



NewsLetter

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Contents

From Newsletter PWG...	2
IB report	2
The International Board is dead. Long live the International Board.	2
Table for contact International Board 2012/2013	3
International Events Working Group	4
Sponsor Contributions	5
European Wind Energy Master	5
What is EWEM?	5
Career prospects	5
Apply now!	5
Contact	5
Happening around Europe	6
Naples	6
Space Symposium 2012	6
Stuttgard	6
Terrassa	8



From Newsletter PWG...

Hello all of you, EUROAVIANS! A new NL is here! Change is in the air; do you feel it? There is a new International Board and a lot of new and good people!

In addition, I'm very happy and satisfied of this NL, because we can read very interesting contributions! There is also an article sent by a important sponsor, that offers us new opportunities to grow up! There are, also, possibilities of career; you can read it in dedicated section!

I hope that you like this work. Indeed, if you don't like enough, you can send me your advices to make the best the Newsletter!

Hugs and I wish you a wonderful month.

Giusy Falcone
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IB report

The International Board is dead. Long live the International Board.

Dear fellow EUROAVIANS,

Another AMEAC is over and another International Board has taken over. During last business year we have been witnesses of an amazing job done by the (now Former) International Board composed by Maximilian Martin (President, AS Dresden), Borja Lázaro Toralles (Secretary, AS Terrassa), Alfonso Serrano Alcalá (Treasurer, AS Sevilla), Rengin Çise Bayrakci (Executive Member, AS Ankara) and Florian Ehrig (Executive Member, AS Hamburg).

But their year of glory has passed and it's time to let the new International Board keep on with the good work done, lead the association toward a brighter future and create new opportunities for EUROAVIA members. Welcome, then, the new International Board with Jacqueline Kim Chindea (President, AS Bucharest), Marco Marino (Secretary, AS Delft), Arnau Miró Jané (Treasurer, AS Terrassa), Carlos González Hernández (Executive

Member, AS Sevilla) and Paolo Morreale (Executive Member, AS Palermo).

The new International Board has defined a set of goals for the next business year:

- Top quality events, both on a local and international level;
- A new interactive website, useful tool for members, business card for companies;
- New and up to date corporate material;
- Increasing motivation and trainings for members.

To achieve such amazing goals, EUROAVIA needs to be structured horizontally and company-like, so to merge inputs from all members, but in a professional frame. That means improving communication, transparency and making all parties aware of the tasks that are being carried out.

In this way EUROAVIA will challenge its members towards performance and will let them leave today their fingerprint upon the aerospace industry of tomorrow!



Table for contact International Board 2012/2013

International Board 2012/2013	
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International Events Working Group

Dear fellow EUROAVIANS,

The International Events Working Group is recruiting! You maybe wondering "What will I do if I join the coolest Working Group of EUROAVIA? Which will be my tasks?? And what opportunities will I have???".

This Working Group is one of the biggest of EUROAVIA: it includes several sub-working groups and many tasks.

Auditing and Coordinating International

Events, to ensure that each international event is organized at the best and according to EUROAVIA regulations. Each international event gets assigned an auditor that meets regularly with the organization team and help them whenever required for any aspect of the event, e.g. communication with participants, sponsor, etc. Auditors are assigned by the Coordinator of the WG and must have taken part at least to one international event as organizer or three international events as participant.

Creating and Updating Manuals for the Organization of International Events,

to provide the best support possible to every Affiliated Society willing to organize an international event. The Coordinator is responsible for the manuals, but every member can contribute to it providing his own experience and advices.

Organizing and Coordinating the Participation to International Air Shows,

because Air Shows are a great opportunity for EUROAVIA to improve the network between members, alumni and the aerospace industry.

The next air show EUROAVIA will take part is Le Bourget Air Show in Paris from 17 to 23 June 2013. The goal is to participate to the air show as exhibitors with a booth, and taking part to as much workshops as possible with the as many EUROAVIA members as possible. Accommodation should also be organized in a centralized way to have members as close as possible in Paris to make easier hanging out together during the evening.

Every member is more than welcome to help in organizing the participation to such an amazing opportunity. **The most active members in the organization will get free entrance to the air show for the whole week.**

Organizing the Design Workshop, the biggest and most challenging international event EUROAVIA can organize. The Design Workshop is an event where students boost their practical and academic skills, while getting in touch with the industry and building the network of their future.

All students that take part in the Design Workshop are selected through a Design Contest, a competition where participants have to write a paper on a subject chosen by the hosting company. During the Design Workshop, then, a group of 25 students works for three weeks on a design project defined by the hosting company. Creativity and enthusiasm together with a professional working environment: as a result, new concepts and ideas are developed and students are trained to work in team in an extremely dynamic and challenging environment, a basic requirement for the aerospace industry of today.

Organizing such an amazing event require a great team and a great commitment. And remember: **the most active organizers will have the participation granted to the Design Workshop.**

So, if you are interested in making one or more of this amazing opportunities become reality, then join the International Events Working Group of EUROAVIA sending an email to iewg@euroavia.eu.

