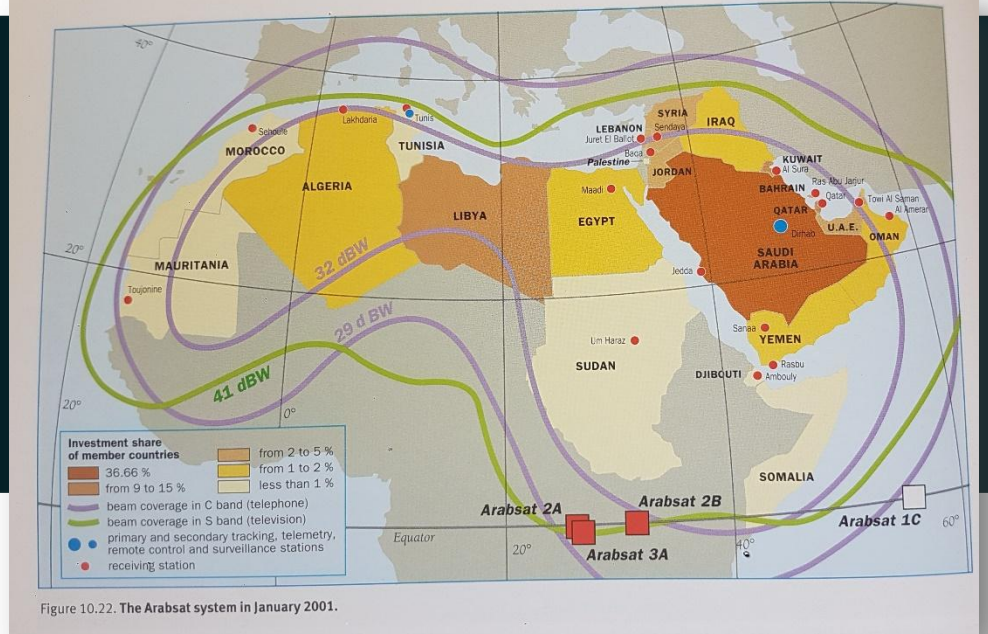
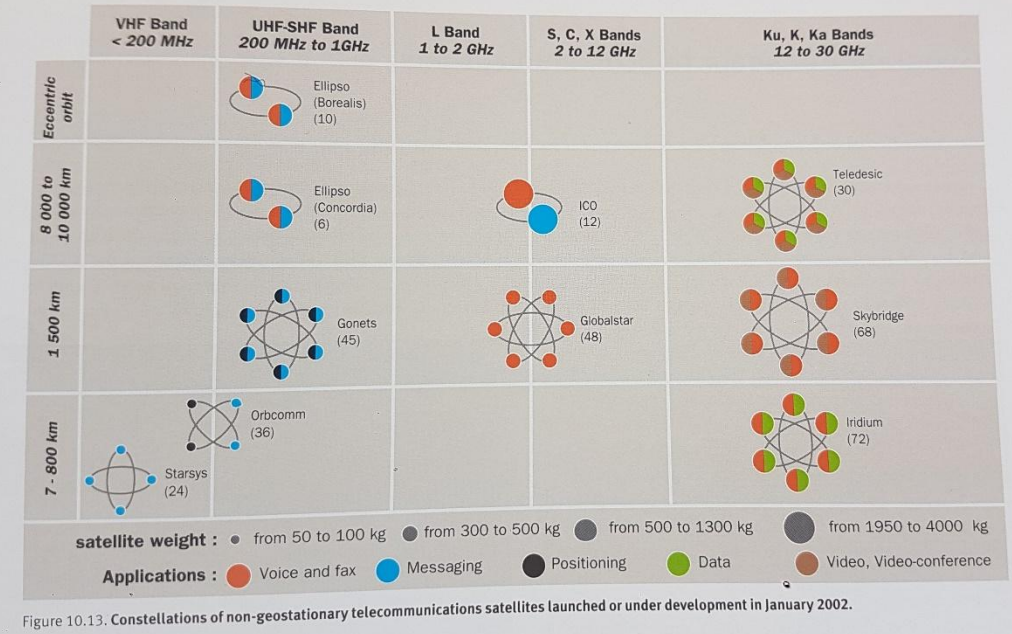



