

THE EUROAVIA MAGAZINE

EDITOR IN CHIEF

Chrysanthi Sarasiti

EDITORS

Athina Athanasaki, Johan Birnie Hernández, Giulia Gemma, Elena Tonucci.

CONTRIBUTORS

AS Aachen, AS Athens, AS Bordeaux, AS Covilhã, AS Forlì-AS Bologna, Istanbul, München, AS Napoli, AS Patras, AS Pisa, AS Sevilla, AS Terrassa, AS València, ASRW'23 Winners, BR WG, CM WG, Corvin Huber, DN WG, Edwin Kanters, EG WG, Eva-Maria Kopetzky, Flavio Tosi, HR WG, IDEATHON '23 Winners, Ioannis Tsagarliotis, PAS Lyon, WG, Stephan Barlet, S&B Windfied-Hagen Friedl.

GRAPHIC DESIGNER

Erika Aucelli

CONTACTS

Communication Working Group communication@euroavia.eu

Design Working Group design@euroavia.eu

International Board

ib@euroavia.eu

Delft, The Netherlands Kluyverweg 1, 2629 HS www.euroavia.eu

All rights reserved.

From the Editor Page 4 Letter from the IB Page 5 Letter from the DIB Page 6 **Upcoming International Events** Page 7 **International Event Reports** Page 8 - IDEATHON '23 1st Phase Page 8 - ExMEAC & AMEAC '23 Page 10 - InSpace Symposium Page 11 - IDEATHON '23 Final Page 12 - Formation Workshop '23 Page 13 - Drone Workshop '24 Page 14 - LUSTRUM Page 16 - EMEAC '24 Page 20 - One World One Flight Symposium Page 21 - FLY- IN Page 22 - Future & Beyond Page 23 - Air Cargo Challenge Page 26 - Airbus Sloshing Rocket Workshop Page 27 **Exhibitions & Conferences** Page 28 - Aviation for Girls Page 28 - European Space Conference '24 Page 29 - Airspace World Page 30 - PACE Challenge 2nd Edition Page 31 - Aero Friedrichshafen Page 32 - Beiras Airshow '24 Page 33 - EYF Project Management Training Page 34 - Space Meeting Veneto Page 35

- ILA Berlin	Page 36
- Farnborough Fair	Page 37
Working Group Contributions	Page 38
Local Group Contributions	Page 42
- AS Athens	Page 42
- AS Covilhã	Page 44
- AS Forlì-Bologna	Page 46
- AS Patras	Page 48
- AS Pisa	Page 50
- AS València	Page 52
Alumni Contributions	Page 54
Interviews	Page 56
- PACE '24 Winners	Page 56
- IDEATHON '23 Winners	Page 58
- Eva-Maria Kopetzky	
MTU Aero Engines	Page 60
- Winfried-Hagen Friedl	Page 62
- ASRW '23 Winners	Page 64
PAS Presentation	Page 67
Sponsors, Partners	
& Collaborators	Page 68
Games	Page 71
List of (P)AS/(P)AM	Page 78
List of Acronyms	Page 78
	Ą
	3

LUSTRUM

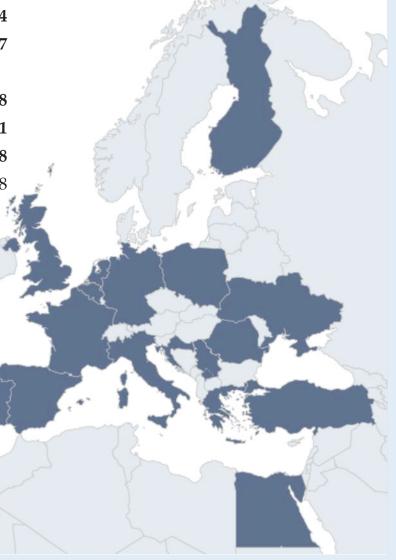
by DIB Officers | Page 16

 $\hbox{\it ``The Lustrum brough together EUROAVIAns'}\\$ of every age, country, and generation together into a day of celebration for EUROAVIA's 65th anniversary".



Interview with Eva-Maria Kopetzky - MTU Aero Engines by Chrysanthi Sarasiti | Page 60

"Our vision is to make emission-free flights a reality. With that vision in mind, we are shaping the future of aviation. Hence, it is quite a cool job to do!"



FROM THE EDITOR

Dear EUROAVIAns,

11 International Events, 10 exhibitions and conferences, 42 Local Groups and 3000 members; our EUROAVIA family is growing.

As EUROAVIAns, we are dedicated in our role to fly together, solidifying our cross-country connections; to fly further, sharing our mission in Europe and beyond; and to fly higher, fuelling our shared passion for aviation. We are all honoured to witness and contribute to the evolution of EUROAVIA and we have a lot to be proud of this year. From the Lustrum event in Istanbul, Turkey, where we celebrated our 65th anniversary, to ILA Berlin and Farnborough Fair, as well as the new editions of Airbus Sloshing Rocket Workshop and Future & Beyond, we widened and levelled up our international impact.

The articles in this edition of The EUROAVIA Magazine testify to the relentless commitment shared by all of us both from a Local and International perspective. First of all, I want to personally thank my Press Unit team for their strong commitment and work for the whole year, I am really proud and honoured to be working with you! Elena, Johan, Giulia, Athina, without your positivity, hard work, and support, this project would not have been possible! A special thanks goes also to our graphic designer, Erika, for her outstanding work regarding the graphics of the Magazine, and, last but not least, our IB responsible, Pavi, for supporting and guiding our work.

I am proud to present you this magazine, a work that you have all contributed to. I wish you a happy reading!

Best regards,

Chrysanthi Sarasiti

Communication Working Group Coordinator



DUR TEAM MEMBERS



Chrysanthi Sarasiti Editor in chief



Athina Athanasaki Editor



Johan Birnie Editor



Giulia Gemma Editor



Elena Tonucci Editor



Lucia Ruocco DN WG Coordinator



Erika Aucelli Graphic Designer



Pavitarpal Singhlitt IB Responsible

LETTER FROM THE IB

Dear EUROAVIAns,

As another year for EUROAVIA draws to a close, we are filled with pride and gratitude for the dedication, innovation, and spirit of our members. This year has been one of remarkable growth and achievement, putting us on a successful track in the first year of our 5-year plan period.

Throughout the year, EUROAVIA has continued to promote connections between students and the aerospace industry, providing numerous opportunities for personal and professional growth. One of our standout achievements was our successful participation in high-profile events such as the European Space Conference, ILA Berlin, and the Farnborough International Airshow. These events not only showcased the talent and ingenuity of our members but also strengthened our relationships with industry leaders and academic institutions. Our technical competitions, including Airbus Sloshing Rocket Workshop, attracted a record number of participants, highlighting the interest and engagement of our community.

In addition, our Local Groups have been more active than ever, organising workshops, seminars, and networking events that have enriched the EUROAVIA experience. Their commitment to engage locally and internationally has been truly inspiring for our members and created invaluable experiences.

Naturally, we also faced some challenges, particularly the higher costs for travel and event organisation. Consequently, some events couldn't reach the participation we had aimed for or had to be cancelled altogether. Despite these obstacles, we are proud that our community demonstrated remarkable resilience and adaptability, finding creative solutions to stay engaged and participate.

EUROAVIA is committed to increasing its support to offset the higher cost of organisation, starting from the event closest to our hearts – the Congress.

As we look to the future, we are excited about the opportunities that lie ahead. The coming year promises to be filled with new projects, initiatives, and events designed to further enhance the EUROAVIA experience, led by a new International Board.

One of the key objectives for the next year is to expand our outreach and engagement efforts, bringing traditional and new events to even more EUROAVIAns, including new technical challenges and new International Events. Moreover, potential new Local Groups are identified to join the EUROAVIA family. As always, we are committed to strengthening our relationships with industry partners, academic institutions, and other stakeholders to increase the impact of our network.

As to continue on our common mission, we invite all EUROAVIAns to join us in shaping the future of our association. Your ideas, enthusiasm, and dedication are the driving forces behind EUROAVIA's success. Together, we can continue to build a vibrant, inclusive, and innovative community that supports the aspirations of aerospace students across Europe.

Best wishes,

Leo, Pavi, and Amanda

ABOUT THE IB:

The International Board is the body that manages and represents EUROAVIA at an International level. This Business Year, it has been composed by Leo Buchner (AS München), Amanda Román Navarro (AS Terrassa), and Pavitarpal Singhlitt (AS Aachen), having the roles of President, Treasurer, and Secretary respectively.



LETTER FROM THE DIB

Dear EUROAVIAns,

This is the first letter that we write together for all of you, and the emotions make our hands shake. Luckly Stamatis' perfectly British knowledge of English makes up for all misspellings. So far the EMEAC feels, when we presented our visions to the Congress and we were initiated to the DIB role through the ritual penguin question.

Recalling those moments, we believe that we were lucky. The Lustrum for the 65th Anniversary of EUROAVIA proved to be a kaleidoscope of flashes from the Association of the past, through the bright testimony of the Alumni, and our own shimmering ideas for the Association of the future. It is like so that we felt enlightened by the vivid link of the past, the present and the future: the EUROAVIA Spirit, the embodiment of the energy that each member has invested into moving the Association one step further.

But after those baroque words, let's come down to business, as every good engineer does. In EUROAVIA we say "Build the wings of your future": the Association can bring us to greater heights, but under the condition that it is itself flying! The Dark Years or the early 2000's proved that EUROAVIA relies on the beliefs and synergetic actions of the associates who are not satisfied with the status quo but see unused potential.

We believe that the capability of transforming such potential into action is not of the IB, but of the Working Groups, and the Congress, and the Local Groups altogether! The trigger is the act of taking responsibilities. Each task accomplished by a Working Group member, each statement made by the representative of a Local Group, and each effort of a local branch in giving more opportunities to its members, have consequences that may at first look limited, but truly resonate in the entirety of EUROAVIA's structure.

We should be the first ones to question the value of our investments in the Association. By doing so, we can see the true meaning of the EUROAVIA Spirit: it is not a unilateral transition, but a rigorously equilibrated exchange! The more responsibilities that are taken, the greater EUROAVIA grows, and the more EUROAVIA can give in return. Beware: this is not a cycle, but an ascending spiral, which we all are part of!

And finally, writing the Business and Financial Plan, we DIB Officers are taking our responsibilities, and giving the energies in our minor contribution. But, if reading this letter, you feel the same energy that we feel, you have the same vision on the responsibilities as we do, and we share the same aspiration for raising upwards, then we think that you should be with us in turning your ideas into reality and carving your footprint in our Association!

We thank again EUROAVIA for having entrusted us with this responsibility and honour. We will gladly put our energies in the growth of our beloved Association.

Together, let us build the wings of our and EUROAVIA's future.

Faithfully,

Stamatis Moraitis & Elia Ghisellini

ABOUT THE DIB:

Stamatis is an undergraduate Mechanical Engineering student in the University of Patras. He loves flying and wants to become an aviator.

Elia is a master student of Computer and System Engineering in ENAC and a member of AS Toulouse. Fascinated by innovation and interested in research, he wants to walk the line between engineering and science.



UPCOMING International Events

October '24

15 - 19

FLY - IN PAS Milano

May '25

PAS Izmir

November '24

01 - 07

IDEATHON '24 1st phase AS Toulouse

May '25

AS Stuttgart

December '24

01 - 06

IDEATHON '24 Final phase AS Zagreb

July '25

AS Leuven

December '24

13 - 17

FLY - IN PAS Samsun

July '25

AS Braunschweig

February '25

17 - 23

FLY - IN AM Cairo

March '25

21 - 28

EMEAC PAS Lyon



INTERNATIONAL EVENT REPORTS

Immerse yourself in the "EUROAVIA Spirit" through our International Events, where members explore the world and build lasting connections. In this chapter, discover the remarkable adventures and experiences from the past Business Year.

IDEATHON '23 - 1st Phase

AS TERRASSA | 3rd - 7th SEP. 2023

From September 3rd to September 7th, 2023, AS Terrassa hosted an international event in its first edition, the Ideathon 2023. During this time, 21 participants organized into 5 teams came together to tackle the challenges presented by Ansys and GTD Software and Systems Engineering during a rigorous 24-hour competition.

The event took place at the ESEIAAT faculty of the Polytechnical University of Catalonia, with all participants accommodated in a nearby hostel for the event's duration.

The 5 attending teams representing 4 European countries—Turkey, Spain, Romania, and Italy—arrived on September 3rd, marking the beginning of Ideathon 2023. The event commenced with a welcome dinner at the hostel, fostering camaraderie among organizers and participants.

On September 4th the event kicked off with presentations, preceding the start of the 24-hour competition. During the morning, EUROAVIA had the pleasure of holding the inaugural speech of the event, followed by a warm welcome from one of the professors of the Polytechnical University of Catalonia.



During that same morning, KIMBcn, a local sponsor of the Ideathon, represented their company and future projects in front of the international participants. Furthermore, the global sponsors of the event, Ansys and GTD Software and Systems Engineering, brought

their company's ideas closer to the teams with their pitch presentations.

Following a brief lunch break, an essential part of the event occurred: networking between participants, companies, and the city council of Terrassa.

Teams engaged with sponsors, exchanging information like CVs and contacts while enjoying coffee and drinks provided by the organizational team. Described coffee breaks punctuated various parts of the day throughout the event.



Thereupon, the global sponsors presented their proposed challenge in a second presentation. Ansys posed the "Design and mission optimization of a crisis response aerial vehicle" challenge in the Aeronautic category, while GTD offered the "Monitoring and predictive maintenance of on-board reusable systems" challenge in the Space category. Two teams tackled GTD's challenge, while three focused on Ansys's.

At 17:00h local time, all five teams embarked on the central event activity: the 24-hour competition. During the course of a whole day, including the night from the 4th to the 5th of September, the teams had to actively work on the challenge they had chosen.



That long period of time included taking turns to sleep, having meals between laptops and piles of papers as well as putting a great deal of focus into achieving the best possible result.

