

17 January 2015

2015 - Prospects

But First – RAF Club Christmas Dinner 2014 The Chapter held the largest Christmas Dinner and Award ceremony of recent times at the RAF Club on 12 December. Our guests included Major John Hayward RM OC Y Sqn 30 Cdo and CSgt Scott Hall RM who collected 30 Cdo's UK Chapter Operational Award along with fellow award winners Dr Bob Andrews MBE, and Chris Howe MBE, (Colonel Anton D. Brees Lifetime Service Award); Professor Steve Roberts was inducted into the AOC EW Technology Hall of Fame, and Mark Elson MBE received the AOC International Achievement award. The Dinner concluded with a short moving tribute to the Chapter by Kathy Hastings, who was our guest and also elected by the Board to become an Honorary Member after her many years of support to the UK Chapter and wider AOC. Now, back to the future, a date for your new year diaries- the 2015 Christmas Dinner and Awards evening is scheduled for 11th December 2015, the second Friday in December (which we have also booked until 2020).

AGM The Annual General Meeting of the UK Chapter will be held in the Royal Air Force Club, London, on Thursday 19 March 2015. All members are encouraged to attend this excellent opportunity to meet the Board, to hear a report on the Chapter's activities and its financial health and to help shape its future. A hot and cold finger buffet will be served. We hope to have an interesting presentation after the AGM. Phil Davies is running the evening. You must complete the proforma and return it, or email him the information, if you want to attend this free event as we have to order the right amount of food and inform the Club of attendees' names for security purposes. More information is available at the end of this newsletter.

Book Review Several months ago I asked for volunteers to review 2 EW books published by Artech House (which specializes in high tech books including EW publications). Many thanks go to UK Chapter member Ian White, Director of Gaddon Ltd, who stepped up and provided the review which is attached below and also available on the Chapter website. I had a recent advert from Artech which featured Dave Adamy's new "EW 104 – EW Against A New Generation of Threats" alongside a glowing recommendation from our very own Dr Bob Andrews MBE. You can find Artech here: <http://www.artechhouse.co.uk/International/ElectronicWarfare.aspx>.

Membership Renewal Problems Some members are having problems renewing their membership using the AOC website www.crows.org. If you are having trouble please let our indomitable membership Director, Ian Fish, know at piscene1@gmail.com with a short summary of the problem. AOC HQ staff members are aware of the problems that are occurring and are trying to resolve them, with a new system scheduled for installation in the near future. You can find all the telephone numbers of the relevant AOC HQ staff on the contacts page of the [crows.org](http://www.crows.org) website. I suggest that you telephone Glorianne O'Neilin (001 703 549 1600 ext. 203), who is the Director of

Membership Operations and pass card and other details to her verbally if the online system doesn't work for you. She and her staff are very helpful and hard-working and will do everything they can to help you. Please do not email any bank card information.

Updated Chapter Website – EW Jobs The new “EW Job Vacancies” page, accessed from the News tab, has already proven to be successful for the initial user, MASS, with at least 2 vacancies already filled from it. If you are interested in seeing what EW jobs are available please check out the new page. If you are seeking highly qualified UK EW personnel to work with you then this is the most focused and inexpensive means of finding them. Please contact Chris if you are interested in the terms and conditions and to get the ball rolling (chris.howe@systematic.com).

Chapter History Evening May 2015 Another item for your 2015 diaries: the 2015 History evening is scheduled for Wednesday 20 May 2015 in the RAF Club. More details to follow. Special thanks to our Treasurer John Stubbington and Dr Phil Judkins, Chairman Defence Electronics History Society, for making the arrangements. Those of you who have attended past History Evenings will know just how excellent they are. Senior staff from the Imperial War Museum attended the 2014 evening and expressed their delight with the proceedings and their intent to secure copies of the briefs for posterity.

Awards The Board has decided to collate a list of all UK winners of AOC international awards. The list is included below and will appear on our website in due course. It is a work in progress and we need your help. If you are an award winner and not on the list please get in touch with Chris Howe; the same applies if you are aware of a winner who is not listed. You can find more about AOC awards at: <http://crows.org/COMMUNITY/AWARDS.HTML> - the 2015 deadline is 1 May so please consider nominating someone now – the UK BOD stand-ready to assist.

Finally That's all folks! I wish you all an excellent 2015! I've listed a few dates below, where you might consider joining us and the wider AOC community in 2015. Remember, the UK Chapter is all about you, so please stay engaged and let the Board know what you want. Feedback is always welcome.



John Clifford OBE
UK Chapter President

SOME DATES FOR YOUR 2015 DIARY

UK Chapter AGM 2015, RAF Club, Thursday 19 Mar 2015

Visit to RN Type 45 Destroyer, Portsmouth TBD 2015

Chapter History Evening, RAF Club, Wednesday 20 May 2015

AOC EW Europe, Stockholm 26 – 28 May 2015, Stockholm, Waterfront Congress Centre, www.stockholmwaterfront.com

NB – The Call for Papers was issued on 16 January;_deadline 27 Feb 2015

AOC webpage: <http://crows.org/event/192-aoc-conferences/2015/05/26/8-electronic-warfare-europe-2015.html>

EW Europe Webpage: <http://www.eweurope.com/>

AOC EW Latin America - One day AOC EW Symposium and 3 Day Exhibition Pavilion during LAAD Brasil 14-17 April 2015

Web pages online w/c 18 January 2015

AOC 52nd Symposium 1 - 3 December 2015, **New Venue** Marriott Marquis DC and Convention Center, Washington, DC

UK Chapter Christmas Dinner, RAF Club, 11 Dec 2015 Awards Dinner Black-tie preferred.