المركز التقني للإتصالات والمعلوماتية

3000 Kg Payload

COM Unit for GEO

Payload **Telecommunications**






Transporter  About 5000\$ /kg
For 3000 kg = 15 Mio \$

Pre-Development (2012-2019)

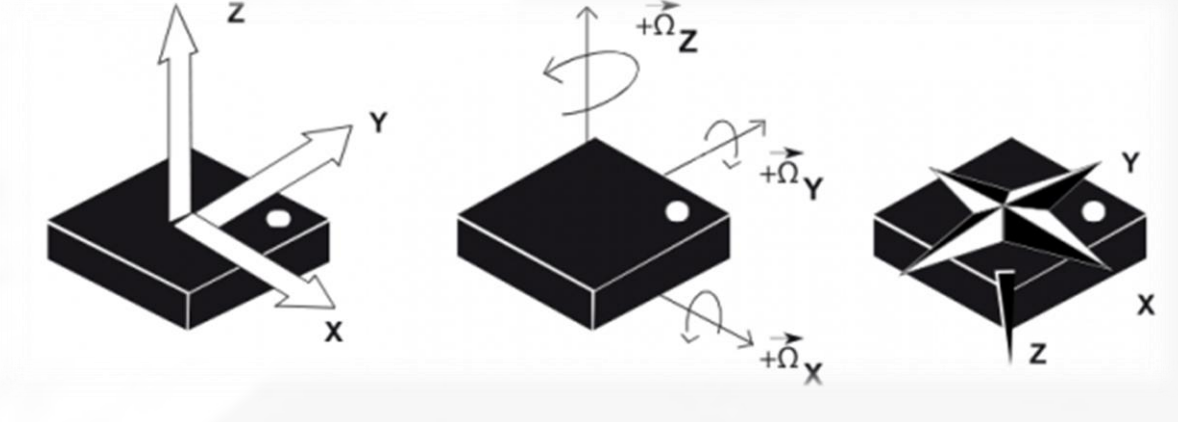
Sensors IMU

IMU or Inertial Measurement Unit


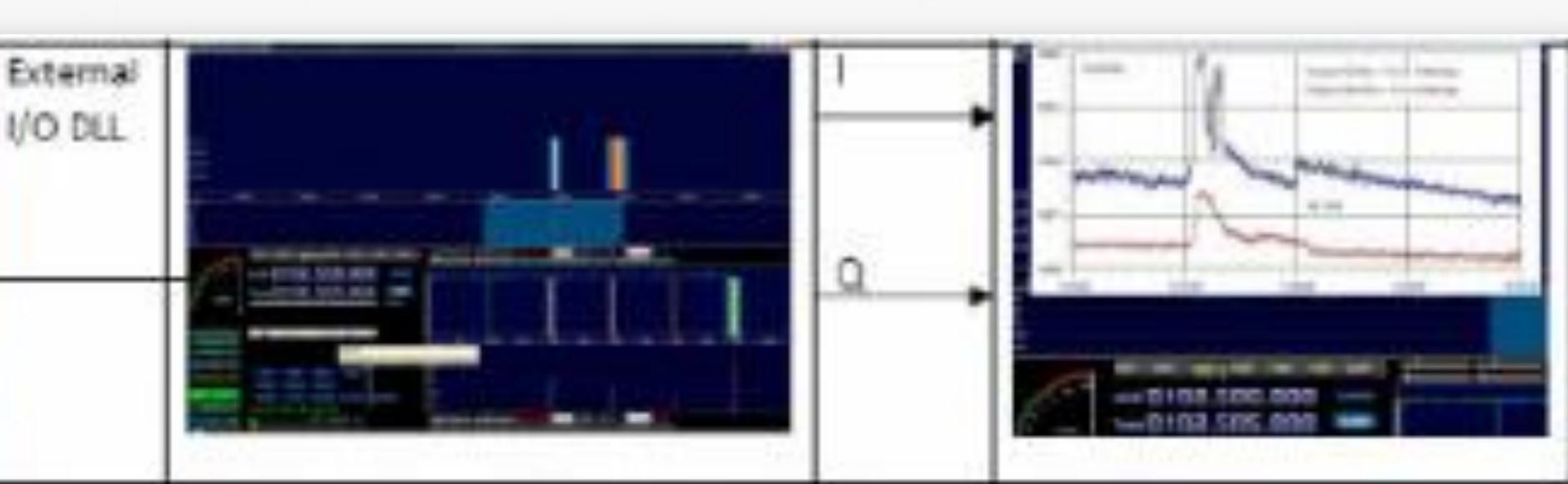
The IMU has the following parts:

- Gyro
- Accelerometer
- Magnetometer



Communication SDR

The radio astronomical IAP project supernova radio wave detector and analyzer SRWDA

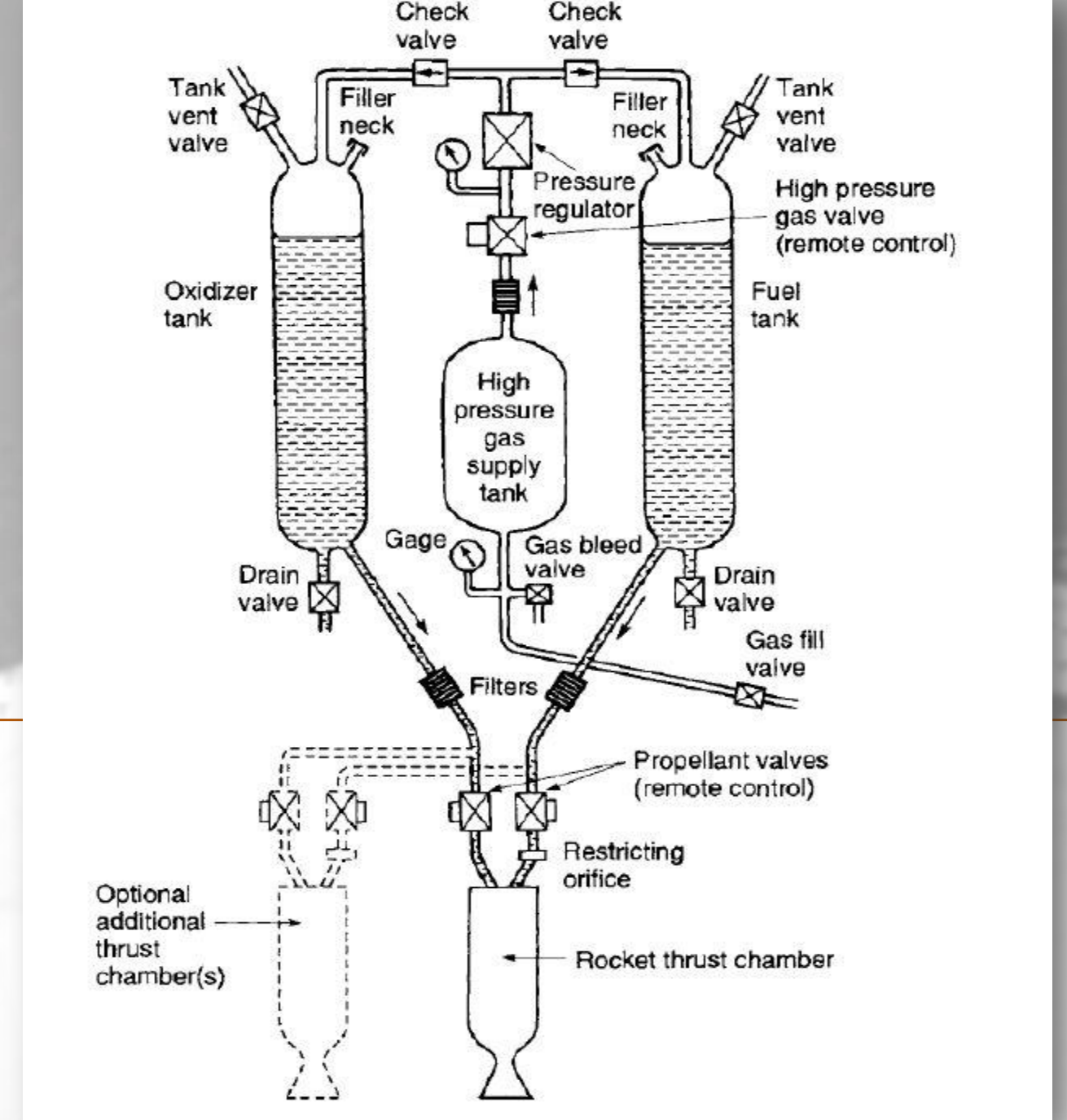