The teams presented their completed work on September 5th, marking the end of the 24-hour competition at 17:00h local time. Afterwards, the jury members from Ansys and GTD met to discuss and evaluate the results, which were subsequently communicated to the organising team.

As it is a tradition in every International Event organized by EUROAVIA, the Ideathon 2023 in Terrassa did not lack a Cultural Night. Despite the fatigue and exhaustion of all participants, the essence of a Spirits Night was experienced by everyone present.

On September 6th, the teams received a guided tour of Terrassa, exploring its main visiting points. In the afternoon, prizes were awarded to the two winning teams, one from each category, who will advance to the second phase of the event in Munich in November. Certificates were presented to all participants, and numerous photographs were taken.

In order to close the event in the proper way, the teams and organizers all together attended the final dinner. There, everyone had the opportunity to consolidate the experiences lived during previous days as well as to have a good farewell.



The event concluded on September 7th, with participants departing at various times. Some teams reunited in Barcelona for a final exploration of the city and lunch together before their flights home.

In 2006 some students contacted EUROAVIA to become an AS. AS Terrassa hosted AMEAC 2010, Rocket Workshop 2017, Drone Workshop 2020, the final of the ASRW 2022 and the first phase of the Ideathon competition 2023.

ABOUT: AS TERRASSA



ExMEAC & AMEAC 2023

AS SEVILLA | 24th - 30th SEP. 2023

Hello, fellow EUROAVIAns! It has been an enormous pleasure for AS Sevilla to host all the participants in our home city. Let's do a recap of exciting congress full of beautiful experiences.

It all started on the 24th of September when many of you took your luggage and came to visit us in this intense week of two congresses in our hot but incredibly beautiful Sevilla. During the arrival day, we introduced ourselves through some icebreakers, to be prepared for what was coming.

All of us spent an unforgettable time together in Técnica lovelv Escuela Superior Ingeniería (ETSI), working, eating, and getting to know each other. But nothing of what happened next would have been possible without the support shown by the staff, members, volunteers, participants, and, of course, our beloved sponsors: AICIA, CATEC, Cátedra AIRBUS, ITAérea, and Skylife.

After some intense and productive days of congress, on the 28th of September, we got to see the wonders of Sevilla. We began the city tour with a visit to the Royal Alcázar, a UNESCO World Heritage Site. This historic palace, a stunning blend of Mudéjar, Gothic, Renaissance, and Baroque architecture, is a testament to the city's diverse past and, most importantly, where Game of Thrones has been filmed. Afterwards, we visited el Rectorado, an old tobacco factory that nowadays holds the humanistic studies faculties of the University of Sevilla and is one of the most historical and charming buildings of our university and the city. Finally, we got to Plaza de España, a spectacular example of Neo-Mudéjar architecture. Built for the Ibero-American Exposition of 1929, this half-moonshaped square is adorned with intricate tiles representing the different regions of Spain, and where "Star Wars: Episode II - Attack of the Clones" was filmed.



The same day, after having lunch, we had our Sponsors' Presentation during which we got incredible inspiration and knowledge from

different speakers. Firstly, we received an insightful and inspiring speech from Dr. Carlos Gómez Camacho, who enlightened us with his experience and his vision for the future of the aerospace industry. Afterwards, we got to know CATEC, one of the most important R+D companies in Sevilla. They showed us all the different projects in which they work, giving us even more inspiration for our future projects. Finally, we received an Excel workshop on the analysis of airline data by ITAérea, which taught us how to master Excel while giving us an insightful view of how airlines take advantage of data analysis to optimise their incomes.

Lastly, we could not have ended the Congress in a better location, along the Guadalquivir and the Puente de Triana, with perfect Sevillian weather of bright sun and 40°C. It was the perfect spot for the emotional moment that we were to live, the exoneration of the IB 2022-2023, and the first Business Meeting led by the IB 2023-2024.



AS Sevilla feels extremely honoured to have hosted this event, the most crucial event for EUROAVIA's future. Furthermore, we would like to thank enormously all the people who came from many different countries to work hard for the future of our association, even if it meant just a few hours of sleep. After all our shared efforts, EUROAVIA will be reinforced and more connected than ever.

See you around Europe!

AS Sevilla was born in 2008 and since its beginning it has been very active, winning the EUROAVIA Cup twice (2018, 2020). It has held many International Events: Fly-In March 2009, UAV's Symposium 2013, **EMEAC** 2015, 2018, FoWo 2019, Symposium and ExMEAC&AMEAC 2023.

ABOUT: AS SEVILLA

InSpace Symposium

AS FORLÌ - BOLOGNA | 3rd - 8th OCT. 2023

To celebrate the World Space Week, from the 3rd to the 8th of October, our association hosted the InSpace Symposium in Forlì, bringing together sixteen enthusiastic EUROAVIAns with passion for aviation and space. The event was focused on the development of space technology and started with a visit to the facilities of the University of Bologna. There, the participants had the chance to visit the space laboratories of the research center "TecnoPolo", where PhD students and researchers explained the ongoing and experiments, providing fascinating glimpse into the cutting-edge work being carried out there.

Over the next following days, a series of conferences took place featuring international speakers. Among them, Engineer Marcello Coradini, co-founder and CEO of Space Systems Solutions, shared with the students his journey from being a scientist to becoming the founder of an aerospace company, providing valuable insights into the space industry. Engineer Dave former coordinator Anilkumar, Innovation and Technology Transfer (ITT) unit at the Italian Space Agency, offered advice on how to pursue careers in the space sector to the participants.

Distinguished professors and PhD candidates from the University of Bologna also actively participated as speakers. Professor Alfredo Locarini, who is also the CEO of Nautilus "Navigation in Space," addressed the topic of asteroids as new frontiers in the mining industry, discussing the opportunities and risks associated with this practice. The researcher Andrea Togni explained satellite tracking in deep space. Finally, PhD Alessandro Lotti introduced Artificial Intelligence and Neural Networks to the students through a Python workshop.



Furthermore, during the event, our association had the opportunity to host companies that work in the aerospace field, such as Sitael, presented by Engineer Alberto Caliumi, who discussed career opportunities in the aerospace sector, and Alten, the main sponsor of the Symposium, introduced by Luca Rizzieri, Business Development Manager of presented who internship company, opportunities in Italy and abroad to the



Finally, the organization team of the event showed the rich cultural and historical sites of Forlì to the participants through a guided tour. This included a visit to a temporary exhibition by the local artist Delio Piccioni at the San Domenico Museums.



Hosting sixteen engineering students from all around Europe in Forlì was a great honor for our association. We would like to thank every well the companies, participant, as as organisations, and volunteers that assured the success of our event.

See you all around Europe!

In 2017, a group of aerospace students at the Forlì Campus of the University of Bologna got to know EUROAVIA and on the 16th of January 2019 AS Forlì-Bologna was born. Four times out of five since its birth, AS Forli-Bologna has positioned itself in the top three Local Groups in the EUROAVIA Cup, reaching first place during the B.Y. 22-23.

ABOUT: **AS FORLÍ-BOLOGNA**

IDEATHON '23 - Final Phase

AS MÜNCHEN | 5th - 9th NOV. 2023

In early November 2023, we had the honour to host our International Event: The Ideathon. The event was a showdown between two exceptional teams: UniBOss from AS Forlì-Bologna and Ad Mundum from AS Bucharest, following their advancement from the previous round in Terrassa, Spain.

The Ideathon is a Hackathon aimed at solving real-world problems. It was divided into two stages, the first one being the group stage in Terrassa and the second one being the final stage in Munich. Therefore, attendance in Munich was free of charge for the finalists who advanced from Terrassa.

In Munich, each team was assigned a challenging task given by our partners GDT Systems and ANSYS. In their respective challenges, the teams spent 24 hours in dedicated rooms, using their skills and creativity to design innovate solutions for the problems proposed by the companies.

Ad Mundum from AS Bucharest worked on the challenge from GTD, which was focused on optimising maintenance for reusable launchers using sensor data. The team had to transform this data into actionable information to plan maintenance, focusing on cost, availability, and reliability. Tasks included identifying critical components, defining parameters, generating data, developing a methodology, and testing solutions. The goal was to ensure launchers are ready for subsequent flights efficiently and costeffectively.

UniBOss from AS Forlì-Bologna used ANSYS' new Mission Planner software to solve a specific problem. The set-up was in a simulated rescue mission on Mount Everest where a team of mountaineers had gotten lost and needed to be rescued by a helicopter. The competitors were tasked with finding optimal flight routes for an unmanned system with the mission of locating the lost explorers first while maintaining a flight route that ensured the best signal coverage.

The competition was intense, but the UniBOss team emerged victorious, tackling the ANSYS challenge, showcasing great knowledge of the tool provided by ANSYS and an unconventional solution even the sponsor had not expected. As Cedric Bellanger from ANSYS said, "We had developed a sample solution before the event. But the UniBOss team surprised us by finding completely different and more efficient solution,

demonstrating their deep understanding of the Mission Planner tool."

The Ideathon offered participants much more than just a competitive platform. Aside from the challenges, it also intellectual was opportunity for cultural enrichment. The teams had the chance to explore Munich, diving into the city's rich heritage and vibrant culture. Their experiences ranged from visiting the iconic Hofbräuhaus to have "Weißwürste", a Bavarian classic, to discovering hidden gems around the city, making their stay in Munich truly memorable. The cultural night was hosted on Campus with multiple members of EUROAVIA Munich attending. The following day the final dinner was hosted at a fine-dining restaurant with a great view of the central Marienplatz at the city centre of Munich.

Looking to the future, this successful first edition of the Ideathon marks the beginning of what we hope will be a series of such events. EUROAVIA aims to create more opportunities like this as International Events in next Business Years. We are excited about the prospect of hosting more Ideathons or share our learnings with other Affiliated Societies for the next editions.



Congratulations to all the teams for their fantastic effort, and we look forward to future Ideathons with great anticipation.

AS München was founded in 1988. For the past 35 years, AS Munich continued to be a cornerstone of the association, hosting international and local events.

ABOUT: AS MÜNCHEN



Formation Workshop 2023

AS ATHENS | 26th NOV. - 1st DEC. 2023

From November 26th to December 1st, we had the pleasure to organise and host the annual International Event Formation Workshop 2023, an event dedicated to soft skills training sessions delivered by the EUROAVIA Training System trainers. In total, twenty-five EUROAVIAns from all around Europe, such as Spain, Romania, Italy, and other cities in Greece, attended the event.

The participants had a packed schedule as, for five days straight, they attended intense but extremely interesting workshops to enrich their soft skills. These focused on communication skills, including non-violent communication, feedback, and active listening, teamwork and conflict management, group dynamics and change management, decision making, and motivation. Across all workshops, the trainers emphasised on a training session called "Mission, Vision, and Values", a motto that EUROAVIA inherently embodies. All the training sessions were interactive and were delivered through team activities, debates, The participants caught a games. understanding on these topics, challenged their beliefs, and, most importantly, gained a wider perspective and knowledge of how association works, our values, and fundamental goals. Our trainers Leo Buchner, Edi Biliboc, Mara Gogiu, and Irina Stoican did an amazing job, and each of the participants was impressed from their delivering charisma.



Nevertheless, our event did not consist solely of work and workshops. It was an amazing opportunity for the participants to meet new fellow EUROAVIAns, that may not share the same culture, but do share the same passion: The love for travelling, space, and aviation. While exploring the beautiful and historic city of Athens, each participant engaged in interesting conversations with each other and created lifelong bonds and friendships.

As the organisation team, we, AS Athens, showcased our hospitality by offering delicious typical Greek food, such as the worldwide famous moussaka and gyros, and by showing them the most exclusive and fun places of our city. Naturally, we did not leave out an extensive tour in the historic parts of Athens, such as the Museum, the Parthenon, Acropolis picturesque Plaka, and explained the history behind each place. And let's not forget the cultural night – the oldest and most fundamental EUROAVIA tradition - a night where we each tried different drinks and sweets from every place the participants came from.



Certainly, this would not have been possible our without generous sponsors, Engineering, AVEK Vetrakos, ELVAL, Global Prep, our university – the National Technical University of Athens, efood, Red Bull, Papadopoulou, and Sklavenitis.

We are extremely grateful for the opportunity we were given to host such an amazing event, and we hope that the participants had as much fun attending our event as we had while organising it. During the organisation process, we certainly benefitted ourselves, as we really understood the EUROAVIA Spirit: possibility to create bonds with people from all around Europe with common values based work. innovation. upon hard cultural teamwork, international awareness, and networking!

Until the next IE, we wish all the best to each Local Group, and we are looking forward to building all together the wings of our future!

AS Athens was founded in 2005 by a group of Mechanical Engineering undergraduate students who shared their passion for aerospace. They hosted Fly-In 2008, FoWo 2010, Satellite Symposium 2009, FoWo 2023, and participated to the last editions of Air Cargo Challenge.

ABOUT: AS ATHENS

Drone Workshop 2024

AS VALÈNCIA | 18th - 23rd FEB. 2024

During the last week of February, from the 18th to 23rd, València had the opportunity to host the Drone Workshop 2024 event, an experience that participants to extend encouraged knowledge and skills on drone technology, without missing the chance of tasting real paella and embracing Spanish culture all week long.

On the opening day, our local members ensured a warm welcome for all participants in València, picking them up and introducing them to the city and traditions, and thus began the first introduction between EUROAVIAns. The day concluded with the Welcome Dinner, which included mainly Spanish food like tortilla or jamón. After that, everyone participated in activities which, apart from letting everyone know each other's names, it gave out joy for a great event kick-off.

Monday 19th marked the beginning of the workshop sessions. First of all, a welcome presentation covered the activities of the week, followed by welcome packages courtesy of the university and an interactive introduction to drones. What is a drone? How is the future of industry envisioned? What applications? These questions brought up engaging discussions during the session. After lunch, at the university's cafeteria, the workshop sessions continued with more technical matters on structures and materials after a visit to the university's hangar.