Marco Marino

Secretary of the International Board

marco.marino@euroavia.eu

<http://www.euroavia.eu>

Sponsor Contributions

European Wind Energy Master

Since this year, 4 world leading wind energy research universities, have joined forces and started the Erasmus Mundus European Wind Energy Master (EWEM), an international master programme for motivated students who want to commit their study to the field of wind energy.

Why an article about this new master in October? For early applicants there are possibilities to get full Erasmus Mundus scholarships, covering a.o. your tuition fees (part or full), health insurance and providing you with monthly allowances.

What is EWEM?

EWEM is a 2 year (120 ECTS) Erasmus Mundus programme that is built on a body of emerging research that has the potential to shape the future of wind energy. The programme aims to educate 120-150 MSc graduates per year, covering the top 1-2

The European Wind Energy Master consortium is composed of four top Universities. The Technical University of Denmark (DTU), the Norwegian University of Science and Technology (NTNU), the Carl von Ossietzky Universität Oldenburg (UniOl) and Delft University of Technology (TUDelft). Each brings its own expertise to the programme. You can choose between 4 tracks:

- Wind Physics
- Rotor Design
- Electric Power Systems
- Offshore Engineering

You will spend different semesters at different partner universities depending on the chosen track, benefiting from a range of expert lecturers and a truly international classroom.

After completion, you will receive a double MSc degree in engineering with certificates from two of the host institutions youve attended.

Career prospects

The total number of jobs in the wind energy sector in Europe is expected to grow from the current 200,000 to 450,000 in 2020. Globally, the growth will be even faster. EWEM prepares graduates for a career in research, both in industry and in academia and is closely linked to the partners research, in particular the large Wind Energy PhD cohort of the four partner universities, of over 130 PhD students.

Apply now!

The final deadline for applications for 2013-2015 will be the 1st of April 2013. However, apply before the 1st of November for a chance on a full Erasmus Mundus scholarship.

Contact

For more information visit the EWEM website: <http://www.windenergymaster.eu/> For further questions you can send an email to: ewem@tudelft.nl or visit our Facebook page: European Wind Energy Master.



EWEM

<http://www.windenergymaster.eu/>
ewem@tudelft.nl

Happening around Europe

Naples

Space Symposium 2012

In concomitance with the 63rd IAC, International Astronautical Congress, EUROAVIA Napoli opened its International Event to give the chance to European EUROAVIANs fellows to join the prestigious Congress.

The EUROAVIA Space Symposium (ESS) 2012, from Sep 30 to Oct 7, welcomed 20 students for a jaw-dropping week in the fascinating city.

The daily schedule at the IAC was filled with technical conferences and lectures, held by professors and engineers coming from all over the world. Furthermore, countless companies stands were spread within the several halls what a better place where to have a sneak-peak of the brand new pieces of space technology together with unique gadgets!

All companies joining the IAC were also eagerly looking for motivated students to train! Therefore, lots of EUROAVIANs managed to apply for internships in their fields of interest.

Last but not least, strolling around the halls during free time you could have easily had the chance to literally bump into VISP (Very Important Space People). Just to give few names all the way to the USA, Mr Leland Melvin! Or straight from the moon, Ladies and Gentlemen give it up for Mr Buzz Aldrin!

Having looked at activities at the IAC, lets move on in the Space Symposium schedule! Our University agreed to let the ESS folks entering its laboratories for an interesting afternoon tour sniffing out all projects our professors and master students were and currently are working on. Furthermore, AleniaAermacchi (Finmeccanica Company) one of our supporters agreed for a visit to the ATR assembly line! Just so wonderful to have had the chance to do it!

The amazing and cheerful atmosphere between either participants and organizers during the week had become a key-stone for its success. It had been

powerfully boosted and spurred by Team Building Activities specific designed to create brotherhood and teamwork the fastest (and also to break them all down!). Plus, city sightseeing and theme-parties played a major role in making that week even more enjoyable!



Mario Natella
Naples Secretary
AS Naples

Stuttgart

The first thing I learned when I moved to Tucson, Arizona, was that I always pronounced it wrong: It must be 'tu:san. The second thing was that I had no idea what it means to live in a desert. Yes, it is hot and dry. Nothing surprising, you might think? But trust me, most of you have no clue how it feels like if it is over 45°C outside in the shade.

To be honest, even after going to the University of Arizona for nearly 9 months by now, I still do not have much of an experience. Because everybody usually hides inside an air conditioned building if the temperature reaches the magical 100°F (38°C). However, this dry climate is the perfect condition for an airplane graveyard. If you now think of elephants wandering off to a specific communal place to die and try to connect that with airplanes, you are pretty much right. But let us start at the very beginning.

With its air force base, Tucson has always been an important place for aviation pioneers. To this day, many fighters and transport airplanes fly over the city center every day.

