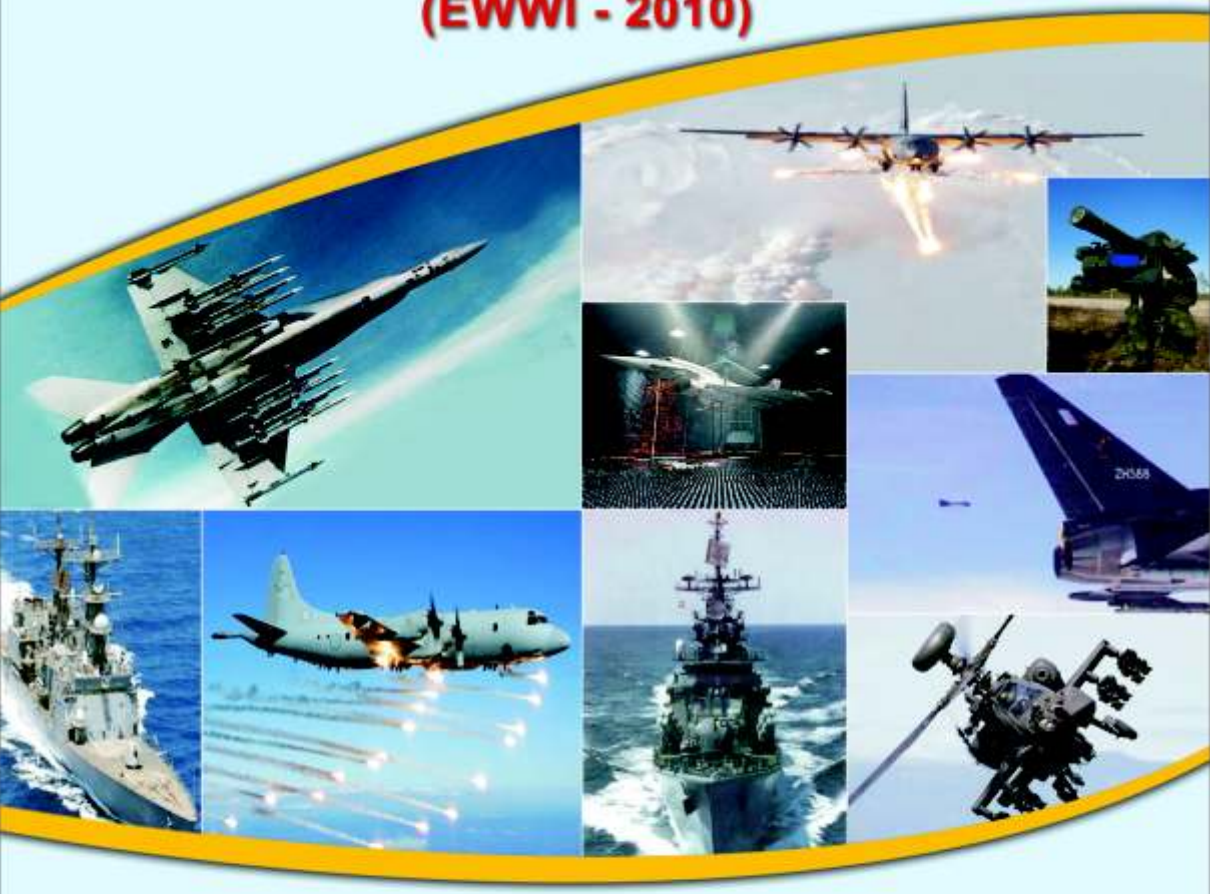
ANNOUNCEMENT

EWWI - 2010

ASSOCIATION OF OLD CROWS INDIA CHAPTER

AOC

First
AOC India National EW Workshop
(EWWI - 2010)



Date: 24-25 November 2010

Venue: Grand Ball Room
Hotel Lalit Ashok, Bangalore

Organisers:
Association of Old Crows (AOC)
India Chapter, Bangalore

Web: www.crows.org, www.aoc-india.org | Email:indiacrows@aoc-india.org

Association of Old Crows (AOC) India Chapter:

Association of Old Crows (AOC), head quartered at Virginia USA, is a prestigious association of Electronic Warfare and Information Operations professionals. The AOC and its Chapters world over are bringing together the experts and the organisations in the field of Electronic Warfare through its programs including International Conferences, Seminars and Expositions. Considering the importance of Electronic Warfare (EW) in modern war scenario and with the vision of providing an institute for the Indian Electronic Warfare professionals, AOC has inaugurated its India Chapter during the International Conference on Electronic Warfare (EWCI 2010), held in Bangalore during 9 to 12 Feb 2010.