Tuesday emerged as one of the most enjoyable days of the event. The day started with an interesting conference on drone sustainability and the future of drone industry with Chris Janke, an aviation expert from Embry-Riddle University. Aeronautical Afterwards, morning session on aerodynamics electronics was carried out. However, the highlight of the day came in the afternoon with the first drone assembly session. Participants

able to experience the process of construction of drones from scratch. Afterwards, workshop session, after participants prepared for the Roundtable led by EUROAVIA IB President Leo Buchner. There, the infinite possibilities of EUROAVIA were explored, accompanied by its history and other fascinating details and testimonies from international WG members. It was a great opportunity for sharing experiences and encouraging new faces in EUROAVIA to make it greater and greater. After that, Cultural Night started, where it was offered a unique opportunity to discover the delights of different countries and strengthening the bonds among participants.



Wednesday stood out as one of the longest days of the event. There wasn't enough coffee in València to enable our bodies to recover and prepare for the City Tour. It began with a visit to Ciutat de les Arts i les Ciències, a monument of singular beauty and splendour where creativity and knowledge are mixed in harmony. Later, a walk through the historic centre of the city allowed everyone to enjoy the hidden wonders of València, including the Llotja de la seda, Torres dels Serrans or the Central Market, where many had the pleasure to try València's local food. In the afternoon, participants took part in a simulation session where Juan Cruz-Ayorora from CQV helped participants learn the basics of drone simulation technology with SIMNET UAV flight simulator.





After all these experiences, we reached the end of the journey. In the morning of Thursday, drones were completed in a workshop session, and then, a test flight took place in an indoor university facility. During the after-lunch break, participants had a blast by going for a walk on the nearby Malvarrosa beach (dip included!). Later, participants came back to the university for the final activity. As a kind of conclusion, the event closed with conferences from EASA and AESA on aviation safety, so that participants have all the information on the sector.



In the end, a course completion certificate was given to each of the participants. A group picture was taken and it was time to dress up for the Final Dinner at a downtown restaurant where we enjoyed a final evening together.

From EUROAVIA València, we want to express our gratitude to all who made this event possible, from the university our collaborators, and especially to all the participants. Thank you for trusting us.



It has been a pleasure to share these special days with you all.

SEE YOU AROUND EUROPE!

Several students from Universitat Politècnica de València (UPV) founded EUROAVIA València in September 2014. Throughout these ten years, the AS has undergone several leadership changes, each time witnessing renewed enthusiasm to uphold the core values it represents.

ABOUT: AS VALÈNCIA

LUSTRUM

AS ISTANBUL | 30th MAR. 2024



On the 30th of March 2024, EUROAVIA 65th celebrated its anniversary with magnificent and awe-inspiring Lustrum event in Istanbul, Türkiye, the gateway between Asia and Europe. The Lustrum, a celebration that takes place every 5 years, is an occasion to link the past, present and future with EUROAVIA members and Alumni. The event preceded the EMEAC 2024 and was filled with talks about our association, panel discussions on interesting topics and more!



After a quick welcome from the IB and the LB of AS Istanbul and the Dean from the Technical University of Istanbul (ITU), Dr. Mecitoğlu, it was time for participants to take a small trip down memory lane and relive some of the moments of our association's past! Chrysanthi Sarasiti, Communication WG coordinator, and Elia Ghisellini, European Grants WG coordinator, presented how from the founding of the association back in 1959 to the dawn of the 21st century, EUROAVIA faced and went through many difficulties having to do with its identity as an organisation, its activities and its goals. We were all astonished and felt an immense number of emotions seeing all our familiar terms such as Working Groups, International Events and even the International Board itself take shape through the years, to the form that we are familiar with in 2024!

Continuing with the references from the past of our association, a panel discussion was held with EUROAVIA Alumni and former IB

members, Stephan Barlet and Mattia Maltauro talking with Elia Ghisellini about the evolution of the association and what qualifications a young engineering graduate should have, in order to achieve professional success! With EUROAVIAns from three different generations and from across two different centuries, the discussion that took place was incredibly interesting and offered a supremely insightful view of how past and present interact on modern, currently hot topics...



After a quick coffee break, we continued to enjoy another presentation from a EUROAVIAn Alumnus, Rareș Bișag, from AS Bucharest, who talked about the different parties involved in the EU space sector, as well as his very own ROSPIN association, (Romanian Initiative). ROSPIN is a non-profit organization that aims to develop the Romanian space ecosystem through various projects activities. Prof. Dr. Sevinç Asilhan followed Rares on a journey of the history of the Aeronautics and Astronautics department of ITU, a story with many interesting aspects. She put special emphasis on how EUROAVIA can be very impactful on young talented engineers.

What came next was the story of EUROAVIA's current status across its last couple of years of existence, presented by Victoria Maria Prieto Rueda, of the FIB 2021/22. Since most of us participated in the situations and developments presented, it was an especially emotional experience, unlocking many memories, both good and bad...





After the lunch break, our gracious sponsors presented themselves!

Nathaniel Green of AIRBUS proceeded to present the company itself, who kindly sponsored the Airbus Sloshing Rocket Workshop, as well as the competition itself. Afterwards, Cédric Bellanger of ANSYS, one of EUROAVIA's biggest fans, gave a speech about how ANSYS helps to develop the next generation of engineers! Both presentations were fascinating, and we would like to thank both companies for being proud sponsors of EUROAVIA! Udaya Silva was next to take the stage and gave a fascinating presentation about his personal life journey, from his studies all the way to the present day, titled "The Journey of a Reluctant Engineer". It was a great opportunity to see how beneficial it can be to grasp all the potential offered to us! All sponsor presentations were a glimpse of the opportunity EUROAVIA can give to its members, as well as how the industry works and views us students!



What followed was a speech from another EUROAVIA Alumnus, Lukas Loidol (formerly of AS Stuttgart) who spoke about what he saw as key qualifications for professional success. This served as an intro to the last panel discussion of the day, where Lukas, alongside Dimitris Gouskos (FIB from AS Athens), Mara-Alessandra Gogiu and Leo Buchner, spoke about the same topic, moderated by Janis Mauch! We would like to thank all EUROAVIA Alumni who spoke and participated in the panels, and allowed us to access their vast pool of experience working in the industry as well as

network with them! We would not have reached this level without them...

The event closed with a short view on the future of EUROAVIA, presented by our current IB President, Leo Buchner. The 5-year plan served as the keystone of his speech and is obvious how it shines a bright light to the future prospects of our association!

After the closure ceremony, we were treated to a magnificent Gala Dinner of Royal proportions, as we dined, networked, discussed, danced and celebrated 65 years of EUROAVIA on a boat in the Bosphorus! There could not have been a better EUROAVIAn moment, that could unite EUROAVIAns of all sorts of different ages and cultures into one single memorable shared experience! The essence of EUROAVIA was brightly shown beneath the bright Istanbul starlit sky, and the spirit of this beautiful association was perhaps the star shining the brightest, that night...

The Lustrum brought together EUROAVIAns of every age, country and generation together into a day of celebration for EUROAVIA's 65th anniversary. It gave us all opportunities to chase, information to follow, glimpses of the past to remember and memories to remember... We are certain that the 70th anniversary Lustrum will be just as bright as this one!

Written by

DIB Officers, Stamatis Moraitis and Elia Ghisellini.

EMEAC 2024

AS ISTANBUL | 1^{st} - 5^{th} APR. 2024

fellow EUROAVIAns! Greetings, Hosting EUROAVIAns from all over Europe in our beloved city of Istanbul was an absolute pleasure. Let us reminisce about this thrilling congress and Lustrum celebration, packed with unforgettable moments.

Our journey began on March 29th, as participants from all over Europe arrived in Istanbul to attend the EMEAC & Lustrum Celebration. The day ended with a warm welcome dinner, setting the perfect mood for the days ahead in anticipation of the Lustrum event. On March 30th, we gathered to celebrate EUROAVIA's 65th anniversary! In the evening, we took an enchanting boat trip on the Bosphorus; enjoyed a gala dinner under the starlit sky, and along the views of two continents on each side (Europe and Asia), where we created memories that will last a lifetime.



April 1st marked the start of the EMEAC, which offers business meetings of great importance in shaping the future of EUROAVIA. But it was not all business! On April 3rd, we took a break from the conference halls to explore the vibrant streets and majestic landmarks of Istanbul with a city tour. We immersed in the rich tapestry of culture and history that this magnificent city has to offer.

We started our tour with The Grand Bazaar which was constructed in 1455 as one of the world's first indoor shopping centres and explored the Historical Peninsula of Istanbul, which incorporates many landmarks from both Ottoman and Byzantine Empires. We walked through Sultanahmet Square, seeing Topkapı Palace as a grand example of Ottoman architecture.

Moving on to a UNESCO World Heritage Site: Hagia Sophia which preserved the glory of being the largest cathedral in the world for a thousand years. We then visited another architectural marvel of its time, The Blue Mosque, taking its name from the traditional Turkish tileworks decorating its walls. After finalizing our tour around the Historical Peninsula, we went to Kabataş to take a walk along the Bosphorus that separates Europe from

Asia and took a glimpse to the Asian Side of Istanbul once again. Lastly, we visited the gardens of Dolmabahçe Palace; one of the greatest examples of Rococo Revival style architecture in Istanbul, which also served as the presidential residence during the first years of Turkish Republic.

In the afternoon, we attended the presentation of our event sponsor Istanbul Grand Airport Academy; where we were informed about the organisational structure and activities of an airport academy, also taking insight about their future projects.

After a day of exploring the city to its fullest, on April 4th, we went back to business with the presentations by our esteemed DIB candidates Elia Ghisellini and Stamatios Moriatis. After a day of heedful discussions both DIB candidates were elected as new DIB officers, and we wish them a year filled with success in their new roles.

Finally, we concluded our congress on April 5th, with the final dinner, a time to reflect on the friendships forged, knowledge shared, and cherished experiences throughout incredible week.



As we bid farewell to all EUROAVIAns leaving our city, the only words left to say were how grateful we felt. We wholeheartedly thank all who participated and contributed to making this congress a resounding success. See you around Europe!

The ITU Aeronautical and Astronautical Engineering Club's was founded on the 4th of January 2001. It became AS Istanbul during **EMEAC** 2002 in Lisbon. Notable International Events organised in Istanbul include Fly-In 2001, EMEAC 2003, EMEAC 2008, FoWo 2013, EMEAC 2018, EMEAC and Lustrum 2024.

ABOUT: AS ISTANBUL

One World One Fight Symposium

AS ANKARA | 29th MAR. - 5th APR. 2024



Between May 7th -12th, 2024, AS Ankara had the opportunity to receive EUROAVIA members from all around Europe for the One World One Fight Symposium, an event focused on the challenges faced in the aerospace industry by individuals such as gender discrimination, racism. The symposium aims to emphasize a collective effort to address global issues such as sustainability in the aerospace industry, security concerns faced in both civil and military aviation and problems faced in international joint projects.

On the arrival day, May 7th, we had the welcome dinner where went to a classic Turkish Kebap restaurant and introduced our guests to Turkish cuisine. After dinner, we had a little tour in the city centre, we explored the places where the students commonly hangout.

During May 8th, participants were concentrated on the seminars of the symposium, where they opportunity to deepen the their understandings of the usage of wind tunnels supercomputers for Computer Fluid Dynamics (CFD) in the aerospace industry. Participants also had the chance to discuss their own ideas with each other and the speakers. As we came to an end for the first day, our sponsors, Space Camp Turkey and iGA Academy did their presentations. To end the day, we paid a visit to Anıtkabir, which is the memorial site of Türkiye's founding father. On our way to the Anıtkabir we had a little stop at 7. Cadde which is the most famous street in the city and ate some Turkish street food.

On May 9th, the second day of the symposium, the participants learned about the Europe's sustainable aviation, workplace gender discrimination and women in aviation and, the importance of the space situational awareness and the space debris. After the seminars we had a visit to our university's museum, while we were on our way to the museum, we got the chance to check out the Motorsport Days, and event organised by our university, where we

had the chance to see old racing cars from 80s, rally cars and a little presentation from our university's Formula Racing team. In the museum we saw an old C-47 from the Second World War and some very cool jets such as the RF-4, the F-104 and a bunch of old American cars from the 30s. In the museum we also had the chance to inspect an old fighter jet's engine. To end this intense day, we had the cultural night, where we spend a great time together.



From May 10th to the 12th, the participants explored the beautiful capital of Türkiye, Ankara and our university's facilities. We visited the three of the most famous museums in the city where we had the chance to see artifacts from the oldest settled civilization who lived in Göbeklitepe. After visiting the museum, we climbed to the castle of Ankara and admired the great view of the city from the top of the castle which is on the highest point of the capital. Furthermore, we explored the beautiful campus of our university and had a little tour on the RUZGEM, one of the biggest wind tunnels in the world. We also wandered around the hangar where our technical teams work in and learned the process of making composite materials parts. Finally, we showed the participants our department, the labs and our association's room along our collection of aviation materials, some of which date back to the 60s.

During the week participants also discovered the Turkish cuisine to its deepest.

The METU (Middle East Technical University) Aviation Society was founded in 1989 by a group of aerospace engineering students as the first aviation society in Türkiye. They joined EUROAVIA in 2002, since then we have actively participated in events and hosted Fly-In 2005, EMEAC 2007, UAV Symposium 2010, AMEAC 2014 and Fly-In 2018.

ABOUT: **AS ANKARA**

Fly- In

AS BORDEAUX | 27th MAY - 1st JUN. 2024

This B.Y., we had the opportunity to host a Fly-In, welcoming EUROAVIAns from all over Europe. We took the chance to also organise a conference open to the public during this week, called "Conquering a new sky".

After welcoming and helping our visitors get settled in the residence the evening before, on the 28th we started the day with a Team Building activity. We formed 7 teams of 3 participants with the goal to get to know each other while designing a water rocket that would be tested at a competition. During the whole week we were trained by the NAASC, Association of higher education institutions in Nouvelle-Aquitaine, at the *École nationale supérieure d'Arts et Métiers* (ENSAM).

