

**PROPOSALS FOR ACCORD OF AIP UNDER 'MAKE' CATEGORY**

1. **Name of Potential Project.** On Board Oxygen Generation System (OBOGS) for fighter aircraft
2. **Brief about the Project.** A variety of the aircraft in the world (Fighter, Transport and Trainers) use the OBOGS. This is a proven system for at least two decades. In IAF also, we have MiG-29 Upg and Pilatus aircraft fitted with this system. A study has been carried out by HAL which shows that the OBOGS can be fitted on Su-30MKI aircraft as well. This involves minor structural modifications in the aircraft. The system offers following advantages over the legacy system in use:-
  - (a) Unlimited endurance. Supply of oxygen is otherwise a factor in determining the endurance of the aircraft.
  - (b) Reduction of weight due to replacement of the heavier components of the legacy system.
  - (c) Low operational and maintenance cost. The legacy system needs frequent charging which involves substantial man hours and repeated procurement of oxygen cylinders.
  - (d) It is safer as compared to existing system which stores gaseous oxygen at very high pressures.
3. **Tentative Quantity.** It is proposed to develop Qty 03 OBOGS sets during Prototype Development Phase and subsequently procure Qty 250 units in production phase.
4. **Approx Cost.** It is estimated that the cost of design and development of Qty- 03 prototype will be approximately ` 40 Cr and the cost of one set of OBOGS will be approximately ` 6 Cr. The total estimated cost for 250 units and prototype will be ` 1540 Cr.
5. **Tentative Timelines.** The prototype development is likely to take 02 years from award of the contract to the Development Agency/ies (DA).
6. **Vetting by other Stakeholders.** Proposal is being moved on the basis of a suo-moto input from the HAL.
7. **Proposal.** AIP of the Collegiate Committee headed by Secy (DP) may be accorded for the above stated project.

8. **Justification.** The development of OBOGS through Make in India route will comprehensively enhance the operational capabilities of the aircraft. The HAL study report suggests that while the system enhances operational efficiency, it is also economical in long run as it eliminates a considerable portion of maintenance requirements. Also, it will bring the critical technology in the country and will also reduce dependency on foreign OEMs.