



**Scope of work &  
Specification for  
Development of LCA  
AF MK2  
1:10 Scale model**

10/1/2024

## Development of Scaled Model of LCA AF Mk2

The activities are as below:

1	LCA AF Mk2 Scaled Model shall be of Size 1:10 Scale
2	Scaled Model of LCA AF Mk2 Missiles/Bomb shall be mounted on Aircraft.

This specification covers the brief description, material including packing and Transportation of the Scaled Models.

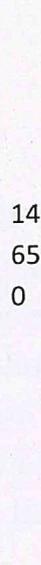
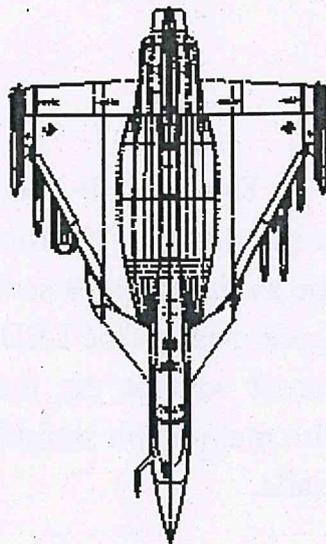
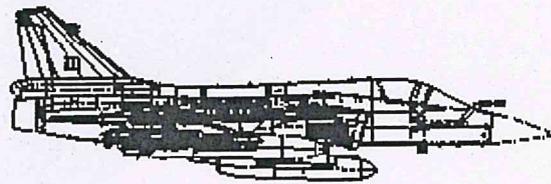
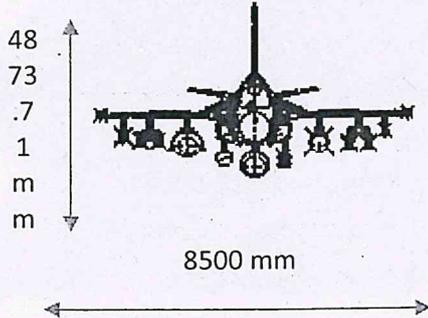
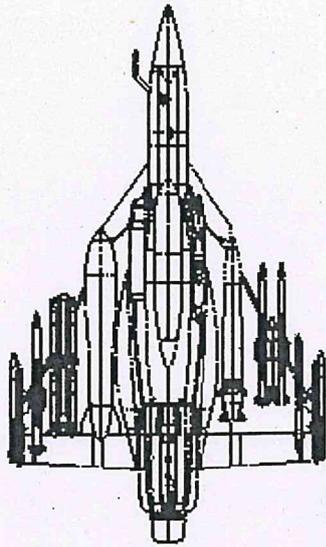
- The rep of Director, ADA shall be the inspection authority /Approving Officer.
- The manufacturer is responsible for fabricating and supplying the model with given scale of the Aircraft as per drawings and specifications.
- Based on these drawings, manufacturer should prepare the scaled drawings for the models to be fabricated & obtain the approval from ADA.
- Any proposals for the improvement in this specification are welcome and shall be addressed to the Director ADA.
- The model should be in the given scale & should appear exactly as shown in respective photographs/drawings. The material like SS, acrylic, FRP etc. to be used so that it matches with the appearance of the original Aircraft with proper strength.