In the afternoon we visited the Aerocampus Aquitaine campus and saw the different training courses that are given there. From maintenance to test benches and military training (helihovers, Rafale maintenance, Falcon 7X, etc...). We were lucky to be accompanied by one former engineer of the air force and a former engineer on Rafale.



On Wednesday morning, we continued the construction of the water rockets and then we organised the competition to launch them. The competition was filmed by a drone used by Mr. Belly (NAASC, AJSEP). The winner was decided by the following aspects: whether the parachute works or not, the maximum height reached and the design. For the anecdote, we won with a height of 48 m! At the end, the teams received medals that we had machined in the ENSAM workshops.

Then, in the afternoon we visited the AIA test benches, on the site of *Crois d'Hins*. The site director welcomed us, and an engineer of AIA explained us the operation of the test benches. These benches are used to test engines at full power, including post-combustion for turbojets before delivering them to customers. We were able to see the benches of the M-53 engines of Mirage 2000, and those of military helicopters like the Tiger.

During the evening, we had our cultural night, where we had a chance to celebrate and relax. We decided to leave the next day's morning free, so our participants would recharge their batteries and get ready to walk around Bordeaux's city centre.

On Thursday the 30th, we hosted the conference "Conquering a new sky" at Talence campus. The aim was to raise awareness of the future of aerospace, a future in which engineering students will be at the forefront.

To this end, three speakers participated:

- Mr Buffenoir, DT of Way4Space, speaking on the Newspace
- Mr Soldano, Rafale program officer for the French Navy, speaking on the future of this aircraft (AI implementation, SPECTRA, and other)
- Ms. Chevalier, flight test manager at the DGA, speaking on the presentation of her course and a test campaign.

The conference brought together more than fifty people including EUROAVIANs, students, professors and industrialists. It ended with a buffet in which the speakers and participants came together and had a chat about the topics discussed during the conference.



On the last day we took a trip to the Dune du Pyla. Participants were able to enjoy this beautiful place to swim and admire the landscapes of the French coast. The week ended with a «final dinner» at the Bistro Régent, allowing us to exchange one last time about this week and say goodbye.

AS Bordeaux was founded in 2018. They are based in "École Nationale Supérieure D'Arts et Métiers" -ENSAM- in France in the campus of Bordeaux. Before the Fly-In that took place this year, they have also hosted a Fly-In in February 2020 that was the last International Event before the COVID-19 hit.

ABOUT: AS BORDEAUX

FUTURE & BEYOND

ONLINE EVENT | 24th - 27th IUN. 2024

"Future and Beyond" was a 4-day online event held from June 24th to 27th, 2024, organised by EUROAVIA to connect students with companies in the aerospace industry. This event provided an extensive platform for learning, networking, and career development, designed specifically for students eager to enter the aerospace sector.

The event's program contained a mix of training sessions, workshops, panel discussions, and presentations from industry leaders. In addition, students had the opportunity to participate in (B2S) Business-to-Student meetings facilitated companies, which valuable opportunities networking and direct interactions with potential employers. The main event was hosted on the virtual platform GatherTown, while the B2B and B2S meetings were conducted on the b2match platform..



In GatherTown you can customise your avatar to look like you!



The event began with a series of training sessions designed to give students some essential career-building skills. Topics included in these sessions were trainings on interview techniques, CV writing, decision-making processes, and negotiation strategies. These initial sessions provided the students some practical tools and insights which are crucial to succeed in the competitive aerospace industry.



24th-27th June 2024





The amazing trainers from ETS were: Leo Buchner, Johannes Brommer, Zeynep Sude Ormancı, Pavi Singhlitt, Andrei-Robert Maftei, and Smit Patel!

The following two days were packed with specialised sessions that delved deeper into industry-specific topics. One session was led the European Union Aviation Safety Agency (EASA), which provided an overview of aircraft accident investigation processes. This session highlighted EASA's role in monitoring and supporting accident investigations, emphasising the importance of safety in aviation and the rigorous processes involved in maintaining high standards in the industry.



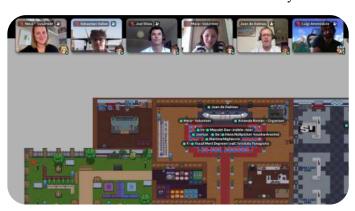


Another session was conducted by AiShed, focusing on personal finance and the importance of financial literacy for young professionals. This workshop addressed essential topics such as the significance of saving and investing, budgeting, and long-term financial planning.



Aeroshift also hosted a workshop dedicated to bridging the gap between academia and industry. This session tackled the transition from academic life to the professional world, addressing challenges common such managing expectations and overcoming barriers.

Throughout the event, participants were inspired by talks from industry leaders, including Juan de Dalmau and representatives from the European Space Agency (ESA), who shared their visions of the future of space and aerospace technology. Industry talks from organisations such as SEAC, Hyper Wind, MTU, and FlyingBasket SRL completed the program. These presentations provided students with a comprehensive understanding of the current state and future direction of the industry.



Two significant panel discussions were also conducted during the event. The first, titled "Navigating the Skies: Career Paths and Skills for Success in Aerospace," was done to guide students through the myriad career paths available within the aerospace sector. Experienced professionals shared their career journeys and highlighted the key skills necessary for success, emphasising importance of both technical expertise and soft skills like communication.



Did you know that out of 35 participants there was only one not studying for an engineering degree?

The second panel, "Adapting to New Horizons: Evolution and Challenges in the Aerospace Sector," focused on the industry's rapidly changing landscape. Experts discussed the impact technological of advancements, regulatory changes, and global trends on the industry, providing students with insights into the challenges and opportunities that lie ahead. This discussion aimed to form students with the knowledge needed to navigate the evolving aerospace sector and to prepare for the dynamic nature of the industry.

The final day of the event was dedicated to B2B and B2S meetings, where students and industry professionals connected directly. Over the four days, fourteen companies and organizations, along with around 30 students, participated in these meetings, making the event a unique platform for networking, skill-building, and



Thanks to the B2B during the event, one participant managed to secure an internship position at MTU!

exploring potential career opportunities.

"Future and Beyond" successfully bridged the gap between students and industry, offering students not only the chance to learn and grow but also the opportunity to connect with potential employers and begin their journeys in the aerospace sector. The event remarks the importance of continuous learning adaptability in an industry that is constantly evolving, providing students with the tools and connections they need to succeed in their future careers.

Written by

IB Treasurer, Amanda Román Navarro.





SPONSORS:























ATTENDANTS:







Air Cargo Challenge

AS AACHEN | 9th - 13th JUL. 2024



The Air Cargo Challenge (ACC) 2024 took place in Aachen, Germany. It was hosted by the Aachen Drone Development Initiative (ADDI) and AS Aachen. While ADDI oversaw the competition itself, EUROAVIA Aachen took care of everything around it. ADDI had the opportunity to host the event this year since they won last edition of the ACC that was held in Munich, 2022. It is a competition for university students in the engineering or science fields, which offers practical application of the acquired knowledge in aircraft modelling.

From the 9th to 13th July 2024, 300 participants from 16 countries, including the USA, India, China, Australia and all over Europe, travelled to Aachen. The 30 teams designed and built their aircraft specifically for this competition. Each team had to comply with technical requirements while showing that their aircraft was fast, efficient and capable of carrying a large payload. Everyone watched their own and other team's planes with great enthusiasm and passion, hoping to come out as the best.

The competition was held at the airfield of the Condor Würselen e.V., a local model flying association. They helped by providing flight directors for the competition, the sound system and much more. Additionally, there was a big, sturdy tent where all 30 teams had booths to work on their planes and take shelter during rain. A big screen stood in front of the tent and displayed the current standings.

The Welcome Dinner took place on the first day of the event, where the participants had the chance to meet each other for the first time and watch the European Football Championship game together. While the first competition day (the 10th of July) started with the technical inspection of all planes as well as a safety and pilot briefing. After lunch, each team had the opportunity to perform a test flight.

On the second day of competition, the sun continued to shine, allowing for two whole rounds of competition flights. Afterwards, the shuttles drove everyone to a restaurant where we had dinner together. While the weather on Friday morning, the final day of the competition, did not allow any flights, a third competition round was completed in the afternoon, leaving time for some fun flights before the award ceremony.

Adding to the excitement of the competition, each day featured lunch and dinner after a long day of hard work, providing participants with a chance to relax, socialise, and share experiences. These gatherings helped build friendships among the attendees and added to the overall enjoyment of the event so that everyone could socialise outside the competitive environment.

After three thrilling days of competition, the winners were announced amid great excitement. With the team Akamodell Stuttgart triumphantly taking first place, their victory means that the Air Cargo Challenge 2026 will be held in Stuttgart, already generating buzz and anticipation for another spectacular event!

During the award ceremony, the tables in the tent were rearranged for the final dinner. After dinner, a lively party was organised where participants celebrated their achievements. The evening featured music, food and drinks, and provided a perfect conclusion to the competition and leaving great memories and experiences in people's minds.

AS Aachen was founded in 1959 and still upholds its old traditions. From the exhibitions participation to the organisation of the Air Cargo Challenge 2024, AS Aachen always manages to attend the highest number of events.

ABOUT: **AS AACHEN**

AIRBUS Sloshing Rocket Workshop

AS LISBOA | 9th - 15th AUG. 2024

The 5th edition of Airbus Sloshing Rocket Workshop (ASRW), a prestigious event for aerospace engineering students, took place in Lisbon, at the Instituto Superior Técnico and the Portuguese Air force Academy facilities from the 9th to the 15th of august 2024. In this year's competition, several records were broken, including the highest number of registrations, greater horizontal flight distance and highest number of successful launches. A team from the University of Bologna and AS Forlì-Bologna, "Squirrel Works", comprised of members from Italy, Spain, and Colombia, claimed victory at the end of the event.

This competition, sponsored by Airbus and hosted by AeroTéc (Aerospace Engineering Students' Association of the Instituto Superior Técnico) in Lisbon, Portugal gave the opportunity to 5 finalist teams to be immersed in the technical challenges of rocket design, demanding novel approaches to overcome the destabilisation effect caused by the movement of liquid within the rocket, and also to get to know an European capital city filled with history and a rich cultural heritage.



This week was the perfect opportunity for the teams of students from the University of Bologna (Squirrel Works), TU Delft (Not Entirely Unlike a Rocket), TU Berlin (Skyhawk Squadron), Zewail City of Science and Technology (ZC-Wings) and Gebze Technical University (Water Wings) to experience a unique blend of technical learning and cultural exchange, with activities such as a welcome dinner, the cultural visit to the city centre, the cultural night and the final dinner.

On the 14th of August, the participants left the university facilities and got to explore one of the Portuguese Air Force Academy bases, in which the final launches of the competition would take place. After presenting their projects, the teams got to visit this unique facility and perform the final launch of their rocket, which signalled the end of the competition. This final began with the



flight from the winning team, Squirrel Works from the University of Bologna, who broke the record with a 26m flight. After all the launches took place, the teams left the Portuguese Air Force Academy facilities and got ready to celebrate this hard-working and memorable week with the well-deserved final dinner.

After a rigorous evaluation by a panel of judges, including three experts from Airbus and one of the main associate professors from AeroTéc, the Italian team emerged victorious. Their design was unanimously praised for its outstanding innovation, stability, overall performance, and was also accompanied by a great technical report and presentation, securing them the first place. Not Entirely Unlike a Rocket earned second place, while Skyhawk Squadron, Water Wings and ZC-Wings finished third, fourth and fifth place, respectively.

This event couldn't have happened without the help of Airbus, MathWorks, the Portuguese Air Force Academy, Instituto Superior Técnico, Instituto Português do Desporto e Juventude, Ansys and Beyond Gravity.

This competition not only highlighted the outstanding talent and creativity of the participating teams but also strengthened the collaboration between AeroTéc, EUROAVIA, Airbus, and academic institutions across the world. The success of the 2024 edition is expected to inspire future generations of engineers and researchers, further advancing the field of aeronautics and space exploration.

The formal foundation of AS Lisboa was on the 30th of June 1996 and the participation in the AMEAC led to its settlement. Through the decades they organised several national events, like the Semana Aeroespacial, an event that always gathers thousands of students and has led to the foundation of the Air Cargo Challenge (ACC) back in 2003.

ABOUT: AS LISBOA



EXHIBITIONS & CONFERENCES

A new era for EUROAVIAns embarks with our organization's participation in exhibitions and conferences that shape the aerospace world! Learn more about this year's visits in this section of the EUROAVIA Magazine!

Aviation for Girls by AviAll

AMSTERDAM, NETHERLANDS | 28th OCT. 2023

On the 28th of October 2023, we had the great pleasure of participating in the event "Aviation for Girls" (A4G) 2023 in Amsterdam (Netherlands) organised by our collaborator AviAll - Aviation for All, and hosted by the Aviation Academy Amsterdam.

AviAll is an association of D&I practitioners across the aviation industry who share a common vision: An aviation industry that is as diverse and inclusive as possible. To make this possible, they regularly organise events, educational outreach programs for youth, development and mentoring, conferences, and networking events.

During the recurring event A4G, high school students had the opportunity to engage with inspiring women working in the aviation sector.

It was a diverse and inclusive educational event that brought together young people from twenty different nationalities and many different backgrounds. We have supported the event by being present with a stand at a Career Fair, with the former Coordinator of the Communication Working Group Elena Tonucci representing EUROAVIA. Elena answered any questions and doubts of the young students and presented the opportunities that EUROAVIA offers to its members.



No one better than EUROAVIAns know what it means to approach the modern aerospace field. In addition, being able to inspire and give guidance to the new generations stands strong in our vision for developing a united and innovative future European aerospace sector.



Other companies and associations joined the event including the European Union Aviation Safety Agency (EASA) represented by the Safety Promotion Officer Antonio González Gómez, EUROCONTROL, Wings For Aid, Pratt & Whitney, Jet Aviation, AERO Friedrichshafen, and many others. Our Local Group in Oostende also joined the event together with representatives of their university, VIVES, bringing EUROAVIA even closer to the young participants from a local standpoint.