Sometimes when I walk over the campus, I feel like I was in a war. Beyond this, this place in the middle of the Sonoran desert was picked to store and manage surplus World War II aircrafts in 1946.

The dry climate helps to minimize corrosion and the hard alkaline soil in this area is so firm that heavy vehicles can be parked on the surface without sinking for a long time.



Today, the often called boneyard accommodates over 4200 aircrafts on 2600 acres, including warfighters like the F15 Eagle and F14 Tomcat, huge military transport planes like the C5a Galaxy and many other out-of-service U.S. Government aircrafts. Once they get here, this is usually their final destination or at least a long vacation and therefore they are prepared for their official retirement:

Dangerous components and materials like weapons, classified items and fuel are removed, high-pressure and spring-loaded systems are relieved and preservation oil is pumped through the whole engine fuel system.

In addition, the engine intake and exhaust areas as well as all other smaller openings are filled with barrier material and get a dust-and-sun protection in form of a latex-based spray called Spraylat which is applied in two coats.

The first coat is black and protects the aircraft from dust, moisture and nesting animals. The second coat is white and reflects most of the solar heat.

Without that protection the interior could quickly heat up to 100°C during hot summer days which would result in severe damage to the plastic, rubber and other heat sensitive components.

Prepared like this, the aircrafts wait for their reemployment or serve as a spare part warehouse for many years.

Some parts from older aircrafts are available nowhere else worldwide!

However, not every airplane received such a pleasant treatment.

In the 1990s, if an airplane was in the unlucky situation to be a B-52, the airplane graveyard turned into a slaughter house.

Since most B-52s in the U. S. fleet had to be disarmed according to the 1991 Strategic Arms Reduction Treaty (START) between the USSR and the former USSR, a 13,500 pound steel blade fulfilled this mission here in Arizona and ripped the massive airplanes into 5 pieces.

The ruined B-52s remained in place for three months, visible for Russian satellites to confirm that the bombers had been destroyed.

Between 1991 and 2001 365 B-52 were destroyed in Arizona, today, 94 B-52s are all that remain of 744 Stratofortresses.



If you ever come to Arizona, I can only recommend to make a bus tour.

It is hard to describe the dimensions of the airplane graveyard in words, maybe you get the best idea if you try to find a satellite photograph on google maps.

Driving through all those dying aircrafts made me sentimental, some of them already lost a nose, a wing or even their engines, whereas the F14 Tomcats stood in a long line as they were ready to take off for their next mission.

Furthermore, the Pima Air Space museum exhibits various airplanes from World War II, some rare and important aircrafts like the Blackbird (Lockheed SR-71), giant aircrafts like the B52 and much more.

309th Aerospace Maintenance Regeneration Group <http://www.amarcexperience.com/> <http://maps.google.com/> search for Pima Air Space Museum and look for airplanes a little north-west



Judith Richter
AS Stuttgart

Terrassa

Dear EUROAVIANS, These last days in the association have been very quiet. Apart from a couple heated Local Board meetings, the most interesting piece of news from here is that we decided to campaign hard for our less crowded projects. We called a meeting for our freshmen and sophomores in order to draw new members into the team and the result was a huge success!

We got a dozen new members for them and the word of mouth will surely spread out. It looks like

Euroavia Newsletter #208

the new generation will bring the needed inspiration for these projects to reach their ultimate goals. Lets go!

Precisely, one of these projects, Terrassa Ground Station (the project that aims to create a Ground Station satellite receiver based in a low-earth orbit (LEO) satellite tracker) has some news to share with the association:

Dear EUROAVIANS, Here in Terrassa Ground Station, things have been quite troublesome for a while. Although almost everything was operating as expected in the ground station, the antennas weren't cooperating much and we had not the slightest idea of why. After applying the most hardcore and cutting edge techniques in engineering to solve the problem (i.e. trial and error), we finally managed to determine that the 600 rotors were failing because of the 1 cent potentiometer. Sometimes stuff like this happens. We are now back on the track, and hopefully after some minor adjustments we will be tracking satellites like crazy.

If you have some satellite to be tracked just let us know! David de La Torre TGS Coordinator



TGS project logo

If you want to stay tuned to this project, go to their [Official webpage](#). For the next few months we will keep you informed on how we plan to do our celebration and how the projects continue to grow! See you around Europe!

Antonio Shu
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AC	Associated Company	IB	International Board
AMEAC	Annual Meeting of the Euroavia Congress	ICM	International Contact Member
AS	Affiliated Society	IEM	International Editor Member
CA	Central Archive	LB	Local Board
DeWo	Design Workshop	NAM	News Advertisement Member
DIB	Designated International Board	NL	Newsletter
EA	Euroavia	PAS	Prospective Affiliated Society
EYE	Euroavia Young Engineers	PWG	Permanent Working Group
EMEAC	Elective Meeting of the Euroavia Congress	SM	Supporting member
FoWo	Formation Workshop	TSP	Travel Support Program
FSP	Financial Support Program	WG	Working Group



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