'WE ARE WORKING FOR VARIOUS INTERNATIONAL AEROSPACE PROJECTS'

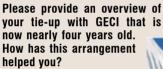
ATUL PUNJ, Chairman – Punj Lloyd Group, talks about the company's comprehensive aerospace and aero structure capabilities in the Indian private sector

Punj Lloyd has got approval from DIPP to manufacture anti-tank weapons and rocket launchers. Tell us how signifi-

cant this investment is going to be for the company's overall business in the defence and the aerospace sector?

We have set up a modern stateof-the-art plant at Malanpur specifically designed to cater to the requirements of land systems for

the Indian Army; aero structures and components for the Indian Air Force and precision machined systems for the Indian Navy. While defence is a long term business, we do see a larger share of revenues going forward from our defence vertical.



This tie-up, AeroEuro Engineering India, has given us an insight into aerospace engineering, in particular for stress evaluation of aerospace components and systems. We have developed niche capability for creation of digital mock ups and carried out finite engineering analysis for various components, like the cockpit and the engine pylons for aerospace OEMs. This expertise is now being projected to the Indian Air Force (IAF) for development work of LCA Mark II and the Advanced Combat Medium Aircraft (ACMA) project.

Are there any overseas projects that Punj Lloyd is executing in the aerospace sector?

Yes, we are working through GECI for various international projects, details of which

cannot be provided due to confidentiality agreements.

What is the size and scope of your MRO contract for IAF's VIP jets? Does it cover the entire gamut of MRO activity?

The MRO work is being executed by Airworks, an associate company of Punj Lloyd. Airworks has developed capabilities and infrastructure for undertaking MRO activity in the aviation sector glob-

ally. Among others, it is also a service provider for Boeing aircraft in India, through which it provides MRO activity for the IAF's VIP jets. The capability created by Airworks is unique and includes an aircraft painting facility, the only one of its kind in India in the private sector; avionics repair and upgrade facility and wide body hangars with access to a



7000-ft long runway at Hosur near Bengaluru.

Give us details of your license to modify civilian aircraft for military applications?

This licence was held with us for conversion of a civilian aircraft for defence applications and was sought specifically for the MRTT (multi role tanker transporter) programme of the Indian Ministry of Defence (MoD).

What are your capabilities in the manufacture of aero

components and avionics? Give examples of some projects you have worked or are working for at present?

Punj Lloyd has the most comprehensive aerospace and aero structure capabilities in the Indian private sector. The company manufactures parts and accessories for aircraft, precision manufacture of aero structures and dynamic components for aviation, fabrication and manufacture of aero structures, air frames and accessories. The company's plant at Malanpur already has a marquee client base and is working on several projects including Upper and Lower Tank Panels for the Sukhoi jet, main gearbox assembly for the Advanced Light Helicopter (ALH), among others.

What sort of opportunities do the Indian government's decisions - such as the 49 per cent FDI, delicensing of military MRO and 'Make in India' - provide the

company? The government has taken the right steps to promote indigenous manufacturing

in the defence sector. All these steps create a positive and stable framework for investment in this sector and enables collaboration with international defence companies

for transfer of technology. The liberalised licence scheme for defence shall give a boost to the MSME sector, more so keeping in view the multiplier that a foreign OEM gets for working with Indian MSMEs in their offset discharge liability in India. The opportunity for us in land systems is for procurement of guns for Air Defence and Artillery, FICV for Mechanised Forces. In Aviation it is the different types of Helicopters like the NMRH, RSH, LUH and for the Navy it is the P75 programme.

BELL HELICOPTER Stand E3.7

Bell Helicopter and Textron Systems, both businesses of Textron Inc. recently announced an agreement estab-

> lishing Dynamatic Technologies Limited of Bengaluru as a single

source supplier of major airframe assemblies for the Bell 407GX and 407GT over the next seven years.

BELL 407GT

The state-of-the-art Bell 407GT tactical light commercial helicopter is an ideal aircraft for armed reconnaissance surveillance, bringing together the Garmin G1000H flight deck with precision weapons capability. The aircraft offers a highly flexible and configurable modern weapons system to meet various mission and operational needs with the capacity to carry personnel inside a closed cabin.

BELL 407GX

The unarmed version of the aircraft, the Bell 407GX, will be on static display



during show hours. In the new 407GX, the superior performance of the 407 reaches a higher level. Its Garmin G1000H flight deck provides critical flight information at a glance for greater situational awareness and safety. It's just one more way the 407GX offers enhanced performance for every mission.

WE STAND READY TO SUPPORT THE INDIAN GOVERNMENT

 $H^{
m oneywell}$ has a long and proud history in India and remain committed to continuing to advance India's indigenous technology, from development through to production. Over 40 years ago, the company began a partnership with HAL to manufacture and support high technology products in India.

We continue to build upon this partnership. India is the global manufacturing base for our TPE331 engine for the Indian Air Force's and coast guard's Dornier 228 - an engine HAL has been manufacturing for domestic and international customers for over 25 years. Our technologists and engineers across the country develop and manufacture products in use across many aspects of defense and civil aviation, not only in India but in vast range of countries around the world. We are also expanding upon our partnership strategy in India. Recently it was announced that we have signed a technology transfer deal with TATA SED. The

STAND E 3.18

Honeywell

landmark deal enables TATA SED to produce the TALIN navigation system under license and it is the first time that inertial land navigation technology will be produced in India. The agreement with TATA supports the Make-in India priority of the new government and provides TATA with a license for the design, hardware and expertise to assemble, test and, in the future build production kits for TALIN.

We recognise the importance of Make-in-India and our strategy of continued investment, high technology jobs, global centers of excellence and development of our people means that we stand ready to support the Indian government as it works to deliver on this



Rohde & Schwarz is a leading supplier of solutions in the fields of Test and Measurement, Broadcasting, Radio monitoring and Radiolocation as well as Mission-critical Radio communications.

IP based ED137B compliant solutions

The R&S M3SR Series4400 software defined radio family is designed for stationary civil and military secure voice and data communications. It features high modularity and outstanding specifications. TCP/IP-based interfaces for remote control, voice over IP (VoIP) and for service/ maintenance activities.

R&S M3SR Series4100 software defined radio family is a state-of-the-art generation of communications systems designed to take HF radio to the next level. The radio complies with all the operational requirements as per STANAG. One step ahead from the company is to achieve higher data rates and next standard of ALE.

Software Defined Radio and Waveform Develop-

Networking across all operational levels is the

first and foremost condition for efficient, modern warfare. NCO require the use of SCA-based

> software defined radios in combination with high data rate waveforms. For international, combined missions, waveforms providing interoperability need to be ported to the software defined radios. R&S SDxR Support external IP based

applications, Jam-resistant and tap-proof communications, simultaneous voice and data transmission.