We are happy to have been invited and have participated to A4G, which was perfectly organised by the many volunteers to whom we owe the success of the event, and especially to the President of AviAll, Nargis Zamaray. EUROAVIA is looking forward to supporting the next editions of A4G in the future and continue guiding new generations of engineers.

European Space Conference

BRUSSELS, BELGIUM | 23rd - 24th JAN. 2024

This year, EUROAVIA had the privilege of participating in the European Space Conference on the 23rd and 24th of January 2024. Annually, the European Space Conference brings together key players from the space industry, agencies, and government. Our involvement in this event underlines our commitment to bridging the gap students and aerospace professional space community and strengthen the voice of youth in the space sector.

conference, leading policymakers, and industry leaders discussed the latest advancements, challenges, opportunities in the space sector. Panels on the topic of European access to space with the – now successful – Ariane 6 launch and collaboration on defence topics have been given special attention in panel discussions.

We participated in a podium discussion on space education at the conference and used an invaluable opportunity to showcase the talent and enthusiasm of our members while engaging with influential figures in the aerospace and space industries. The panel discussion was moderated by eurisy and also included attendants from the European Space Agency (ESA) and UNIVERSEH, a group of universities tackling space related problems with interdisciplinary approach.

Throughout the conference, we had the chance to attend numerous presentations and panel discussions covering a wide range of topics, from the future of space exploration to the role of space technology in addressing global challenges. These sessions provided deep insights into the current trends and future directions of the space sector.

One of the key benefits of attending the Space Conference European was opportunity to network with a diverse range of professionals from the space sector. EUROAVIA took full advantage of this, engaging in conversations with representatives from leading space agencies, private companies, and research institutions. These interactions always open doors to potential internships, collaborative projects, and mentorship opportunities, and strengthened the value of EUROAVIA's network.

Our participation in the European Space Conference was a success, providing our association with unparalleled exposure to the forefront of the space industry. The knowledge gained, connections made, and experiences shared will undoubtedly have a lasting impact. EUROAVIA aims to participate in the conference again in 2025.



As we look forward to future conferences and events, EUROAVIA remains committed making the connections between students and the space industry. By providing these opportunities, we continue to inspire and equip the next generation of aerospace professionals, ensuring that they are well-prepared to lead and innovate in the rapidly evolving space sector.

We would like to encourage all EUROAVIA take advantage members of opportunities to learn, network, and showcase their talents. Through EUROAVIA International, many doors open that would otherwise be closed. Together, we can continue to build a strong, dynamic, and innovative aerospace community that will shape the future of space exploration and of Aerospace as a whole.

Airspace World

GENEVA, SWITZERLAND | 19th - 21st MAR. 2024



We, EUROAVIA, had the opportunity to attend Airspace World 2024, an event organised by the Civil Air Navigation Service Organisation (CANSO). As the global representative for the Air Traffic Management (ATM) sector, CANSO brings together air navigation service providers, innovators, and industry experts to share knowledge, establish best practices, and shape the future of secure and efficient airspace operations.

Throughout the event, we actively engaged in conversations with numerous companies. The final day of the conference was particularly special, dedicated entirely to young talent. The day kicked off with our participation in the breakfast with CEOs, a unique opportunity for young professionals to interact directly with industry leaders.



The highlight of this day was the launch of CANSO's new initiative, Tomorrow's Voices, aimed to attract young talent to the ATM field. As part of this initiative, a survey was conducted where some of our members participated actively gathering valuable insights.

A remarkable moment of the event was the signing of a partnership agreement between EUROAVIA and CANSO. This partnership aims to bridge the gap between young talents and the ATM sector, fostering a new generation of professionals through core aerospace activities. This collaboration will help bring skilled professionals ready to innovate and lead in the industry.



EUROAVIA's presence at Airspace World 2024 not only provided invaluable contributions to the latest advancements in ATM but also reinforced its commitment to empowering the next generation of aerospace professionals.

PACE Challenge

BERLIN, GERMANY | 23rd - 24th APR. 2024

In collaboration with our sponsor, PACE TXT, EUROAVIA hosted the 2nd edition of the PACE Challenge. Last year's challenge was focused on designing an aircraft based on requirements, with finalists presenting their findings at the PACE Days fair in Berlin, culminating in the announcement of the winning team.

This business year, the PACE Challenge tackled a highly relevant topic in the aerospace sector: extended applications. The aerospace industry is characterised by standardised processes and intensive training to meet stringent safety standards. For instance, cabin crew staff must undergo extensive theoretical and onboard training, which is both time-consuming and To streamline this process, more companies are adopting extended reality applications for innovative training methods. Consequently, PACE TXT defined the theme of this year's edition as "PACE Innovators Awards in eXtended Reality Training in Aviation."

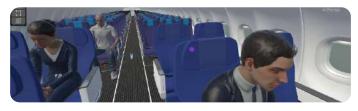
The challenge focused on designing a virtual training environment for cabin crew. Teams were provided with PACE's PACElab WEAVR software, which includes a comprehensive library of pre-designed aerospace-related assets, simplifying the creation of virtual environments. To optimise and test their creations, PACE also supplied the teams with virtual reality headsets.

Following the initial briefing and several training sessions to introduce the participants the WEAVR software, the teams commenced their design processes.



Two finalist teams emerged, both of whom were invited to present their projects at the PACE Days in Berlin.

Wings of Icarus (AS Forlì-Bologna): This team designed an extended reality training focused on handling a passenger with cardiac arrest. The training took place in an aircraft cabin, detailing the process of retrieving a defibrillator from overhead bins and performing the required medical actions. It included textto-speech and on-screen instructions, adhering to certified onboard procedures to enhance realism.



FAWKES (AM Cairo): This team opted for a broader approach, creating a training module to familiarise cabin crew with onboard equipment. The module included a walkthrough of the galleys and management of lavatories



At the PACE Days, each team presented their finished projects, which had been previously reviewed by a jury from PACE TXT. After the presentations, "Wings of Icarus" won the award for the best concept, while "FAWKES" received an award for the best presentation.

The PACE Days event concluded with extensive networking opportunities and a pleasant surprise for the teams: they were allowed to keep their VR headsets instead of returning This them as initially planned. underscored the commitment of PACE TXT to encourage innovation and continuous learning in the aerospace sector.



AERO Friedrichshafen

FRIEDRICHSHAFEN, GERMANY | 19th APR. 2024

On April 19th, 2024, EUROAVIA had the unique opportunity to attend the General Aviation Fair, "AERO," held in Friedrichshafen, Germany and we were represented by members from AS Dresden on this year's event. The fair provided us with an excellent platform to explore and discuss the latest developments in the general aviation sector. One of the key topics featured during this edition was the progress in electric aviation carbon-neutral technologies. Although currently practical only for short-haul flights, the potential for these innovations to significantly reduce greenhouse gas emissions is undeniable and promising.

In addition to attending the fair, we also had the honour to have our own booth during the fair. This allowed us to have direct contact with various companies and other student groups involved in aviation. Our representatives engaged in discussions about the upcoming opportunities and challenges that the aviation industry is likely to face in the coming years and explored how students like us can contribute to and benefit from these advancements.

During the duration of the event, we showed through the EUROAVIA Instagram account the development of the fair to showcase the diverse and exciting aspects of the general aviation sector.



Through the stories, we highlighted the technologies and innovative approaches being developed within the industry. We also interacted with our followers by answering questions about EUROAVIA and sharing insights from the fair.

Overall, the AERO fair was an enlightening experience that not only expanded our knowledge of the general aviation industry but also allowed us to actively engage with likeminded individuals and organisations passionate about the future of aviation.



Beiras Airshow

CASTELO BRANCO, PORTUGAL | 10th - 12th MAY 2024

EUROAVIA is thrilled that this year we had the chance to participate in the Beiras Airshow 2024 from May 10th to May 12th, 2024. This event was hosted in Castelo Branco, Portugal's beautiful interior, and was an exciting experience for all aviation enthusiasts. Our presence at the airshow underlines EUROAVIA's commitment to connect with our local groups, aerospace students and the broader aviation community.

AEROUBI, EUROAVIA's AS in Covilhã and organisers of the Beiras Airshow, created a dynamic and engaging program, ranging from aerobatic performances to model airplane flights and created a buzzling place for aviation enthusiasts and the local community to gather. The pilots flying the acrobatic displays managed to impress viewers in perfect summer weather.

A special attraction was the attendance of the Portuguese Air Force that allowed attendants of the Airshow to take flights in their C130 aircraft. Next to the flying display, there was also the opportunity for companies and associations to participate in the event with stands placed right next to the airfield. Aviation companies from Portugal, pilot schools and aviation associations came together for the Beiras Airshow. AEROUBI had invited EUROAVIA to be represented in one of these stands. Both Covilha members of EUROAVIA WGs, and an International Board representative (our president) were present at the stand. At EUROAVIA's stand, attendees had the opportunity to learn about our latest projects, network with aerospace talent and gain an insight into the EUROAVIA's aerospace network.





One of the most notable things about the Beiras Airshow is that it is almost entirely organised by students. As such, it is one of the biggest airshows in Europe organised by students. As engaging students and promoting their passion for aerospace is at the heart of EUROAVIA's mission, the Beiras airshow is one of the prime examples of how EUROAVIA's LGs bring students, the aerospace industry and our local communities together. We can't praise enough the effort of AEROUBI and their organisation team, led by then president, Pedro Moreira, enough. The generous offer to participate, but also the invitation to the local culture has strengthen the relationship between EUROAVIA and AEROUBI. We can only hope that future generations of EUROAVIA members will also have the chance to organise such impactful events or grasp to chance to widen their horizon by visiting other EUROAVIAns!

EUROAVIA's participation in the Airshow 2024 is more than just an opportunity to display our projects; the airshow is a celebration of the dedication, creativity, and passion that our members bring to the field of aerospace. This event provides a unique platform for students to engage with industry professionals and be inspired by the wonder of flight. As we fondly look back to the airshow, we invite all our members to make ambitious projects like the Beiras Airshow reality. Together, we can continue to push the boundaries of aerospace innovation and education.

EYF Project Management Training

STRASBOURG, FRANCE | 21st - 24th MAY 2024

Between the 21st and 24th of May 2024, EUROAVIA had the privilege to participate in a Project Management Training organised by none other than the Council of Europe (CoE), the European public entity responsible for the promotion of democracy, human rights, and the rule of law across the continent in various settings. Notably, the European Foundation (EYF) is the branch of the CoE dedicated to supporting youth organisations.



During this training, Erika Aucelli, a member of the European Grants Working Group, was invited to the European Youth Centre in Strasbourg, France, to gain further insight into the management of projects within the scope of activities that the EYF, alongside other European institutions, will co-fund.

With a strong alignment to the priorities of the EYF, the training alternated between teambuilding activities — including a free afternoon aimed at fostering better connections among and non-formal education participants sessions, such as peer-learning workshops and group activities. These sessions, conducted in collaboration with the trainers, involved tackling various real and hypothetical cases of applications. We had the opportunity to exchange viewpoints and experiences with 34 other youth organisations from diverse fields, structures, and backgrounds; the Youth Deaf Community, for instance, shared the true meaning of inclusivity in an event.



We also volunteered for a peer-learning session, during which we had the chance to exchange our tools and receive advice from other, more experienced organisations. Additionally, during the networking evening, we successfully presented our organisation, gaining the interest of several other organisations for potential collaborations.



On the final day, we participated in a "speed meeting" with representatives from each Council of Europe department, where we had the opportunity to explore a future collaboration with them. The whole experience was truly inspiring!



Presenting our organisation to the CoE's Head of the Youth Department, Tobias Flessenkemper, was an incredible and unforgettable experience — one that we hope will open many doors for us in the future!

Space Meeting Veneto

VENICE, ITALY | 20th - 22nd MAY 2024



Space Meetings Veneto is a specialised event that fosters connections and collaborations within the space sector over three days. The event brings together upstream and downstream suppliers, aeronautics companies, investors, buyers, research centres, government agencies, and space agencies and EUROAVIA had the chance to participate.

The goal of the event is to facilitate business and knowledge exchange through networking sessions, workshops, seminars, exhibitions, and investment opportunities. By connecting various stakeholders, Space Meetings Veneto aims to accelerate innovation, drive industry growth, and create a dynamic ecosystem for the advancement of space technologies and applications.



One of the panels at the event was "DIALOGUE FOR INNOVATION 4: #GREENSPACE: Space Technologies to Support the Green Transition in Veneto." This panel featured an engaging discussion on the initiatives being undertaken by companies and various entities to promote the green transition. The panel included participants such as Rita Steffanutto, Director of Innovation Research, and Energy Competitiveness Department at Regione Veneto (Moderator); Carlo Bettanini, Scientific Coordinator at RIR & AIR, Università degli Studi di Padova; Carlo Moretto, Director of the Soil Quality Unit at ARPAV; Luca Stevanato, CEO of Finapp; Federica Fistarollo, Co-Founder and Managing Director of Stellar Project; and we were represented by Amanda Román Navarro, the IB Treasurer.



As EUROAVIA, we had the opportunity to students' perspectives important topic, highlighting how we are witnessing these transitions, how they are affecting our professional development, and the impact we can have as future employees in the **sector**. Some key conclusions from the panel emphasized that sustainability means doing things better and that achieving this goal requires collaborative efforts toward a common objective.

ILA Berlin

BERLIN, GERMANY | 5th - 9th JUN. 2024

Since 1909, ILA Berlin – Pioneering Aerospace has been the cornerstone of aerospace innovation, showcasing the coolest innovations in aviation, space, defense, and sustainability. This event attracts the brightest minds worldwide— industry leaders, visionary policymakers, and brilliant academics!

From the 5th to the 9th of June 2024, we got the chance not only to attend ILA Berlin but also to have a stand at the exhibition, a big milestone that we accomplished with hard work and dedication.

