

SIXTH INTERNATIONAL CONFERENCE ON ELECTRONIC WARFARE IN INDIA

EWCI 2020

BY AOC INDIA CHAPTER: A REPORT

The sixth edition of the popular International Conference on EW in India, EWCI 2020, organized by the India Chapter of Association of Old Crows and held during 17-20 February, 2020 in Bangalore, concluded in a grand and memorable fashion. The three-day conference, one-day pre-conference tutorials and accompanying indoor exhibition of state-of-the-art EW products, which were actively supported by Defence Research and Development Organisation (DRDO), Government of India and Defence Public Sector Unit - Bharat Electronics Limited (BEL), are a big success both technically and commercially. The event, designed with the idea of providing a platform for international collaborations and sharing the latest developments in the field of Electronic Warfare and Information Operations (EW/IO), with a theme “EW: Collaborate for Success,” has lived up to expectations and has been of immense use to participants.

EWCI 2020 started off with a traditional Inaugural Function in the presence of several Dignitaries and about 350 delegates. The Conference Chair, Dr. U K Revankar; the Chief Guest



for the occasion, Mr. M V Gowtama; the Chairman and Managing Director of Bharat Electronics Limited; the President Elect of AOC International, Mr. Glenn Carlson; and Technical Chair, Dr. Anupam Sharma, delivered opening and keynote addresses and inaugurated the event. EWCI 2020 provided a platform for interactions of all the stakeholders in the field of EW/IO, including Techno-Managers, Research and

Development professionals from DRDO, Manufacturers - Bharat Electronics, Indian Armed Services personnel and Industry Partners.

Following the Inaugural Session, two sessions of Plenary Talks highlighted the current and near future developments and innovations in the areas of EW/IO, including Phased Array Antenna, UV/IR based systems, simulation and testing by replication of real life operations, use of artificial intelligence and cyber techniques, and space-based EW payloads.

During the Conference, six Invited Talks were delivered by eminent personalities in the field of EW/IO on selected topics: “Establishing EW Relationships” by Ms. Lisa K Fruge Cirilli, former AOC President, USA; “New Developments in Test and Evaluation of EW Systems” by Mr. Greg Patshke, Keysight Technologies, USA; “Improving Situational Awareness by Gathering Critical Meta Data” by Mr. Volker Brands, Narda STS, Germany; “Portable Modern Communication and Radar-EW Test and Training Systems” by Mr. Robby Miles, OAK Defense Ltd., Canada, and Mr. H V Harish, CEO, Aidin Technologies, India; “Specific Emitter Identification of COMMS Signals” by Mr. Fabrizio Vergari, Elettronica, Italy; and “Advances in Submarine ESM Systems” by Mr. Patrick Clarke, SAAB Grintek Defence, South Africa.

The Conference attracted a large number of technical papers, of which about 70 were selected that were contributed by authors from India and abroad. The papers were presented in 21 sessions conducted in three parallel halls. The papers were segregated into eight thrust areas: EW Systems and DF Techniques, EW Receiver and RF Subsystems, Electronic Attack and High Power Transmitters, EW Antennas and Active Phased Array Systems, EW Signal Processing and Digital Receivers, EW/IO Threat Simulators and EW Testing/Evaluation, EW Systems Installation and Testing/Evaluation, and EW Software Engineering/Modelling and Certification. The sessions were chaired by eminent personalities in the field of EW/IO.

The pre-conference tutorials day was also well attended by about 230 delegates. The in-depth tutorials were on contemporary subjects: “Naval EWS: The Modern Naval EW Defence System” by Dr. Andrea De Martino, Elettronica S.p.A., Italy; “Border Surveillance and Traffic Analysis: The boost of Artificial Intelligence in Homeland Security” by Dr. Andrea De Martino and Mr. Fabrizio Vergari, Elettronica, Italy; and “Advancements and Design Concepts for Modern EW Test and Training Ranges” by Mr. Robby Miles, Vice President, OAK Defense Ltd., Canada.



The Technical Exposition accompanying the EWCI 2020 Conference had participation from about 50 major EW organizations, including firms from eight countries. The exhibitors had quality interactions with both developers and end users of the systems in India. The details of the vendors are compiled into “EW Sources” in the EWCI 2020 souvenir book released during the inauguration. The Proceedings of the Conference, which has high referential value, was provided to all delegates in electronic form.



The EWCI 2020 event not only showcased technical advances concerning the field of EW/IO in India but also presented a glimpse of a conducive environment for international collaborations and interactions in the form of a cultural event and conference dinner during the event.