### Process involved in Development of 1:10 aircraft model

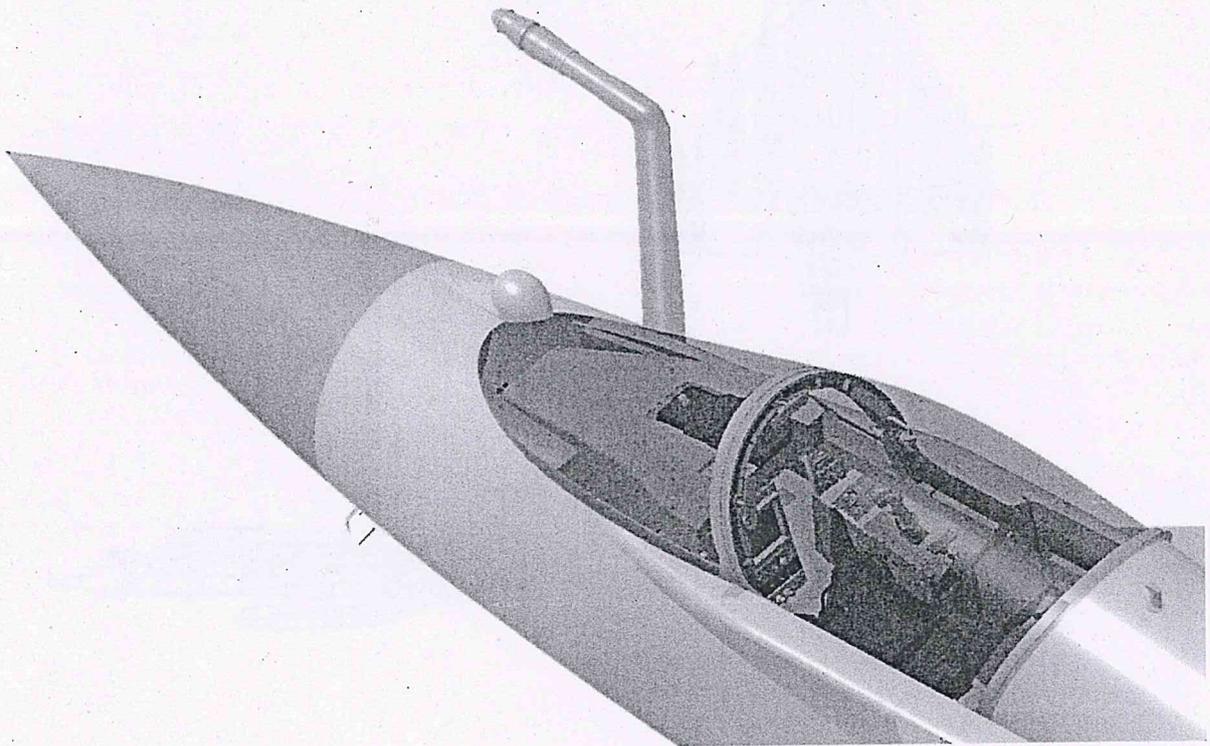
#### 1. Development of CAD Model:

The CAD drawings are provided by ADA, Bangalore. The given drawings should be converted to required size (i.e., 1:10 scale):

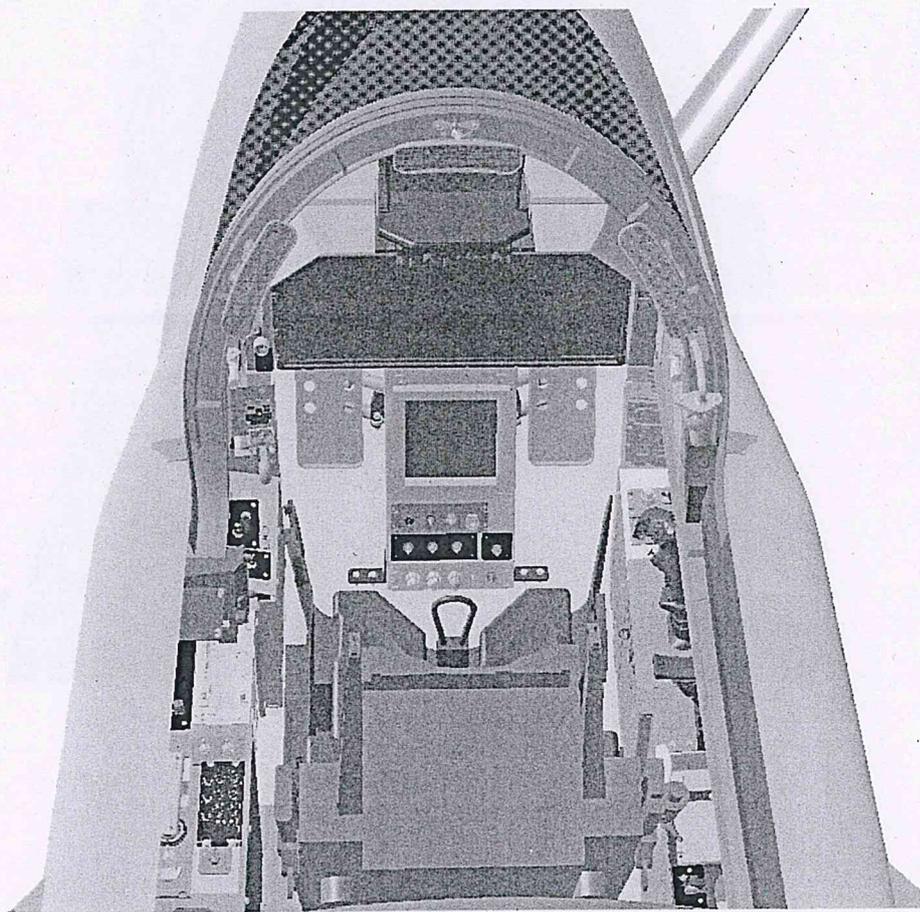
Sl. No.	Scale	Length (mm)	Span (mm)	Height (mm)
1	1:10	1465	850	487.371



