

# **International Director's Report**

**AESS BoG - Anaheim, CA, 24-25 April 2009 – Marina Ruggieri**

The activities that have been reported for the Spring 2009 BoG are described in the following.

## **1. Dr. William Lyons – Australia, New Zeland**

Another successful UAV Challenge was held in Australia in September, 2008, of which the AESS sponsored high school entries with a grant of \$5K (a significant achievement at a time of need for fiscal restraint). In addition, a grant of \$5K was provided to the student entry from Missouri University of Science and Technology. This team was awarded one of the encouragement prizes of \$500.

The UAV Challenge has grown into a highly visible annual event with over \$80K of prize money available, a significant operating budget and has generated an international network of participants, sponsors and stakeholders. Many will remember that this event was spawned from a recommendation stemming from a UAV workshop sponsored by Boeing, the AESS and the Australian Government in December 2005.

This years' event will be held from September 28 – to October 1, 2009.

The new Queensland Chapter continues to attract members and forum speakers. Thanks to Dave Dobson for providing marketing collateral. I have been one of their speakers and will also be a speaker this Tuesday

### New Activities

Boeing is sponsoring an aviation studies award to bring six university students to the United States for visits to Boeing (and non-Boeing sites) across the United States. This is the expansion to an annual award that was made as an offset under Wedgetail AEW&C sales. I would like to request that we co-sponsor and make a nominal award of \$250 per student and perhaps some of the Industrial members of the BoG could host them for a visit to their site. We could distribute information pack to students. When they return to their home schools they are required to give a presentation outlining their visit and what they have learned and observed.

## **2. Dr. Ram Gupta – India**

The activities mainly focused on the following areas:

- *All India Student Project Contest*: the initiative was started about 3 years before on all India in the AESS FoI. The 2008 contest projects and authors have been announced and a CD has been circulated in the 2008 BoG meeting. The announcement for the 2009 project was made in November 2008 and the deadline for entry submission is May, 2009. The results will be announced in July/August 2009.
- *Eight-day-course (7 hrs per day)*: India Council is organizing this event during June 2009 in Hyderabad in the area of electromagnetism by Prof. Nargona Rao (University of Illinois; also Edward C. Jordan Chair). It is also proposed to have the same course in Delhi and Mumbai. AESS agrees the funding of USD 5000 for the above initiative.
- *Exchange of scientists in cooperation with Italian Universities*: the initiative – fully funded by the Indian and Italian institutions (i.e. no cost for AESS) – will envisage the scientific cooperation between India and Italy in the AESS FoI. In particular, on the Italian side, the initiative will see the involvement of the University of Roma Tor Vergata.

### **3. Prof. Hugh Griffiths – UK and Ireland**

The relevant international activities in the area of UK and Ireland have been included in the report on the Radar Systems Panel. Two quite important activities are the following :

\* *Workshop on Multistatic/MIMO radar*: the one-day workshop was organised by Hugh and held in London, UK, April 17 2009, to discuss and identify priorities and initiatives in multistatic and MIMO radar. The event was also kindly supported by ONR Global. The event was very successful, with participants from 6 countries, and a dedicated report is in preparation. The international participation saw two people coming from the USA specially for the meeting.

\* *Conference on 'Synthetic Aperture Radar and Synthetic Aperture Sonar'*: Hugh has been strongly encouraged to repeat the conference he organised in 2006 on 'Synthetic Aperture Radar and Synthetic Aperture Sonar' in Lerici (Italy). So the next one will be in September 2010, also in Lerici (near to NATO Undersea Research Centre in La Spezia). This would be on the basis of technical co-sponsorship by AES - i.e. member-rate registration for AES members, in return for publicity, but no financial obligation. This is the type of cross-discipline, systems-oriented meeting that AES should be leading in.

Finally, Hugh successfully nominated Dr Philip Woodward - who invented the radar ambiguity function - for one of the main IEEE Awards, the Picard Medal. It would be presented at the Awards Ceremony in Los Angeles next month, but Woodward is nearly

90 years old, so does not want to travel so far. Hugh would like to arrange a small event in Malvern (where he lives) to mark his achievement.

#### **4. Prof. Igor Immoreev – Russia**

A very successful seminar has been organized, in spite of some difficulties, on the "Use of the UWB Radars in the Industry and Medicine". The Event took place in Moscow on March, 05 2009.

