

Bore Sighting System for LCA-Tejas (Air Force)

Laboratory Name	CSIR - Central Scientific Instruments Organisation, Chandigarh
Brief Profile of Technology/Product	Bore Sighting System (BSS) is required to harmonise the Mounting Tray (MT) used for mounting Head Up Display (HUD) in the cockpit of an Aircraft. The BSS substitutes the actual HUD for the purpose of aligning the MT with reference to the Aircraft axis (Fuselage Reference Line - FRL). Once the tray is harmonised, the interchangeability of HUD is ensured within specified tolerance of 1 mRAD. Installation and harmonisation of the MT is carried out with the help of a Harmonisation Board placed at a distance of 25 meters (approx.) from the design eye position.
Returns/Benefits	Its indigenization will not only save foreign currency but also provides an option to customize the design further for other aircraft platforms.
Validation Level	<ul style="list-style-type: none"> • The actual system has been tested and evaluated by Regional Centre for Military Airworthiness (RCMA), Chandigarh. • CSIR-CSIO transferred the technology of BSS, custom designed for LCA-Tejas Aircraft, to Bharat Electronics Limited, Panchkula.
IPR Status [also indicating the status of the patent (if any) in 2015]	--
End product price (if not available, estimated price)	--
Technology/Product Collaborator	--
Relevance of Technology in present times	The technology is strategic in nature and need to be custom designed for each aircraft platform to ensure correct harmonization of HUD and similar systems in the aircraft cockpits.
Similar technology/product developed	BSS for HJT-36 and LCA-Navy A/c HUD Platforms

Picture of the technology/product (if any, with good resolution)



Boresighting System designed for LCA Air Force