Chemical Prop. Unit

The satellite chemical propulsion system is based on this system

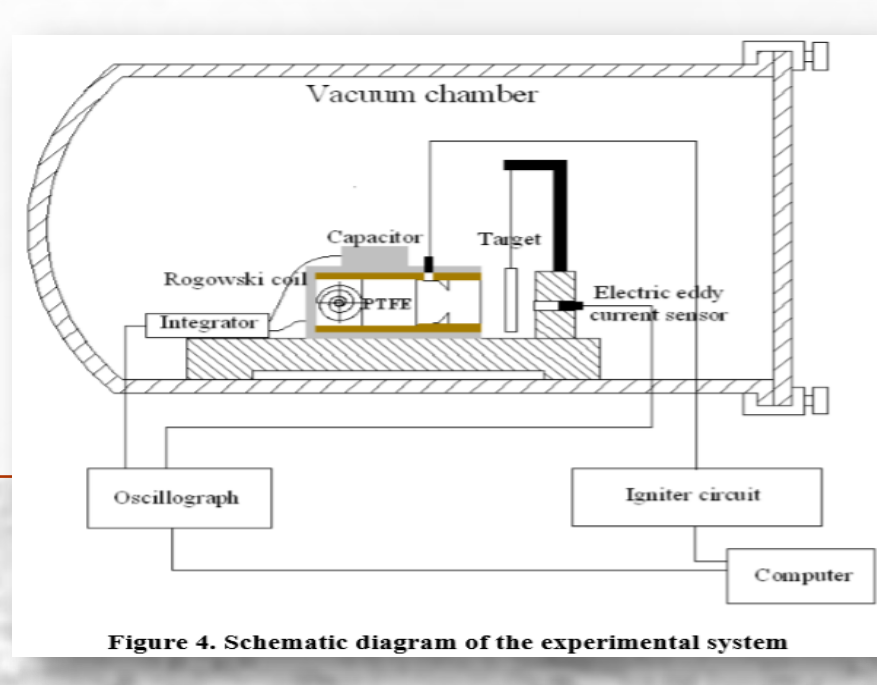
- Methane tank
- Oxygen tank
- Thrust chamber