First AOC India Chapter National EW Workshop (EWWI-2010):

EWWI-2010 is the First National Level Workshop in India, in the niche and vibrant field of Electronic Warfare, organised by the Association of Old Crows (AOC) India Chapter, Bangalore. The two day Workshop aims at imparting deeper knowledge in the selected area of EW and enables professionals to get updated with the state-of-the-art technologies in the field. The AOC India Chapter is the only professional body for the EW Professionals in India and has the vision of bringing EW expertise in India onto a single platform for the mutual benefit. The speakers participating in the Workshop are very highly qualified International Experts in the field of EW. It is an opportunity not to be missed by Indian EW Professionals.

Workshop Topics and Speakers:

1. EW Innovations, Challenges and Solutions in 2000 and 2010 Years

By Dr Filippo Neri, President, VirtuaLabs, Rome, Italy.

The "EW Innovation" topic covers the following:

- EW purposes
- The 2000 years challenges and solutions like Wide Open Architectures, Super Het Rx, Monobit Rx, Digital Rx (DRX), DRFM and Solid State Tx-Rx Antennas.
- The 2010 years challenges and solutions like Wide Open and Channelised Architectures, Advanced Integrated DRX/DRFM and Solid State Tx Antennas.
- The Future Solutions like Active Stealth.

Dr Filippo Neri, PhD in Electronics Engineering from Roma University, Italy has worked in EW organisations like AMS (Selania) and Elettronica, Italy. He lead and controlled the development of Advanced Radars, Anti Missile Systems (SIAM), Integrated naval System (INS-3), EW Passive Systems for Helicopters and Solid State Active Antenna. He authored many technical papers and books that include “Introduction to Electronic Defence Systems”. He is a recipient of many patents and distinguished awards. Currently he is promoting the development of cutting edge technologies including Fast Signal Processing (ADRIS), Very Advanced Integrated EW Systems (DRIAC), Multi Function Radar (MFR-10X, Octopus) through VirtuaLabs.

2. Passive EW Surveillance

By Dr Dario Benvenuti, Sr EW System Analyst, Elettronica S.p.A, Rome, Italy

- Communication Warfare topic covers an overview of CESM and COMINT techniques, Digital Receivers architectures, techniques for the COMM signal detection and classification, Antenna type and Goniometry, Real data Examples and some mention about COMM Jamming.

- The Surface Passive Surveillance topic covers ELINT and ESM systems overview, Digital techniques and architectures, Radar signal detection and identification. Techniques for goniometry estimation and localization (Triangulation, Multilateration).
- Airborne Surveillance topic covers Airborne systems overview, Antenna types, goniometry, and Doppler based Localisation.

Dr Dario Benvenuti Graduated in Electronic Engineering at the University of Rome "La Sapienza". He worked in Alenia Marconi Systems (Radar & Technology Division) with main activities concerning analysis and system aspects of a modern multifunctional Phased Array Radar System. Since 2002 he works in Elettronica SpA in the Analysis Dept, where his main activities are the Design and Simulation of data and signal processing algorithms of Electronic Defence Systems.

3. EW and Radar System Test and Evaluation Techniques and Systems

By Dr Roberts Andrews, Commercial Director, EW Simulation Technology Ltd (EWST), UK

The topic covers the following:

- The history of EW systems and the associated test equipment and techniques used to evaluate legacy system performance
- Integrated defensive aids EW system (DASS) testing requirements and solutions.
- Developmental Testing (DT&E),Operational Test and Evaluation (OT&E), for ground support (EW library validation) and for final flight line confidence. The Test Systems, and the associated techniques and Waveforms, will cover Radar, Radar ESM, Radar ECM, Missile Warning Systems (MWS) and Laser Warning Systems (LWR).
- Typical T&E requirements and solutions and Future Trends in T&E requirements/Technology..

Dr Roberts S Andrews, PhD in Underwater Data Communications from Imperial College, London is currently the Commercial Director of EWST, UK. He has more than 30 years of involvement in the field of EW. He specialises in ESM Receiver design, Signal Processing, DRFM Techniques, EW Simulation Techniques and Systems. He has authored more than 20 Technical Papers in the field of EW. Presently he has been elected to AOC Board of Directors as International Region 1 Director.

