IRNSS-1G Spacecraft Paper Model
(Scale - 1:25)

DO IT YOURSELF

Instructions:
1. Please take print on 300 gsm thick paper sheets
2. Cut along the outline of each part to get 14 parts + body of the Satellite
3. Refer the enclosed assembly procedure chart
4. Fold the individual elements along the dotted lines using the scale as guide
5. Use good glue on the indicated areas to complete the individual parts and stick on body of the satellite at respective locations.

Materials needed:
1. Scissors
2. Scale
3. Glue

Assembly Procedure:
1. Please take print on 300 gsm thick paper sheets
2. Cut along the outline of each part to get 14 parts + body of the Satellite
3. Refer the enclosed assembly procedure chart
4. Fold the individual elements along the dotted lines using the scale as guide
5. Use good glue on the indicated areas to complete the individual parts and stick on body of the satellite at respective locations.

Sheet 1
Glue on back side & paste it to main body of the satellite on area marked *

Sheet 2
Dual Band Helical Array Antenna

Dual Band Helical Array Antenna Base

Glue backside tip & paste to the center of the circle

Glue white portion

Glue back side of this panel alone

Glue white portion

Interface Ring

Sheet 3
IRNSS - 1G

Salient Features:

Orbit : Geosynchronous with 5 deg. inclination
Lift-Off Mass : 1430 kg
Dry Mass : 610 kg
Physical Dimns.: 1.8Mx1.62Mx1.74M
Power : Two Solar arrays generating 1660 W, One Lithium-ion battery of 90 AH
Propulsion : 440N LAM, Twelve 22N Thrusters
Control System : Zero momentum system, orientation input from sun & Star sensors, Reaction wheels, Magnetic Torquers & 22N Thrusters as actuators
Mission life : >10 years
Launch date : 28th April 2016
Launcher : PSLV C33

IRNSS-1G Paper Model
Scale - 1:25

Stand Base
Fold all flaps as per the diagram.

**Fold & glue**
Insert the tuck in flap inside as per diagram to finish body of the Satellite.

Fix both the Solar panels on the area marked on the body of the Satellite.

*Make sure solar cells are facing in front as per diagram.

**Tuck in flap**

**Glue**

Roll to form C Band Rx Horn

Roll to form LAM

Roll to form LAM Shield

LAM & Shield Assembly

**Roll to form upright cylinder**
To finish interface ring

Glue backside tip & paste to the center of this circle

Glue white portion

Glue on back side

**Roll to form C Band Tx Horn**

**Dual Band Helical Array Antenna**

Glue white portion

**Now IRNSS-1G Model is ready.**

**Apply Glue**

**Apply Glue & fix Satellite**

**Glue**

**Glue**

**Glue**

**Glue**

**Glue**

**Glue**

**Glue**

**Glue**

**Glue**

**Glue**

**Glue**

**Glue**

**Glue**

**Fold all flaps & paste the flaps as shown in the diagram**

**Finished Stand**

**Finished Base**

**Stick one end of the stand to satellite & other end to the base and glue as shown in the diagram.**

**IRNSS-1G**
Scale 1:25

**Sheet 5**