Transporter propulsion system design

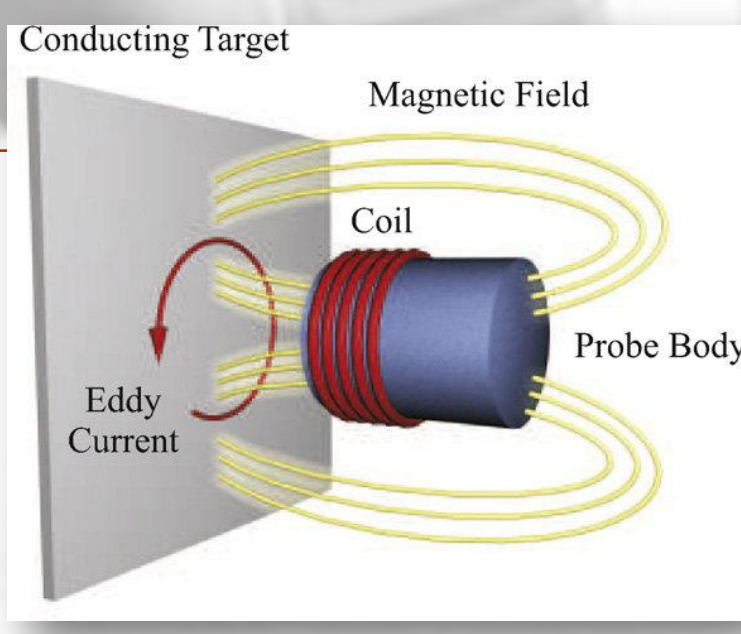
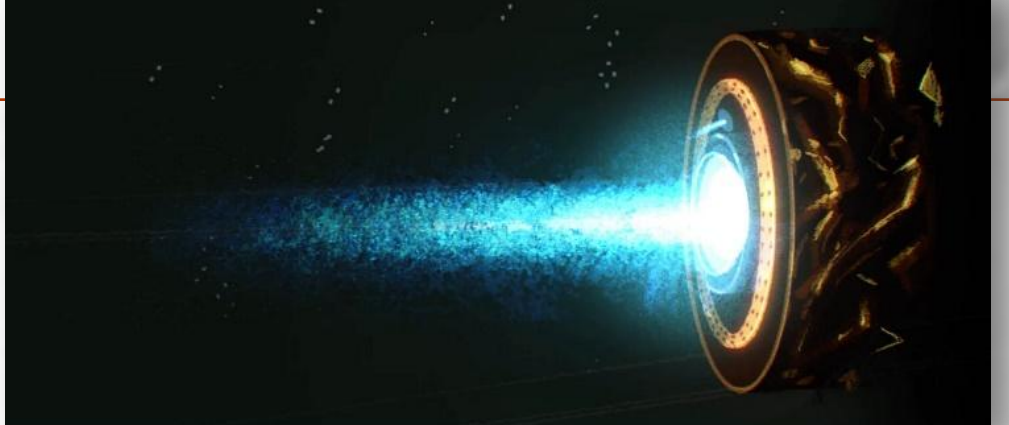


Electrical Prop. Unit

Pulsed Plasma Thruster



EDDY current sensor

Open Tasks

Tasks	Needed Human Resource	External Cost	Year
TEMOLeb-Mintad Gas filling	2 Technicians, 4 MM (man months)	5000\$	2019
TEMOLeb-Mintad& TEMOLeb-SAT solar panels and system	-	2000\$	2019
TEMOLeb-Mintad Control System development & Validation (simulink/scilab)	Eng., 5 MM	400\$	2019
TEMOLeb-Mintad Actuators, Wings integration	2 Technicians, 2 MM	1000\$	2019
TEMOLeb-Mintad Sensors integration	Eng., 1 MM	300\$	2019
TEMOLeb-SAT Actuator (chem.)	1 Technician, 1 MM	1500\$	2019
TEMOLeb-SAT Platform Integration	1 Technician, 1/2 MM	500\$	2019
TEMOLeb-Mintad Telemetry Unit	2 Eng., 6 MM	3000\$	2020
TEMOLeb-SAT Telemetry Unit	2 Eng., 6 MM	3000\$	2020
TEMOLeb-Mintad COM Unit (Payload)			2020
TEMOLeb-SAT COM Unit (Payload)			2020