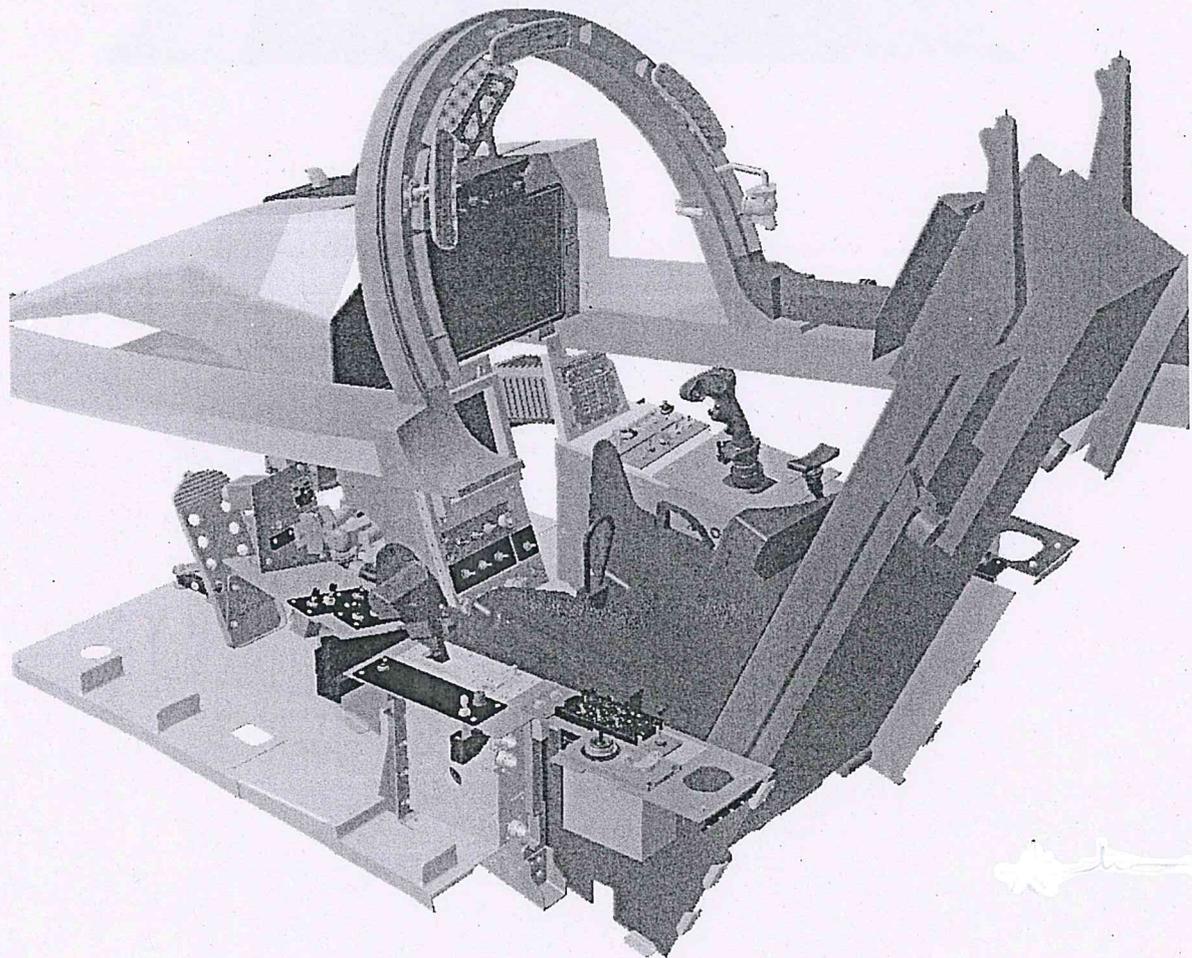
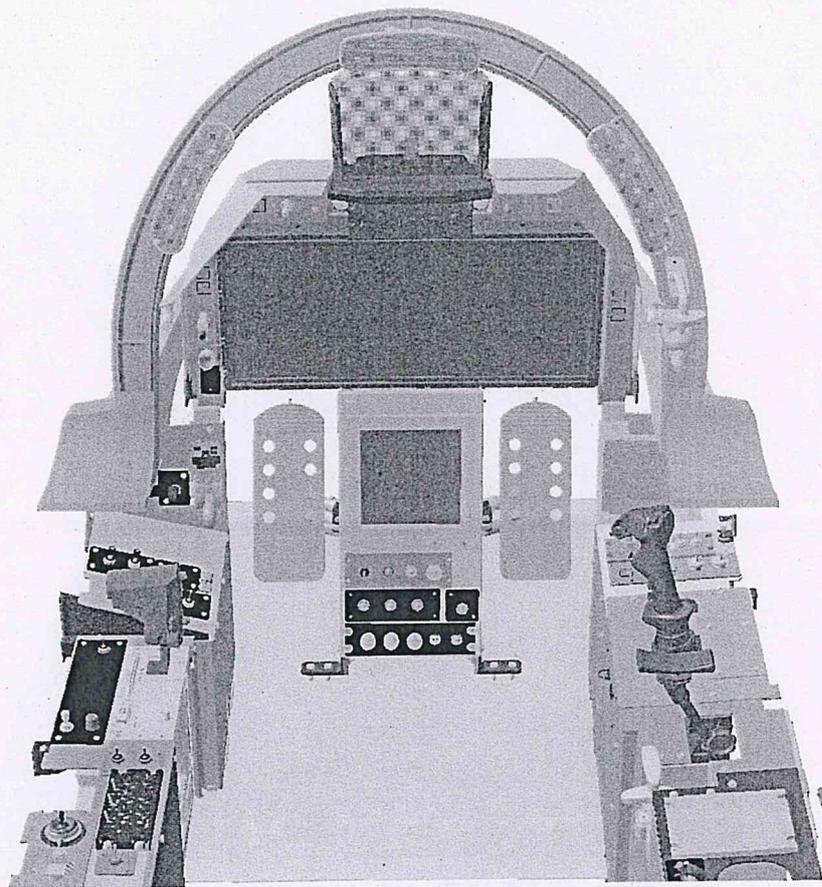
First stage is Development of CAD model to the required scale for preparing master template.