4. New Generation Airborne Integrated EW Systems (AIEWS)

By Dr. Andrea De Martino, Chief Technical Officer, Elettronica S.p.A, Roma, Italy

The Topic covers the following:

- New EW Threats scenarios (Evolution of the radar technology)
- Design principles of the AIEWS NG architecture to cope with high dense signal scenarios and to respond t multi-simultaneous threats within the A/C constraints
- Recall of DRX/DRFM technology and of its usage in threat localisation techniques and in jamming programs implementation
- Recall of basic Active SS Rx/Tx Phased Array technology and illustration of implemented Airborne equipment
- Adaptive use of the technologies to achieve highly improved Selectivity and sensitivity enhancements, Control of ERP with high values, sophisticated jamming, Highly directive large bandwidth data link capabilities, High system operation compatibility with both on-board and own wing A/C systems.
- Applicability of AIEWS architecture to ASPJ and ESJ requirements.

Dr Andrea De Martino is a Doctorate in Nuclear Engineering (Electronic Track) and Ph.D. in Automatic Control Systems, both from the University of Rome. He is a Researcher in the field of Large Systems Theory and Automatic Control at the Electronic Engineering Institute of the University of Rome, Radar System Designer and Chief Engineer at Selenia S.p.A – Rome, ranging from surveillance and tracking radars to Multifunction Phased Array Radars.

Dr. De Martino is a patents holder and author of many technical papers in the field of Radar, EW Equipment Techniques and Technologies. He is currently Chief Technical Officer at Elettronica,Rome, Italy.

5. Mini TWTs and MPM Technologies for EW

By Mr Antony J Challis, Product Manager, e2v, UK

Mini Travelling Wave Tubes (TWTs) topic covers the following - History of TWTs, Types, Applications, Fundamentals of Operation, Design and Performance. The Microwave Power Modules (MPM) Technologies topic covers the History of MPMs, Applications, Fundamentals of design and Performance.

Mr Anthony J. Challis received the HNC in electro-mechanical engineering from Anglia Polytechnic University (APU), Chelmsford, U.K., in 1987.He joined e2v technologies Ltd., Chelmsford, U.K. in 1983. His achievements in Electron Gun and PPM Stack design led to his involvement in the development of " Mini TWTs" designed for airborne decoys. With his knowledge on TWT design and manufacture, allied with an appreciation for the vacuum electronics business, he was promoted in 2006 to Product Manager for TWTs and Microwave Amplifier Systems.

6. Modern Trends in SIGINT and ELINT

By Mr Pascual J Ruiz, Technology Director, INDRA, Spain

The topic covers progress in Digital Technologies that pushed up the capabilities of the Sensors for performing EW Intelligence Gathering, Opening new ways for being less dependent on platform availability, taking advantage of unexpected opportunities during ordinary operations and reducing detectability of SIGINT/ELINT missions. The topic also covers change in Signal Intelligence Perspective from "Strategic" to "Tactical" and the Requirements & Capabilities needed for it. Relevant case studies applying these technologies will be discussed.

Mr Jose Miguel Pascual Ruiz is a Telecommunication Engineer from the Universidad Politecnica de Madrid. He has lead technological innovations at INDRA in SIGINT, DRFM Technology and Digital Reception Technology. Mr Pascual has participated in several NIAG Study Groups related to ESM and Geolocation Systems. He has authored many Technical Papers and delivered invited speeches on Specialised University Courses and Study Groups. Presently Mr Pascual is the Technology Director at INDRA, Spain.

7. EO/IR Sensors, DIRCM and Towed RF Decoy

By Mr Erich Wagenbauer & Dr Colin Hamilton, EADS, Germany

The topic covers the following - Introduction to EW Capabilities in Airborne Platforms and nature of changed Threat Scenario; EO/IR Sensors as a part of Self Protection Systems; Hostile Fire Indication / Laser Beam Rider Detection; Data Fusion with Active Sensors for new Performance and Capabilities and Modern Missile Seekers versus Directed IRCM. The topic also importantly covers the Philosophy of Fibre Optic Towed RF Decoy (FOTRD), its applications, Technology and Trends.

Mr Erich Wagenbauer graduated in 1988 from the Technical University of Munich in Electronic Engineering. He has a background in Real Time Image Processing, EO Systems and Software development at Cassidian and its various predecessors such as MBB, Dasa and EADS. He has been involved in the development of various Missile Tracking Systems, MILDS MWS family and AMPS Self Protection System. Mr Erich Wagenbauer is presently working as the Senior Manager at Cassidian Electronics (EADS), Munich, Germany.

Dr Colin Hamilton is a PhD in Semiconductor and Microwave physics from University of London. He led development of Microwave components at Marconi Instruments, UK. He has been mainly responsible for the development of Airborne Radar and EW Systems within EADS Deutschland GmbH. He authored over 100 Technical papers and holds many patents in Microwave and EW Systems. He is currently the Vice President at EADS, Germany.

