

# भारत इलेक्ट्रॉनिक्स लिमिटेड

(भारत सरकार का उद्यम, रक्षा मंत्रालय) पंजीकृत कार्यालय

आऊटर रिंग रोड, नागवारा, बेंगलूर - 560 045, भारत

#### **Bharat Electronics Limited**

(Govt. of India Enterprise, Ministry of Defence) Registered Office: Outer Ring Road, Nagavara, Bangalore - 560 045, INDIA.

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To

Manager (Listing), BSE Ltd., Floor 25, PJ Towers, Dalal Street, Fort Mumbai - 400 001

Fax No.: 022 22723121

Dear Sir/Madam,

Sub: Press Release.

We are enclosing herewith a copy of the press release titled 'BEL wins Raksha Mantri Awards', being issued to the press.

This is for your information and record.

Thanking you,

Yours faithfully,

for Bharat Electronics Ltd.

S. Sreenivas

Company Secretary

Encls: As above



### **Press Release**

QUALITY. TECHNOLOGY. INNOVATION.

# **BEL wins Raksha Mantri Awards**

Navratna Defence PSU Bharat Electronics Limited (BEL) has won a total of seven Raksha Mantri's Awards for Excellence for the years 2012-13 and 2013-14 in various categories. For the year 2012-13, BEL has won Raksha Mantri Awards in the categories of 'Best Performing Division of DPSUs' (Sonar & Communication Systems/Naval Systems); 'Indigenisation' (for the design and development of retrofit security solution for Shakti and indigenisation of AK630 Gun Drive); and 'Design Effort' (for L70 Gun upgradation and systems of IACCS networks).

For the year 2013-14, BEL has won the Raksha Mantri's Institutional Awards for 'Excellence in Performance' and 'Best Performance in Exports'; 'Indigenisation Award' (for configuring, developing and engineering weapon control modules and Bharani Radar); and 'Design Effort' (Electro Optical Fire Control System- EOFCS-U1).

#### Indigenisation: Shakti

BEL in collaboration with DRDO, has designed, developed, manufactured and fielded two thirds of Regiment of Artillery of Indian Army with Artillery Combat Command and Control System (ACCCS), called Project Shakti, which automates and integrates all artillery operational functions and provides decision support at all levels of Artillery command. It enhances accuracy and speed, enabling optimum use of resources to engage a target. The Shakti retrofit security solution is a custom-designed hardware platform from BEL. These modules replaced imported modules and software to perform functions as per the crypto policy guidelines and met all the functional and performance requirements of the Indian Artillery users.

### Indigenisation: AK-630 Gun Drive

The AK-630 system consists of a 30mm automatic gun mount remotely controlled from the radar fire control system and is intended for arming ships for destruction of anti-ship missiles, aircraft, small-size seaborne surface targets, open manpower and fire emplacements of the enemy on the coast. BEL was selected for indigenisation and production of the electrical sub-assemblies of the gun mount, which form the heart of the AK-630. It was required to develop an All Electric Drive (AED) to replace the hydraulic drives and this has been successfully indigenized.

### Design Effort: L-70 Gun Upgrade

40mm L-70 anti-aircraft guns were indigenously manufactured by Ordnance Factory Board (OFB) with Swedish technology. BEL developed and integrated electronic upgrades namely electro-mechanical power drives, electro-optic fire control system and rugged power system into this gun as per requirements.

### **Design Effort: IACCS**

Integrated Air Command and Control System (IACCS) is a completely indigenously conceived, designed and commissioned system of systems by BEL, truly aligned to the spirit

of 'Make in India.' IACCS is an automated Air Defence command and control system for controlling and monitoring of Air Operations by Indian Air Force over an IP based Wide Area Network backed up with SATCOM link. This C4I (Command, Computer, Control, Communication & Intelligence) system offers seamless air operations across AOR (Area of Responsibility) for the entire air space of the country. The entire application software is indigenously designed and developed at BEL.

#### **Indigenisation Award: Bharani Radar**

Bharani Radar, a Low Level light Weight Radar (LLLR), has been indigenously developed by BEL-Ghaziabad and LRDE for deployment in high altitude, mountainous terrains for protection of valuable assets of the Army Air Defence Units. The L-Band, 2D Radar provides aerial surveillance to help detect, track and assign weapons for hostile aerial targets such as aircraft, helicopters and UAVs that trespass air space up to a range of 50 kms and height up to 5,400 mts. The light-weight, portable and rugged radar can operate in extreme climatic conditions and has state-of-the-art Electronic Counter-Counter Measures (ECCM) and Integrated 'Identify Friend or Foe' features.

## **Design Effort: Electro Optical Fire Control System (EOFCS-U1)**

The Electro Optical Fire Control System (EOFCS-U1) has been indigenously designed and developed by BEL to provide surface defence with short range and medium range Gun Mounts and Naval Gun Fire Support, onboard Naval ships. EOFCS-U1 has been configured for Fleet Tankers and Naval Offshore Patrol Vessel (NOPV) class of ships for detection, tracking and engagement of targets. The system comprises two axes, stabilised Electro-optical Director (EOD) housing three Electro Optic Sensors, a Laser Range Finder and a Rugged System Control Unit. The system provides day-and-night passive surveillance, high accuracy tracking and engagement of surface targets, through precise pointing and firing of 76 mm & 30 mm Guns. The system is also provided with the additional capability of controlling Gun Mounts using Target Designation System.

#### Photo caption:

1. Mr S K Sharma, CMD, BEL, receiving the Raksha Mantri's Institutional Award for 'Excellence in Performance' (2013-14) from Shri Manohar Parrikar, Hon'ble Raksha Mantri, along with Mr P R Acharya, Director (Finance), BEL, at the awards function organised at New Delhi on January 27, 2016. Also seen on the dais are (L-R) Mr A K Gupta, Secretary (Defence Production); Air Chief Marshal Arup Raha, Chief of the Air Staff; and Admiral R K Dhowan, Chief of Naval Staff.

BENGALURU	(ASHISH KANSAL)
February 5, 2016	SD DV CENEDAL MANAGER (CORP. CONT.)
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