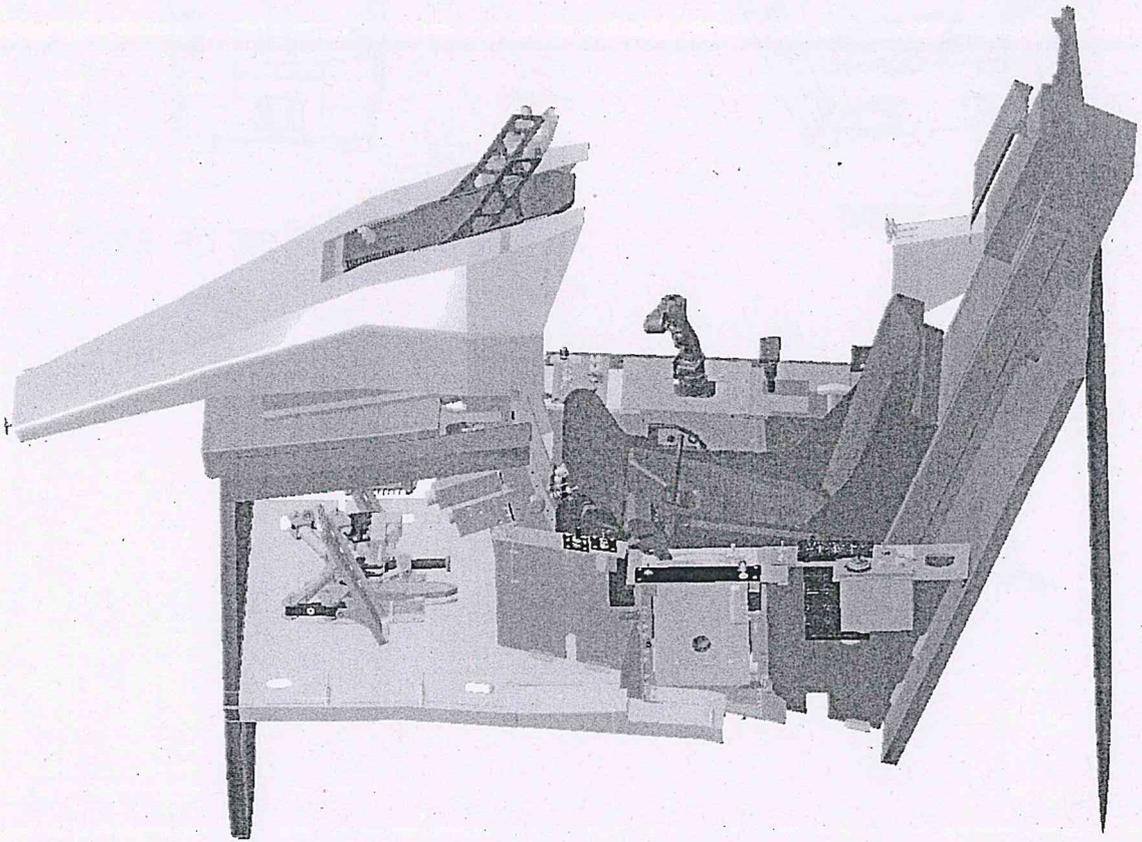


**2. Cockpit Internal Details and Lightnig :** The cockpit details should be shown properly as per given drawings which should be of appropriate size and be given proper lightning arrangement (can be avoid for 1:10 scaled model) so that the inetrnal details of the cockpit should seen clearly (the LED lights should not be seen).The cockpit should be transparent so that the inetrnals of the cockpit should visible clearly. Scale down Pilot maniquenn should be placed on the pilot seat with proper helmet and other details.



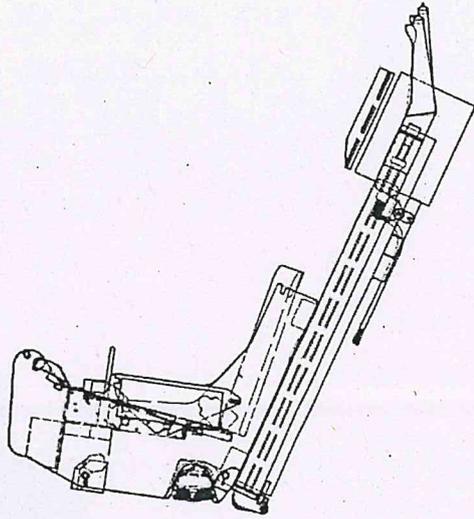
4-1



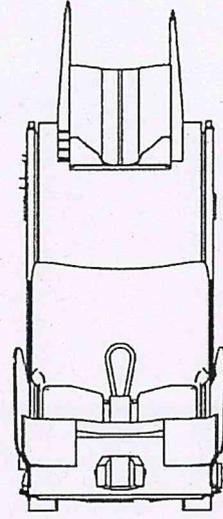


Cockpit Details

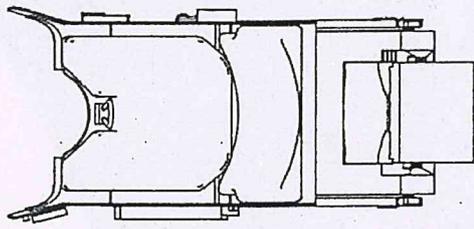
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SIDE VIEW