Check out our website at www.ukaoc.org



AOC UK CHAPTER – AWARDS HALL OF FAME

NAME	AWARD	YEAR
REGINALD JONES CBE FRS	TECHNOLOGY HALL OF FAME	1984
DAVID PALMER OBE	INTERNATIONAL ACHIEVEMENT	1995
JOHN CLIFFORD OBE	INTERNATIONAL ACHIEVEMENT	2002
VIC PHEASANT	TECHNOLOGY HALL OF FAME	2004
PETER EAST	TECHNOLOGY HALL OF FAME	2005
JIM MacCULLOCH	COL ANTON D BREES LIFETIME ACHIEVEMENT	2005
EDWARD PRITCHARD	INTERNATIONAL ACHIEVEMENT	2009
DAVID PALMER OBE	BOARD OF DIRECTORS	2009
PETE LIIVET	INTERNATIONAL ACHIEVEMENT	2009
DAVID KITCHING	COL ANTON D BREES LIFETIME ACHIEVEMENT	2010
ROGER BLACKBURN	COL ANTON D BREES LIFETIME ACHIEVEMENT	2010
DOUG RICHARDSON	TECHNOLOGY HALL OF FAME	2010
JOHN WISE MBE	BOARD OF DIRECTORS	2011
JOHN STUBBINGTON	COL ANTON D BREES LIFETIME SERVICE	2011
TONY SALE	TECHNOLOGY HALL OF FAME	2011
ROGER HANNAFORD	COL ANTON D BREES LIFETIME SERVICE	2012
STEPHEN ROBINSON OBE FRS	JOSEPH P KEIRNEY PIONEER AWARD	2012
STUART PEACH KCB	GOLD MEDAL WINNER	2013
DAVE PECK	COL ANTON D BREES LIFETIME SERVICE	2013
STEVE ROBERTS	TECHNOLOGY HALL OF FAME	2014
BOB ANDREWS MBE	COL ANTON D BREES LIFETIME SERVICE	2014
CHRIS HOWE MBE	COL ANTON D BREES LIFETIME SERVICE	2014
MARK ELSON MBE	INTERNATIONAL ACHIEVEMENT	2014

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“Electronic Warfare, Receiver and Receiving Systems.” Author Richard A Poisel.

This electronic warfare book covers the area of communications signal intelligence and interception. Although aimed at system designers it does give a very good grounding in the aspects of receiver, modulation and more complex techniques to a level understandable by most RF engineers.

The book covers basic receiver principles, signal and modulation systems, the RF stages, small signal amplifiers, mixing and mixers, IF amplification, IF filters, narrowband receivers, compression receivers, digital receivers, sampling and ADCs, digital filters. Digital demodulation, DACs, direct digital converter, spread spectrum techniques, intercept receivers and direction finding receivers.

Although each chapter is not completely stand-alone it is very easy to find any area of interest and assuming the reader has a general understanding of RF theory can be used as a general reference as well as being Electronic Warfare biased. The mathematics are, as would be expected, complex but all the equations are built from the basic principles and the terms are explained in a manner making it easy to go back and reinforce the understanding of the derivations. The covering of various filtering and digital techniques are extremely useful in these days of Software Defined Radio systems and digital signal conditioning.

Although being designated as electronic ware this book would be a good addition to any RF engineers' library to give an understanding of the current receiver techniques and procedures. This is not a book for a complete RF novice as much of the terminology is used either without or with only a quick explanation, however as an understanding of receivers, the associated problems when looking at signal and data capture and inherent problems with any RF system, I find this book outstanding. I have three types of books in my library, the look pretty (impress visitors) never read, useful but looked at rarely and 'now on the third copy' because I've worn out the previous two. This book, in my opinion, falls into the latter category and I anticipate it being carried around for reference when running courses in case of difficult questions. I understand at least one company is looking to use this book as part of the set books on their ECM course.

Reviewed by Ian White, Director RF engineering, Gaddon Ltd



UK CHAPTER

ANNUAL GENERAL MEETING

Royal Air Force Club, 128 Piccadilly, London W1J 7PY

Thursday 17 March 2015

The Annual General Meeting of the AOC UK Chapter will be held in the Royal Air Force Club, 128 Piccadilly (Hyde Park end) on **Thursday 17 March 2015**. All AOC members are encouraged to take this opportunity to meet the UK Chapter Board, to hear a report on the Chapter's activities and its financial health and to help shape its future. Guests with a view to becoming AOC members will be most welcome but would have no voting rights at the AGM.

The programme for the AGM, to be held in the Millennium Suite, is:

1800: Pre-AGM drinks.

1830: AOC AGM and guest speaker.

2000: Finger Buffet.

Members wishing to attend should complete the proforma below and send it by e-mail to Phil Davies as soon as possible. There is **no charge** to attend the AGM and the application is for administrative and RAF Club security purposes only.

To: Phil Davies
E-mail: phil.davies@selex-es.com

I wish to attend the AOC AGM on **Thursday 17 March 2015**.

Name: _____ AOC Membership No: _____

Telephone: _____ E-mail: _____