Our team in the stand was represented internationally by the president of the IB Leo Buchner, the Business Relations WG Back-Up Coordinator, Panagiotis Kaimasidis, and the Communication WG coordinator, Chrysanthi Sarasiti. However, our impact would not have been nearly the same without all the German Local Groups from Munich, Stuttgart, Aachen, Bremen, Braunschweig, and Dresden.

In the exhibition, the winners of the previous Airbus Sloshing Rocket Workshop competition from AS Napoli, Maria Mattiello, Vincenzo Junior Di Rosa, and Pierluca De Felice were also present and enthusiastically shared their expertise about the Sloshing effect.

During these four days, we enthusiastically joined the party, shared our projects with multiple companies, made new connections, and dived deep into the future of aerospace.

n addition to enjoying the airshow, we engaged in many interesting conversations regarding the future of our field, enjoyed a detailed tour at the MTU Aero Engines exhibition stand, and delivered an informative roundtable about what our association does.



The roundtable was delivered by Katalin Friederike Eleonora Sachse, AS Dresden Business Relations Executive, Clemens Martin Fleischer, AS Dresden President, Karl Wilhelm Funke, member of AS Aachen, and Leo Buchner, IB President for this B.Y. It was a dedicated and enthusiastic team, and we received positive feedback!

To conclude, it is undoubtedly an opportunity for our Association to grow and build a stronger community. We look forward to being present in future exhibitions and showcasing our passion for the aerospace industry!



Farnborough Fair

FARNBOROUGH, UNITED KINGDOM | 25th - 26th JUL. 2024

On the 26th of July 2024 we had the opportunity to participate to the Farnborough International Airshow. The Farnborough International Airshow (FIA) is one of the world's most prestigious events in the aerospace calendar, the latest innovations showcasing technologies in the industry. Held every two years in Farnborough, near London, this fiveday event brings together leading aerospace companies, professionals, and enthusiasts from around the globe.



But let's start from the beginning!

Participants arrived on the 25th, but we managed to meet and get to know each other only in the evening due to international delays and flight cancellations. Our group was composed of 18 people coming from different AS, WGs (as CM and BR) and the IB.

On the 26th morning, we took a train from Reading to Farnborough, and we found ourselves thrown into another world: four enormous halls filled with stands of companies presenting their ideas and their projects. Outside was even better! It was packed with planes, helicopters and drones, from historical beauties to futuristic innovations.

FIA 2024 was focused on six key themes: Space, Defence, Sustainability, Innovation, Future Flight Technologies and Workforce. On the 26th, it was mainly focused on the Workforce theme, for which the Pioneers of Tomorrow event took Aimed to students and professionals interested in a career in the sector, this event was created to inspire future generations and enable companies to highlight the opportunities they had to offer. The event was held in Hall 1, and EUROAVIA had its own stand! It was a great opportunity to connect with companies and people, from enthusiasts to someone discovering the wonders of aerospace for the first time and get them familiar with our association.



Participants at the EUROAVIA stand in Hall 1.

At noon, the flying exhibition started, and we gathered on a terrace to have a better view for what was about to happen. Our eyes were pointing up to the sky as the commentator announced the flight displays and meticulously described what we were seeing.

We witnessed flights from planes we always studied from books: the 21st century fighter jet Lightning" RAF-35, the McDonnell Douglas F-15 Eagle and General Dynamics F-16 Fighting Falcon, and also the Supermarine Spitfire! It was then the turn of the newest Airbus A321 253 XLR, which took off and flew right above our heads, of the Boeing's JAC CH-47 Chinook and of the Italian Air Force Eurofighter Typhoons.



McDonnell Douglas F-15 Eagle flying display.

At the end of the day, we took a train back to Reading and wandered around the city before sitting to a pub to eat something typical.

It was a wonderful experience being present at the Farnborough International Airshow; we had the opportunity to get a better insight on the aerospace industry and get to EUROAVIA's values with a lot of new people. We look forward to the next exhibition!

WORKING GROUP

CONTRIBUTIONS

The Working Groups are a vital force behind EUROAVIA's success, fueling collaboration and creativity. This section highlights their achievements over the past Business Year, laying the ground for what's to come next!



BUSINESS RELATIONS



While the Business Relations WG (BR WG) has dedicated its work to completing various tasks throughout the B.Y., what truly marked a difference in the work quality was the Physical Meeting held in Barcelona at the beginning of December 2023. The productivity achieved in just four days amazed all attendees, but what stood out the most was the profound shift in the vision and purpose behind the BR WG's mission. The get-together fostered a renewed sense of motivation, planting new seeds for the "how?" and, more importantly, the "why?" behind the work done. It also sparked a new vision of the immense opportunities that can be achieved in the name of EUROAVIA.

Following the Physical Meeting, the team has been working with newer and greater aspirations. The team spirit remains extremely high, and everyone is eager to work to support EUROAVIA. With the new mindset and purpose, the BR WG has been focusing on the acquisition of general sponsorships, while continuing to work on the more typical or event specific responsibilities. The members that currently compose the WG have a true feeling for what can be accomplished together and don't fail to show it with a constant dedication towards meeting BR's goals.



COMMUNICATION



This B.Y. was the year of change for the Communication Working Group (CM WG). Starting with our Physical Meeting in Rota, Spain in October 2023, we had the opportunity to bond with each other, organise our work, and analyse our marketing strategy, while swimming in the Atlantic Ocean and enjoying Spanish food. With our batteries recharged to a 100%, we were ready to dive deep into new projects filled with enthusiasm commitment. Our Social Media Unit became stronger and more populus than ever. In addition to the usual promotion of the association's opportunities, we delivered new TikTok and YouTube videos weekly with EUROAVIAn moments, showcasing the inner spirit of our association. This was a game changer in our Social Media analytics, as our target group drastically increased. Our Press Unit also included the monthly Newsletter and our weekly aerospace articles to our LinkedIn profile, strengthening

engagement in this platform. For the 65th Anniversary of our association, we majorly contributed to the ambitious project of the History Book and published a limited series of short articles about the history of our association based on this book, which attracted more audience to our blog. Finally, this magazine would not have been feasible without the work and dedication of our Press Unit members!

We plan new creative initiatives for the next B.Y., so stay tuned to our Social Media pages for new campaign announcements. So, what are you waiting for? If you want to expand your imagination and creativity, we are your ideal fit! We look forward to welcoming you to our group!



DESIGN



This year, the Design WG has been incredibly active, taking on numerous exciting projects that showcased our creativity and dedication. Despite the challenges of working remotely, we've successfully collaborated to produce outstanding work that we are proud to share with all EUROAVIAns out there. Unfortunately, we were not able to host a Physical Meeting this time, but that did not stop our creative journey!

It's safe to say our tasks were as demanding as they were rewarding, such as promotions for Future&Beyond, Ideathon, and the design of the very Magazine you are reading! One of the most arduous projects embraced this year was the merchandise for the Lustrum celebration in Istanbul and the design of the History Book. From brainstorming sessions to final production, we dedicated our whole hearts to ensure they perfectly captured the spirit of our association.

It was also the year of change, or rather, evolve, in many aspects. Firstly, we got to create new material to represent ourselves at

exhibitions, new flyers, roll-ups, and even business cards — which you all can use! Then, we also planned some exciting changes and long-due updates to our Corporate Identity (CI), the fundamental core of the WG, aimed at giving the EUROAVIA image the shine it deserves.

All of this was achieved while gaining new friends along the way and enlarging our group. As we look to the future, we are excited to build on our successes and continue pushing the boundaries of creativity. With new members and fresh ideas, we are confident that the coming year will be even more dynamic and productive. If you wish to be part of it, our doors are always open!



EUROPEAN GRANTS



European Grants in EUROAVIAn Chants

Thou EUROAVIAn who read these rhymes, recall how grants help to get the dimes!

In Sevilla the EG was voted with success And our work we now fully address.

First, the Local Groups we support: In our Database they can report.

All the grants they clearly can find So, they're shared and not slip from their mind. Collaborations are what comes next and many various topics are the pretext, Because EUROAVIA builds your wings But those are not the only things!

A European training we attended And not technicalities we presented: As the students are people in a society, Engineering is to be seen in its entirety! Writing these rhymes to expose few elements of the work and objectives of the European Grants WG (EG WG) was entraining, but the last topic treated deserves to be expanded conventionally, for a better understanding.

In our work, we often have to deal with European institutions and associations that do not belong to the sphere of interest of aerospace engineering from its technical perspective, and we came to think "are we too technical?".

The dialogue with these dimensions led us to reconsider EUROAVIA as an association capable of addressing the field of aerospace with human approach, considering environmental concerns, the impact technology on society, gender equality in engineering.

Thus, it is one of our aims to provide EUROAVIA with tools and events to create more conscious, understanding and skilled future leaders.

If you share these same visions with us, we would be happy to exchange and work together with you.

Build the wings of your future!



HUMAN RESOURCES



The word that best describes the past B.Y. in the Human Resources WG would 'evolution'.

Since the AMEAC in Seville, we have put all our efforts into assuring the wellbeing of all the members in EUROAVIA's WGs. We wanted to bring HR closer to everyone, and we did so by assigning an HR responsible to every WG, providing members with a known person they can count on if needed. Also, the lack of harassment protocols was spotted, so a taskforce inside the WG has been developing the Sexual Harassment Protocol, which draft version was presented during the EMEAC, and a Harassment Protocol that will be ready for the next AMEAC in Covilhã.

Last but not least, we have been working on some manuals to make transitions easier such as the 'New Members Manual' and the 'New Coordinators Manual' that is on its way. Of course, we have kept doing our main task that is welcoming and guiding every new member into WGs, handling over 50 requests. If want contribute to EUROAVIA and enjoy meeting new people, this is your WG. Join HR!



STATUTES & **BYLAWS**



During this B.Y., the Statutes and Bylaws WG has successfully restructured the financial framework of EUROAVIA. By amending the bylaws, we have ensured the continuous development and stability of our association. These critical changes enhance transparency and efficiency in our financial operations, allowing us to allocate resources more effectively and support a wide range of initiatives and projects.

A significant development is the inclusion of a law student as part of the WG. This addition has been transformative for our WG, bringing a higher level of expertise in legal matters that is crucial for many of our tasks. This expertise has not only strengthened our framework but also boosted the confidence of the group in making informed decisions.

Overall, these changes ensure EUROAVIA remains adaptable and resilient, better equipped to navigate challenges and seize new opportunities.

By maintaining a strong legal and financial structure, we continue to promote a vibrant and dynamic community, committed to innovation and collaboration within our field. Additionally, it is now a requirement that every member must have at least one cat or a direct affiliation with a cat, adding a purr-fect touch to our team (dogs can work too).



LOCAL GROUP CONTRIBUTIONS

Local Groups are the heart of EUROAVIA, uniting aviation and space enthusiasts across universities in Europe and beyond. Explore their stories of unique events and projects and let them inspire you for the new Business Year!

AS ATHENS



ABOUT THE AS: **AS ATHENS**

AS Athens was founded in 2005 by a group of Mechanical Engineering undergraduate students who shared their passion for aerospace.

They hosted Fly-In 2008, FoWo 2010, Satellite Symposium 2009, FoWo 2023, and participated to the last editions of Air Ĉargo Ĉhallenge.



This Business Year (B.Y.) was crucial for EUROAVIA Athens, as it was filled with many exciting projects. We started by setting goals that we wanted to fulfil, with the most significant one the Air Cargo Challenge (ACC) Competition 2024 that is taking place in Aachen, Germany from the 9th to the 13th of July 2024. The competition involves designing, documenting, building, and flying a radio-controlled aircraft with the best and highest combination of large payload, excellent efficiency, and high speed.

As this was an ambitious and demanding project, we decided to do a "test trial" and build an aircraft -ATLAS- outside of the competition's regulations. This would help us understand better the procedure of building an aircraft, which involves practicing and using certain manufacturing techniques and finding out what works best for us. This was also the time to use our imagination and experiment on aerodynamic and structural parameters of the aircraft.



Therefore, the goals that we wanted to fulfil with project ATLAS can be summarised in the following points. First, we decided to test different configurations, such as V-tail, VTOL, and various airfoils to validate our design methods and calculations. Similarly, we also tested different manufacturing methods, such as carbon fiber-foam main wing spar and reached a conclusion on which is the most efficient one, both in terms of performance and price.

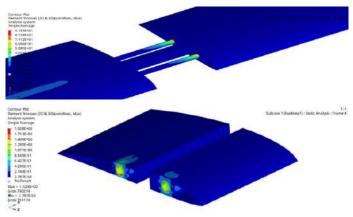
Moreover, we had a cargo bay for payload dropoff and billiard balls base, matching with the ACC 2024 Competition payload requirements. In March 2024, after 6 months of hard work and dedication, we reached a milestone for our Local Group (LG) by completing this ambitious project. Our technical team completed the manufacturing process of ATLAS aircraft and successfully performed a flight test, gathering important data for the upcoming ACC Competition. More knowledgeable than ever and filled with more confidence and stronger team spirit, we were now ready to start our journey for the ACC Competition. We analysed our observations from the ATLAS Project and decided on how to better implement our newly acquired knowledge to our benefit.



This is going to be our 6th entry in the competition with the aircraft "Hermes VI", which is currently under construction. Due to the new points scoring system in ACC, we adapted our approach enhancing our focus on optimizing aircraft design and flight trajectory to meet the competition's multifaceted objectives. Initial experiments conducted in the university's wind-tunnel facilities assessed motor performance with various propellers across different wind speeds and throttle These experiments led to the settings. development of a comprehensive enginepropeller map database through data interpolation, facilitating refined analysis.

Final design choices were validated through post-processing of the evolutionary algorithm's results, employing methods like Principal Components Analysis (PCA) to assess the sensitivity of the optimization problem to various design variables. This comprehensive approach not only optimized the aircraft for the competition's scoring system but showcased the efficacy of combining algorithms with evolutionary targeted simulations to navigate the complexities of

aircraft design and performance optimization. While the design was under process, our manufacturing sub-team, is working familiarising with different manufacturing methods. More specifically, the team conducted several carbon-fibre - epoxy vacuums to optimize its efficiency and accuracy. Also, the sub-team created test samples from various carbon fibres and were tested with professional equipment provided from the university in order to figure the exact mechanical properties of the materials.