FRONT VIEW OF SEAT



TOP VIEW

Cockpit internal model can be made by RP process

### 3. Painting and Sticking as per scheme to be made

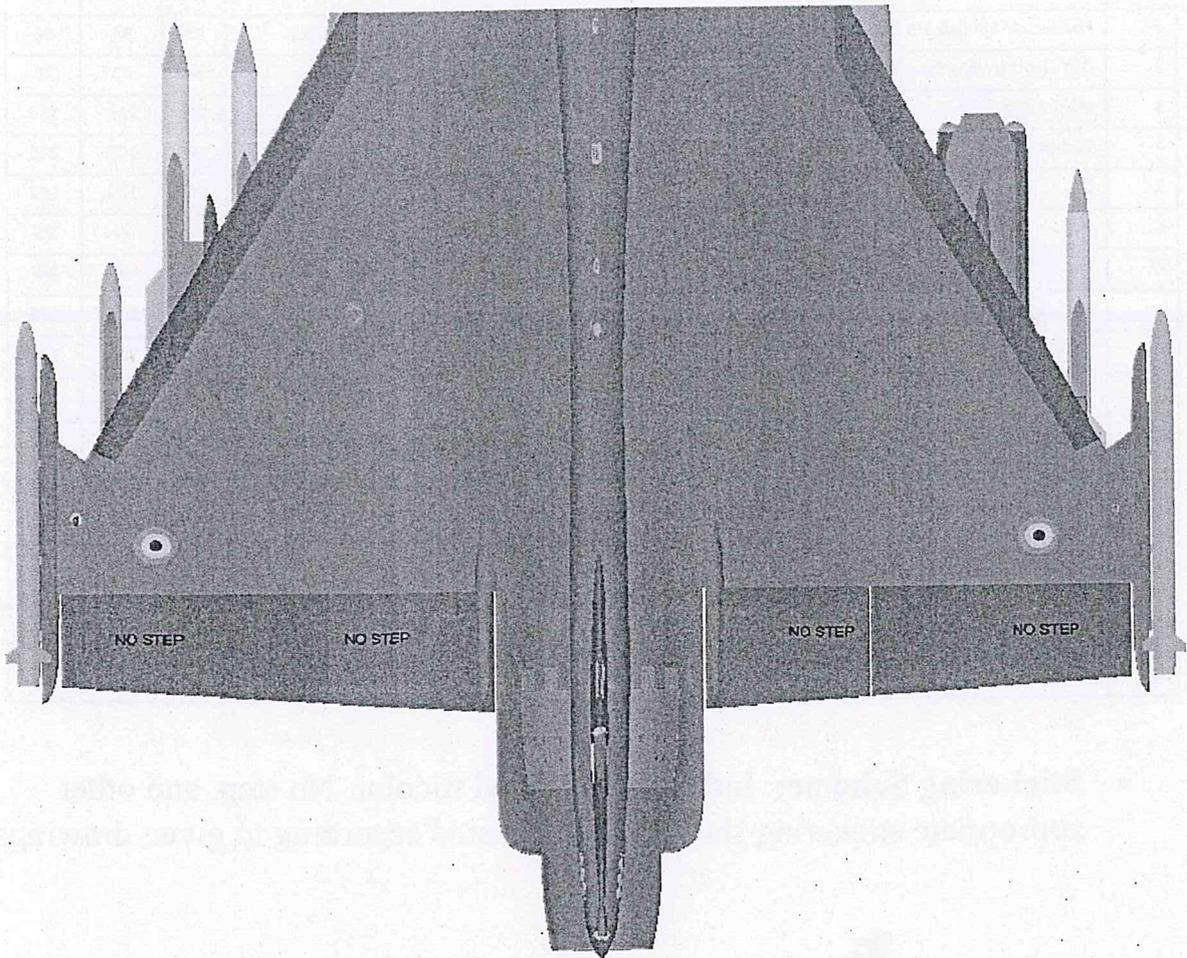
- **Painting Scheme:** The Surface treatment and painting of fabricated Aircraft model should be carried out as per our painting scheme. The painting scheme will be given to the bid awardee. High quality lacquer coating finish is required.

*As per*

Sl.No	Particulars	Sample Colour	Approx. Colour	RGB Colour Code		
				Red	Green	Blue
1	Rudder, BP Fin Cap, I/B Elevons, I/B Slats, CANARD		Dove Grey	95	94	90
2	O/B Elevons, O/B Slats, Radome,		DA Grey	82	82	79
3	Main Body		Dove Grey	119	118	114
4	Rudram II		Satin Blue	142	207	215
5	DTs		Silver Grey	193	196	192
6	LDP		Blazer Blue	73	74	95
7	TARA 250 (body 1)		Olive Green	83	85	66
	TARA 250 (body 2)		Tata Blue	31	116	173
8	SAAW x 2 F1		Royal Ivory	211	178	125
9	SAAW x 2 F		Olive Green	83	85	86
10	SAAW x 2 R		Velvet Green	52	52	52
11	Missile Front		Mahindra Grey	182	187	190
12	Missile Rear		RAL Grey	197	199	196
13	ASTRA Mk1 Front		Mahindra Grey	182	187	190
14	ASTRA Mk1 Rear		White	255	255	255
15	Air Brake, IRST		DA Grey	145	145	145
16	All Antennae		Dove Grey	197	199	196

- **Stickering Scheme:** Indian flag, Round tricolor, No step, and other appropriate stickering should made / pasted according to given drawings.