#### **5. Prof. Marina Ruggieri – Italy and Western Europe**

The relevant international activities in the area of Italy and Western Europe have been strongly interleaved with those of the Space Systems Panel, which are included in the related report delivered to Bob Lyons. The following events and activities are worth being mentioned in the International Report:

\* *Book on Dual Use*: In October 2008 the book “Aerospace Technologies and Applications for Dual Use - A New World of Defense and Commercial in 21st Century Security” – the first on the topic – has been published by River Publishers (P.Finocchio, R.Prasad and M. Ruggieri, Eds’). The book moves from the main results of the International Symposium (Roma, Italy, September 12-14, 2007) on *Aerospace Technologies and Applications for Dual Use*, organized by the AFCEA Rome Chapter with the technical co-sponsorship of AESS. The book chapters are derived from the keynote speeches, invited lectures, panel discussions and conclusions of the Symposium. Book publication has been announced on various websites, including AFCEA, AESS, ESA. The Book has been presented worldwide in the last months. In the presentation the link between AESS and AFCEA on dual use established by the signed Memorandum of Agreement is underlined. The book has been presented, in particular, in the following places:

- European Space Agency (ESA) Headquarter, Paris (December 2008)
- AFCEA WEST 2009, San Diego, CA (February 2009)
- AESS Aerospace Conference, Bik Sky, MT (March 2009)
- SatExpo 2009, Rome (March 2009).

The topic of the Book matches fully the AESS FoI and it is worth mentioning that some Chapters of the Book are authored by AESS officers, BoG members and AESS members.

\* *International Conference “Wireless Vitae 2009”*: the Conference is organized by CTIF (Center for TeleInfrastruktur) – the reserch center network with nodes in Denmark (HQ), Italy, India, Japan and soon USA – and will be held in Aalborg, Denmark on 17-20 May, 2009. As agreed in the Fall 2008 BoG, the Conference is technically-co-sponsored by AESS. AESS had a key role – according to our technical co-sponsorship approach – in the Conference technical organisation, as Prof. Ruggieri is one of the two Technical

Program Co-Chairs and she will introduce to the audience AESS and the opportunities given by an AESS membership.

\* *Project for Abruzzo*: a project for the involvement of AESS in the earthquake emergency management in Abruzzo (Italy) has been conceived (phase 1: USD 5000 financial support from AESS).

\* *Young engineers activities*: **Cosimo Stallo**, working in the University of Roma Tor Vergata, approached to AESS thanks to a fellowship during his M.Sc course in 2006. He has become very active in promoting IEEE and AESS through several initiatives. An IEEE GOLD Affinity Group has been created in May, 1, 2007: the Group has 506 members and the Chair of the Executive Committee is Cosimo Stallo. Some of the activities where the affinity group has been involved are:

- Awards (Chapter/AG): IEEE GOLD Remote Sensing Conference. Award for the best paper.
- GOLD Seminar on: “*Risk Management*” by Marco Brancati held on October, 25, 2007 at University of Rome Tor Vergata
- Italy & Denmark GOLD Seminar on: “*Journey to the Cutting - Edge of Positioning and Navigation*” held on November, 30, 2007 at Room TC04 of Sogei S. p. A in Via Carucci 99, Roma.
- 2008 IEEE GOLD Remote Sensing Conference held on May, 22-23, 2008 at ESA-ESRIN Magellan Room, Frascati-Roma.
- Italy & Denmark & Greece GOLD Workshop: “*Development of Leadership skills*” held by Kurt R. Richter, Professor Emeritus, (Technical University of Graz, Austria) on July, 3-4, 2008 at “Sala Congressi” of University of Tor Vergata”
- Planning of some web-based video technical seminars for IEEE GOLD students within IEEE AESS Video Education Initiative.
- Participation to the 2008 R8 GOLD Congress, August, 28 – September, 1, 2008 - Queen Mary University, London. It is under evaluation the possibility to hold the R8 GOLD Congress in Italy in 2010.
- Participation to the International Siberian Conference on Control and Communications (SIBCON-2009), Tomsk, Siberia, March, 27-28, 2009 for establishing a strong GOLD network in Europe and Asia, that can represent a productive bridge between the experienced IEEE members and new incomers, also exploiting an important opportunity for sharing ideas and knowledge, discussion of current issues, and discovery of talents and opportunities.

Roma, May 7, 2009