We are looking forward to the competition in Aachen this July and be part in the biggest aerospace celebration that is ACC. We are extremely proud of our work, and we are curious to see how Hermes VI will perform in the competition. Regardless on the outcome, we are happy to participate in ACC and showcase our love for aerospace and our strong commitment to this project. We are grateful for all our sponsors, without whom we would not have been able to achieve so many things this year. A big thank you to our platinum sponsors, Hellenic Aerospace Industry, ALTAIR, AVEK, Motor Oil, and Elval, our Gold Sponsor, NAX, our Silver sponsors, EUROBANK, Athens International Airport, Hellenic Drones, Global Prep, National Technical University of Athens, Kaoussis and HELLAS digital. Last but not least, we want to thank our supporters, B&B accounting associates and FIBERMAX.



AS COVILHÃ



ABOUT THE AS: **AS COVILHA**

AEROUBI & AS Covilhã was founded in 1993 by a group of students at the University of Beira Interior. The group became an AS in 2003.

From 2024 they are proud holders of the EUROAVIA Archive, an essential part of the Association's history.



National Aeronautics Meeting 2024

As it has become a tradition for AEROUBI & AS Covilhã, we recently organised the Encontro Nacional de Aeronáutica (ENA) from the 6th until the 12th of May 2024. This is an event that helps students connect to the job market and gives recognition to our university and association. The ENA is a massive event that consists in a set of lectures (Jornadas Aeronáuticas da Covilhã), followed by an Opportunities Fair, and we end with an Air Festival, which is the only one in the world organised by students.

Jornadas Aeronáuticas da Covilhã and **Opportunities Fair**

The event started on the 6th of May, with an opening ceremony from the president of our association, the Head of the Aerospace Sciences Department, and the Dean of our university. In the first four days, we hosted many lectures and workshops about multiple topics regarding the Aerospace sector. We are honoured to have hosted many accomplished engineers and people from the field in our event, including the Chairman of the Portuguese Engineers Order.



To encourage the participation of the students, we also organised different giveaways, with prizes like a 3D printer, a drone, a voucher and many other things. In addition to this, we hosted three social events at the end of each day, a Quiz Night, a Futsal tournament, and a barbecue. The Opportunities Fair took place on the 8th and 9th of May, where all the students from our faculty were able to network with people from relevant companies in the Aerospace field like Omnidea, Beyond Gravity, CEiiA, and others.



Beiras Airshow

To finish up this amazing week, from the 10th to the 12th of May we had the pleasure to host the first edition of the "Beiras Airshow" in the Aerodrome of Castelo Branco. The event promoted the passion for aircraft in a region where the aeronautic field has devalued over the past years. Many enthusiasts joined and spent the weekend admiring the planes doing incredible performances.

We also had the presence of well-established companies, corporations, and associations in the aviation sector, including the Portuguese Air Force and EUROAVIA, where we were joined by some members of the S&B WG and the current President, Leo Buchner.

On the 10th of May, we began the event with an opening speech during the sunset given by members of our AS and the President of the City Council of Castelo Branco. This was followed by a barbecue accompanied by music, following Portuguese celebratory traditions.

Throughout the weekend, the "Beiras Airshow" provided the attendees with many different activities to choose from, giving them a packed weekend where boredom was forbidden.

Along with the airshow, many short talks were being given in parallel to deepen people's knowledge on aircraft performance.

Attendees also had the opportunity experience firsthand the airshow by flying in paramotors, skydiving and even ballooning. Just like last year, there was also the opportunity to have a baptism flight on a C-295 in which radical manoeuvres and high G-forces could be experienced.



In the end, we were pleased to say that we hosted such a successful event that was able to inspire more than 5.000 visitors and we hope that next year will be even better.



AS FORLÌ-BOLOGNA



ABOUT THE AS: AS FORLÌ-BOLOGNA

In 2017, a group of aerospace students at the Forlì Campus of the University of Bologna got to know EUROAVIA and on the 16th of January 2019 AS Forli-Bologna was born.

Four times out of five since its birth, AS Forlì-Bologna has positioned itself in the top three Local Groups in the EUROAVIA Cup, reaching first place during the Business Year 2022-2023.



At the beginning of this Business Year, we realised our beloved AS Forlì-Bologna was about to turn 5 years-old. Celebrating this important achievement was a must, and thus, the Lustrum was organised on April 13th, 2024. The Lustrum had the scope to strengthen our bonds with many institutions and associations in Forlì, as well as companies. It also gave the opportunity to old members to catch up and interact with the current members by sharing their experience. The event started early in the morning at the Teaching Hub, a building of the University of Bologna in Forlì. The current Francesco Cuttitta, President, gave welcoming speech to the audience along with the authorities from the Emilia-Romagna region, the city of Forlì, and the University of Bologna.

Afterwards, we had the honour to host the current IB President and Treasurer, who gave an overview of EUROAVIA's activities and its network. On the local level, former Local Board Presidents presented the history of our association, along with the EUROAVIA Forli-Bologna History Book prepared for the occasion.



At this point, the event was divided into two parallel activities. In the conference room, three discussions related to the aerospace field were held with three different panels, while in the corridors of the building, the participants participated in a company fair where they could interact with companies and associations to get introduced to their activities and pportunities. EUROAVIA, Novac, Nanoprom, Zephir, NPC Spacemind, Associazione Arma Aeronautica, AIDAA, and ITAER participated with a stand at the fair.



The first panel of the day was about "Orbiting Opportunities", focused on space economy. The speakers included: Lorenzo Ciapetti, director of Antares, research centre for industrial policies who focused on the decrease of costs to launch satellites; Fabrizio Ponti, ordinary professor of aerospace propulsion at the University of Bologna, who focused on the European Project BOOST for orbiting satellites refuelling; and Damiano Accurso, director of NPC Spacemind, who focused on the dimension reduction of satellites over the years. The discussion was mediated by Giulia Bubbolini from the MAE Project.

The second panel of the day was about "AI Horizons". The speakers included: Vincezo Basco, chief technology associate at Thales-Alenia who highlighted the pivotal role AI will play in new technological endeavours and shorter times on redesign of aerospace modules; associate Modenini, professor aerospace systems at the University of Bologna, argued that AI systems require regulations and expertise to be properly employed. discussion was mediated by Martina Cavallucci, data scientist at Istituto Tumori della Romagna (IRST), who highlighted that it is imperative to use AI and similar tools for the analysis of macro data within the medical field.



The third panel was called "Women looking for Space". The speakers included: Maria Pia Falaschetti, researcher at the University of Bologna; Elisabetta Perrotta, flight instructor at Leonardo Elicotteri; Alessandro Curti, CEO of Curti S.p.a; and Nicole Ticchi, president and founder of the association "She is a Scientist". This panel was mediated by Maura Bernabei from ITAER. The discussion revolved around women's roles in different technical fields and

the need to dismantle stereotypes imposed by society in the past. This topic particularly created a lively and heartfelt debate, with many questions and contributions also coming from the audience.

After the closing ceremony of the event, we hosted an aperitif with live music from the local band "Over the Pops". A lot of fun, singing, and dancing topped of the evening for both participants and organisers.



During these five years, AS Forlì-Bologna has demonstrated its resilience, determination, and commitment to EUROAVIA. An example of this was winning the EUROAVIA Cup for the Business Year 2022-2023, thanks participation of many members in international activities, Working Groups, and IB. We hope that this celebration is only the first of many Lustrums for EUROAVIA Forlì-Bologna, and that the collaborations just initiated will continue in the future. We want to express our deepest gratitude for every participant, guest, and volunteer of the Lustrum, to make this celebration possible and a success. Finally, we wish future generations were inspired by our history and will continue the legacy of our association, with countless new successes to come.

AS PATRAS



ABOUT THE AS: AS PATRAS

Founded in 2001, after several years of inactivity a group of three engineering students managed to revive AS Patras in 2016.

focus continuous With a on improvement, AS Patras remains committed to foster relationships and create partnerships.



As we reflect on the B.Y. 2023-24, EUROAVIA Patras celebrates a period marked by vibrant significant achievements, activities, dedication to our mission steadfast transmitting aviation and aerospace knowledge and passion among our members. This year has been a testament to the power of community, education, and innovation, shaping a brighter future for our organisation and its members.

Following a brief introduction, EUROAVIA Patras hosted a photography seminar on January 12th, 2024, to kick off the new year. Led by our secretary, Spyros Vasileiou, and Technical Director, Antonis Kyvellos, the event provided participants with opportunities to enhance their photography skills, covering camera settings, capturing perfect shots, and Lightroom editing. It catered to all skill levels, offering valuable insights and techniques in manual photography and editing, successfully combining entertainment and education. The seminar was a standout event, demonstrating the effective blend of learning and enjoyment. Moving forward, the organisation aims to continue sharing its passion for aviation and other interests through similar events.

As February came to an end and exams wrapped up, we were committed to maintain an active year. On March 1st, 2024, all members gathered to celebrate the New Year by participating in the traditional cake-cutting ceremony, which symbolised good luck for the year ahead. The event was filled with surprises, and a special gift was presented to the lucky winner. Additionally, a new seminar on Fusion and 3D Printing was hosted on March 2nd and 9th. Led by an HR member, Apostolos Boufidis, the seminar aimed to enhance participants' knowledge and skills, offering valuable insights



networking opportunities, and career guidance in these fields. The seminar provided an excellent chance for attendees to delve into mechanical design and improve their abilities.

EUROAVIA Patras recently reached significant milestones in the aviation community. Board members took part in EUROAVIA's 65th anniversary Lustrum event in Istanbul. We gathered with global aviation enthusiasts, students, alumni, and sponsors. The celebration featured a warm welcome, hosted by EUROAVIA Istanbul. Subsequently, during the EMEAC Symposium from March 30th to April 5th, attention turned to organisational changes and voting on EUROAVIA's bylaws. A pivotal moment occurred with the election of the next International Board (DIB). Designated Stamatios Moraitis from AS Patras was elected, marking a proud achievement for EUROAVIA Patras. Joining him, Elia Ghisellini from AS Toulouse was also elected. Inspired by Stamatios's journey, EUROAVIA Patras eagerly looks forward to new adventures and endless possibilities in aerospace.



In May, we were bustling with activities that enriched our knowledge and passion for aviation and aerospace. Our journey began with an unforgettable visit to the "Eleftherios Venizelos" control tower, where we witnessed the precision of air traffic control and explored the historic approach field at Hellinikon, fostering a deeper connection to Greek aviation's legacy.



The excitement peaked with the launch of our 'Space Mics' podcast. The trailer and episodes, available on YouTube and Instagram, promised enthralling content for listeners, marking a significant milestone in our digital endeavors. professional Education and development remained central to our mission.

Panagiotis Kaimasidis led an insightful session for our Business Relations Working Group, members in forging connections. Additionally, we looked back with anticipation at a past CV training session with Anastasia Bogdou and Marios Zafeiriou, which aimed to equip members with skills to craft compelling resumes and enhance career opportunities.

As we close this chapter on a high note, EUROAVIA Patras is filled with pride and optimism. The achievements of this year, from workshops and seminars to elections and new initiatives, signify a bright future where passion dedication lead to recognition and and influence. Together, we soar to new heights, inspired by our journey and driven by a love for aerospace that has united us for 65 remarkable

We are excited about what lies ahead, particularly the participation of our team M.ACH in the upcoming Air Cargo Challenge a three-year effort coming to fruition. Here's to the adventures that lie ahead and the endless possibilities that await us in the skies of tomorrow.

AS PISA



ABOUT THE AS: **AS PISA**

AS Pisa was founded in 1959 with Giuseppe Pizzi as its first president, also a signatory of EUROAVIA's first statute.

Covid-19 pandemic did not stop the AS from bringing up a great number of online events, resulting in winning the EUROAVIA Cup in 2019.

EUROAVIA Pisa had a very busy year! With more than one activity per month, we kept our members' interest high.

Our presentation event in collaboration with A.I.D.A.A., the usual visit to the Virgo interferometer, the opportunity to pilot an ultralight aircraft, and the chat with the Senior Mechanical Engineer of the MIT Kavli Institute for Astrophysics and Space Research, Elio Angilè, are just some of the activities we organised.



Among all, an innovative event stood out particularly: the visit to an important local reality, Aitronik.

The company was founded in 2017 in Pisa, the Italian cradle of Robotics, to help companies design and develop Autonomous Ground, Aerial, and Marine Vehicles, from concept to pre-series production.

They believe autonomous robots to be a strong and emerging opportunity to make the world more efficient, safer, and less polluted. The team is composed of robotic experts, hard workers, and passionate people, who developed and integrated AI systems into autonomous underwater vehicles, boats, cars, fixed-wing aircraft, multi-rotors, and much specialising in Machine Learning and Real Time Embedded Systems.

Within their working environment, they promote work-life balance while pushing themselves to reach ambitious goals. They believe autonomous robots to be a strong and emerging opportunity to make the world more efficient, safer, and less polluted.



On the 8th of April 2024, we were welcomed to visit this lively, rapidly growing and developing

Our members had the opportunity not only to see autonomous vehicles at work, but to sit on an automated robotic lawnmower and take a tour of the surrounding Pisa's countryside!

Within our visit, they also showed us a robot that collects 3D maps with semantic information about the surrounding objects. The innovative Cooperative Semantic Mapping framework COSE-MAP was developed in Aitronik by Riccardo Di Majo for his master's thesis as a Robotic Engineer at the University of Pisa.