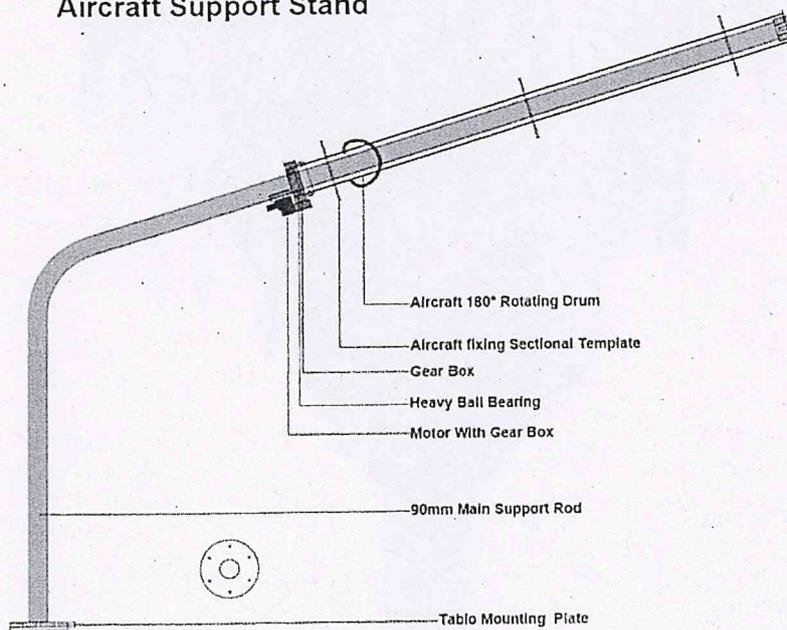


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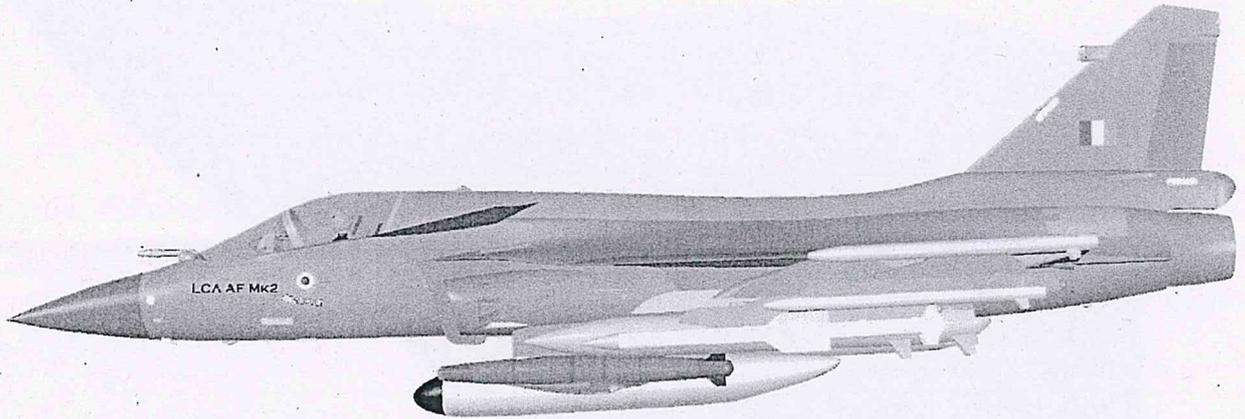


**4. Model Mounting Stand:** The mounting stand should bear the weight of 1:10 scaled Aircraft model. The 1:10 stand should have the mechanism to rotate the Aircraft model to 180°. The high quality of motor and necessary mechanism should be installed / used in rotation mechanism.

Aircraft Support Stand



**5. Lightning Schematic:** The LH and RH external lights should illuminate (for 1:10 Scaled model) to the spectators.



**6. Missile Configuration:** The ASRAAM, ASTRA Mk1, SAAW x 2, 1700 Ltrs Drop Tank, LDP, 1300 Ltrs Drop Tank, TARA 250, RUDRAM II, Twin Astra Mk1 missile should be manufactured as per given drawings. The missile should fitted to the Aircraft in their appropriate place:-