Workshop Schedule: Day 1 - 24 Nov 2010

08:15 to 09:00 Hrs	Registration and Complementary Breakfast
09:00 to 10:00 Hrs	Inauguration of EWWI-2010
10:00 to 11:00 Hrs	EW Innovations, Challenges and Solutions in 2000 and 2010 Years Dr Filippo Neri, President, VirtuaLabs, Rome, Italy
11:00 to 11:30 Hrs	Tea Break
11:30 to 13:00 Hrs	EW Innovations, Challenges and Solutions in 2000 and 2010 Years (Continued) Dr Filippo Neri, President, VirtuaLabs, Rome, Italy
13:00 to 14:00 Hrs	Lunch Break
14:00 to 15:00 Hrs	Invited Talk (Tentative) on Information Warfare and Net Centric EW
15:00 to 17:00 Hrs	Passive EW Surveillance Dr Dario Benvenuti, Elettronica, Rome, Italy
17:00 to 17:30 Hrs	Tea Break
17:30 to 19:00 Hrs	EW and Radar System Test and Evaluation Techniques and Systems Dr Roberts Andrews, EW Simulation Technology Ltd (EWST), UK
19:30 Hrs	Workshop Dinner

Day 2 - 25 Nov 2010

09:00 to 11:00 Hrs	New Generation Airborne Integrated EW Systems (AIEWS) Dr Andrea De Martino, Elettronica, Roma, Italy
11:00 to 11:30 Hrs	Tea Break
11:30 to 13:00 Hrs	Mini TWTs and MPM Technologies for EW Mr Tony Challis, e2v, UK
13:00 to 14:00 Hrs	Lunch Break
14:00 to 16:00 Hrs	Modern Trends in SIGINT and ELINT Mr Pascual J Ruiz, INDRA, Spain
16:00 to 16:30 Hrs	Tea Break
16:30 to 18:00 Hrs	EO/IR Sensors , DIRCM and Towed RF Decoy Mr Erich Wagenbauer and Dr Colin Hamilton, EADS, Germany
18:00 to 18:30 Hrs	Closing Function

Registration:

The registration fee is Rs 10,000 per head. This includes one year membership (for the non-members) of the AOC India Chapter worth Rs 2100. A 50% concession is offered to AOC India Chapter members. The fee does NOT include accommodation. The registration form can be had from the AOC India Chapter Web Site(www.aoc-india.org), Workshop Coordinators or AOC India Chapter Office.

Technical Exposition:

A limited exhibition area is provided to sponsors to display their products. The sponsors are specifically invited by the Organising Committee, EWWI-2010, AOC India Chapter.

Souvenir and Proceedings:

A multi-coloured souvenir will be produced to mark the occasion. This will include details of AOC India Chapter activities and abstract of the topics discussed in the workshop, in addition to the product advertisements by the sponsors. The detailed materials of the workshop will be provided in a CD.

Mode of Payment:

All payments are to be made by Demand Draft or Banker's Cheque drawn in favour of “Association of Old Crows, India Chapter”. The last date for the payment is 10 November 2010. The completed registration form available with this brochure (can be photocopied for multiple registrations) may be mailed to either Workshop Coordinators or AOC India Chapter's address.

EWWI-2010 Advisory Committee

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PVSM AVSM VM VSM, CISC, IDS HQ, New Delhi, Chair

Shri G Boopathy

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Shri I V Sarma

Director (R&D) BEL, Bangalore

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Shri H V Harish

CEO, COPEX India Bangalore, Event Management

Shri Sadananda Upadhya

Scientist, DARE, Bangalore, Hospitality and Transport

Contact Details:

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Workshop Coordinators Office:

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Bangalore, 560 075, India. Telefax: 080 2528 4223

Web: www.aoc-india.org, www.crows.org, Email:indiacrows@aoc-india.org

Attention Please: Delegates Registration closes on 10 November 2010. Register by paying the registration fee before the due date to avoid disappointment

REGISTRATION FORM

EWWI - 2010

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(EWWI - 2010)

Name: _____

Designation: _____

Organisation: _____

AOC Membership No (If Member): _____

Office Address: _____

_____

_____

Telephone (Office): _____

Mobile: _____

Fax: _____

Email: _____

Payment Details:

Draft/Cheque No and Date: _____

Drawn on Bank and Branch: _____

Amount: _____

(Rs. 10000 per head for non members which includes one year AOC India Chapter Membership worth Rs 2100 and Rs 5000 for AOC Members; to be paid before 10 Nov 2010**)**

Date: _____

Place: _____ Signature