CLOSE-MAP leverages RGBD cameras to enable multiple robots to achieve the following tasks:

- 1. Object Detection and Recognition in real 3D Environments: it empowers robots to identify and recognise objects within their surroundings.
- 2. Unified Database Storage: the framework allows robots to store information in a unified database. It has been optimised by selectively storing instances and their locations, avoiding the need to memorise the entire map. Memory usage has also been released as an open source to benefit the global robotics community.
- 3. Dynamic Map Creation at Runtime: by retrieving and combining information from the database, COSE-MAP generates detailed maps at runtime.

Sadly, we cannot describe other projects: a lot of them have yet to be released on the global market!



The engineers working at Aitronik shared with us their life experiences, from their studies at the University of Pisa to the challenges, mistakes, and successes from working in their projects. Through this unfiltered chat, it became clear that the academic results are not of primary importance: they choose people who pour positivity and new ideas. The only competition Aitronik wants is the healthy one to encourage everyone to improve themselves and work in synergy with the others.



Innovation and technology are driving the future, and an open dialogue between students and companies has become crucial. Bringing together EUROAVIA Pisa and Aitronik was an attempt to close the gap between our university and local companies, and we surely took a step forward in that direction.

See you next year!



AS VALÈNCIA



ABOUT THE AS: AS VALENCIA

from Several students Universitat Politècnica de València (UPV) founded EUROAVIA València in September

Throughout these ten years, the AS has undergone several leadership changes, witnessing renewed enthusiasm to uphold the core values it represents.



For AS València, this B.Y. has been full of activities and trips that have enhanced our members' experience in the field of aviation, allowing them to improve their knowledge both in the business and military aviation sector.

On November 24th, 2023, we had the pleasure to visit Air Nostrum's airline maintenance facilities at València Airport. Our members enjoyed a warm welcome followed by an introductory talk on the company's planning and objectives. Air Nostrum currently operates under the umbrella of Iberia Group, serving as a regional airline and connecting passengers to Iberia's traffic distribution hubs. The visit concluded with a tour of the hangar to learn in detail about the maintenance tasks for the fleet, including CRJ-900 and ATR 72-600.



Of course, we cannot forget the DroWo València 2024 that took place from February 18th to 23rd. In this International Event (IE), participants had the chance to broaden their knowledge on drone technology, get involved in engaging discussions through roundtables and meet brilliant people in the best environment. There is so much to say about it and you can check it out on the International Events section in this magazine, but one thing is to be said, and that is that no other event can reach the level of quality that EUROAVIA IEs can, and in AS València we are sure of it.

This year for the first time, we had the chance to visit not once but twice (on February 15th and March 7th) the València Airport Tower. There, the personnel, especially ATCO and ex-military officer Vicente Hernández, explained us how they manage their work, and shared the difficulties in the profession. Our members gained first-hand insight into air traffic management and got the chance to talk about professional opportunities in this sector.

Just like the previous year, on March 21st 2024, we visited the Zaragoza Air Force Base, where the participants toured the facilities of Ala-15, home to the F-18 fleet, and visited Ala-31, where we found an A-400. This experience provided a deep look at the equipment and the complexity behind the operations conducted by the Spain Air and Space Force.



From May 13^{th} to the 18^{th} , 2024, our members had the opportunity to fly in ultralight and/or autogiro aircraft and could even ask for acrobatic flight. This activity was possible thanks to La Llosa aerodrome near València, where many youngsters learned to fly these aircrafts accompanied by the instructor, who, by chance, was a former member of AS València.



Then, on May 17th, 2024, members from our group had the chance to visit both the Albacete Air Base and Maestranza, the first is one of the 15 Spain Air and Space Force Bases and the latter is the most important Air Force aircrafts maintenance site in Spain. There, we got to see up close the routines that military personnel perform each day, as well as mind-blowing equipment and aircraft. Our most enthusiastic members could feel the floor rumbling and the loud engines working as cutting-edge military aircraft performed several test flights over our

heads. We visited the hangars and flight equipment of the Eurofighter Typhoon, as well as the various control and engine repair sections. Additionally, we explored the maintenance workshops for the F-18, the propulsion departments, and firefighting hangars, gaining valuable knowledge about the engineering and maintenance of those aircraft.

After recovering from last day's blast, we went on a trip to Benicassim, a coastal village near València, on May 18th and 19th, 2024. There, we had some bonding activities, starting with an Effective Communication Training delivered by ETS Trainer and AS València Vice-President Antonio Jordà, followed by beach volley matches. The next morning, some of the groups went on a trip to the mountain right next to the sea, where members disconnected from the routine city life and spent some quality time. Overall, the weekend marked an enjoyable experience for AS València members.



During all year long, we hosted lectures and engaged discussions on aviation matters. For instance, we invited Spanish paragliding Cubel champion David Gallarte, paragliding enthusiast and university professor Raúl González Monaj. Attendees learned about the physical principles of paragliding, the basics of the sport, and interesting facts about the paragliding world. We also organised a lecture on May 30th, 2024, on Relativity effects, delivered by Dr. Michael M. Tung. Everything sums up to fulfil AS València and EUROAVIA's duty. More and better to come next year!

ALUMNI CONTRIBUTIONS



Once a EUROAVIAn, always a EUROAVIAn! Discover how EUROAVIA empowers students to grow, featuring inspiring testimonials from our Alumni.



Corvin Huber

Active period in EUROAVIA:
1987-1991

AS and Role in EUROAVIA:

AS and Role in EUROAVIA: Founding member Munich, Bavaria, Germany

"As a founding member of EUROAVIA München, I was lucky to have a great group of like-minded and enterprising fellow-students who created a very vibrant AS, which created valuable contacts into industry, but also initiated great events like our Soviet Exchange Visit.

While the contacts into industry helped me win a stipend from Daimler Benz Aerospace/Airbus for a post-grad study of aerospace marketing at Airbus' Training Institution EURESAS, the experience in the former Soviet Union (Ukraine, Russia, Kazakhstan) helped me and two fellow EUROAVIAns off on our first company, START that led me to a path of serial entrepreneurship that keeps me busy to this day, since I have directed several aircraft development and manufacturing companies and started two high tech companies (currently: Skyroads). The opportunities that arose from my engagement in EUROAVIA have definitely shaped my career, and my original contribution has been returned many times!"



Flavio Tosi

Active period in EUROAVIA:
1987-1993

AS and Role in EUROAVIA:
Milan - Secretary 1988-1993

"I started my career in engineering for Danieli Steel Industries and IMA S.p.A. For the following 12 years I have been a manager in General Electric, covering roles in Project Management, Business Process Re-engineering, and Strategic marketing. After that, I continued as a freelance Consultant for medium size industrial companies and high-tech startups.

EUROAVIA has always been a key topic on all my professional interviews and consulting engagements. It provided a differentiator compared to other newly graduated that proved passion, English proficiency, management skills, etc. It also lured more than a client when I offered my personal worldwide network, capable of reaching thousands of friends in the Aerospace industry. It also helped me to show and set a common ground on key personal values, like European Freedom and social collaborations, a give back to younger generation, and the value of merit regardless of cultural, political, race, religious and physical limitations."



Stephan Barlet

Active period in EUROAVIA: 1988-1992

AS and Role in EUROAVIA: EUROAVIA München. Member of the IB/ President of IB

"I am a trainee within today's Airbus Group. I have had various executive functions HR at Airbus Group and Infineon. I am a self-employed management consultant running three consulting companies (ACA, AXCEL Partners, Level S).

My employment with Airbus was only based on the reputation of my activities within EUROAVIA, especially the international ones. Through the first years of my managerial functions, I benefited a lot from my EUROAVIA experience on supervising an organisation simply composed of selfmotivated people (inside a company the people are dependent on the employer, at EUROAVIA people stay only if they like it). Overall, EUROAVIA has shown me how great it is to work in an environment of European cooperation with people who think and act in terms of possibilities!"



Edwin Kanters

Active period in EUROAVIA: 1996-2000

AS and Role in EUROAVIA: Delft, Editor for EUROAVIA News

"After graduating from TU Delft, I worked as a design and lead engineer for projects in composite materials. Being a member of EUROAVIA has helped me to establish contacts with our international customers. As a lecturer in an international educational programme on Aeronautical Engineering, I can now relate to our international students much better."



Ioannis Tsagkarliotis

Active period in EUROAVIA: 2008-2012

AS and Role in EUROAVIA: Athens. PR, VP and President.

"I have a solid academic foundation, with a background as a mechanical engineer and a MSc in supply chain management, and I have been an officer in the Greek Governmental Services in the field of engineering.

EUROAVIA provided me a platform to connect with professionals, industry experts, and fellow students from around the world. Through various workshops, seminars, and technical sessions organised by EUROAVIA, I have had the opportunity to develop both my technical and soft skills. EUROAVIA events, such as conferences and company visits, have given me insights into the latest trends and innovations in the aerospace industry. Also, being part of a recognised organisation like EUROAVIA, adds professional credibility to my profile."

INTERVIEWS

From aerospace experts and professionals but also, from other EUROAVIAns and engineering students, dive into the interviews in this section and let their insights fuel your dreams and ambitions.

PACE '24 WINNERS - AS FORLÌ-BOLOGNA

JOHAN BIRNIE | CM PRESS MEMBER

Johan Birnie (J.B.): How did you choose the name of your team?

H.M.: The name is inspired by AS Forli-Bologna's logo, where there's Icarus, the symbol of Forli. We thought we were represented by him: knowing the history of Icarus, who tried to fly as high as possible, we were trying to achieve a great result on the competition even though at the beginning we didn't know anything about virtual reality (VR).

J.B.: What urged you to apply to the competition?

D.C.: At first, we wanted to challenge ourselves, and we were told they were going to teach us the basics of VR. We didn't see any cons but only pros, in addition to the fact that we had the possibility to fly to Berlin to participate in the final.

H.M.: Personally, I have never used a VR visor, so it was also a great chance to try it out and develop things to use the visor.

J.B.: What was your project about?

D.C.: We had to design a training for the aircrew of an Airbus A320 using their VR assets (i.e. how the crew reacts to a passenger having a heart attack). We used a PACE developed plug-in (Weaver) for Unity, that allows to integrate the visor that the trainee is wearing with the virtual reality environment, in this case the aircraft.



ABOUT THE INTERVIEWEES:

The 2024 XR Student Competition on Extended Reality Training in Aviation hosted by PACE TXT winning team, Wings of Icarus, from AS Forlì-Bologna is composed from:

Daniele Cantini (D.C.), second-year student of the bachelor's degree in aerospace engineering from the University of Bologna, Forlì Campus.

Hugo Santiago Mengoa Paredes (H.M.), third-year student of the bachelor's degree in aerospace engineering from the University of Bologna, Forlì Campus.

Gianluca D'Agostino (G.D'A.), second-year student from the bachelor's degree in aerospace engineering from the University of Bologna, Forlì Campus.

J.B.: How was the final?

D.C.: The final took place during an event organised by PACE, called PACE Days, which was a fair that took place in Berlin, and they would show their technologies to other companies. We were there for three days, and one of those days was the day of the presentation.

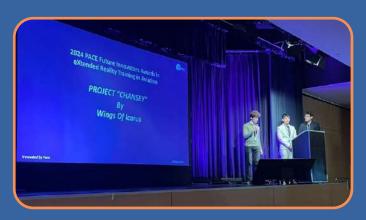


H.M.: During the presentation we showed not only to the PACE representatives, but also to the other companies how we used the tool developed by PACE and how, as students, we were able to develop things like the one for the contest. And I think this was nice.

J.B.: Do you think there was a certain aspect in your design/ manufacturing that actually led you to win compared to the other teams?

D.C.: I believe we performed a more realistic training compared to the other participating in the final.

H.M.: Also, I believe we spent more time exploring the tools of the software and developing more things compared to the other team.



J.B. How did you feel when you won? Did you expect it at all when seeing the other finalist teams? Did it catch you by surprise?

D.C.: I mean, we were a bit surprised, because we didn't know what the other team had developed. Funny story, they first announced the winner of the best presentation, which was the other team from AM Cairo, and I turned and looked at Hugo disappointed thinking "we lost".

H.M.: We felt mixed emotions: as we already convinced ourselves that we had lost, we found out that they didn't give away the main prize. They announced us as winners, and we were happy, relieved and surprised.

D.C.: As a prize they gave us a trophy, they covered the expenses of the trip to participate in the final and they gifted each of us with a VR visor MR Meta Quest 2.

J.B.: What advice would you give to the finalists for next year in order to succeed?

D.C.: For sure I suggest a team that can work together in presence and not online. Depending on the contest, a computer can only handle the software used for the challenge.

H.M.: At the beginning I thought that the people from PACE were only bothered about important things. When we met them in person, we realised that they were open and happy to offer any kind of help and answer any question we had. I would suggest to future teams not to be afraid to ask questions, even the simplest ones.



I would suggest to future teams not to be afraid to ask questions, even the simplest

D.C.: And if you are curious about the topic of the competition, or you want to learn more about that topic, just do it. Especially if it's something that you are passionate about.

H.M.: To add something on that, if you are worried about the time you'll spend on the project, don't make that a problem: you'll find the time and organise your daily tasks. In the end, the experience is the most important thing, and it opens doors to the industry, and that helps a lot. Also, take advantage of all the opportunities EUROAVIA gives to its members!



ABOUT THE INTERVIEWER: **JOHAN BIRNIE**

Johan Birnie is a Ph.D. student in Mechanics and Advanced Engineering Sciences from the University of Bologna. He is both a mechanical and aerospace engineer and a member of EUROAVIA since 2019. spends his free time reading, watching sports or tv shows and travelling.

IDEATHON '23 WINNERS - AS FORLÌ-BOLOGNA

ELENA TONUCCI | CM PRESS MEMBER

Elena Tonucci (E.T.): Hello and thank you for being here. You have won the first edition of Ideathon, but what urged you to apply in the first place?



It is important to challenge yourself, and what I saw in this competition was exactly a way to do so. On top of that, we had the opportunity to travel, meet new people, and have fun together. How could we ask for more?

G.T.: Personally, I wanted to go a step further than just studying for exams. As students, that is the main thing that we do, but I believe it shouldn't be the only important thing in your academic career. It is important to challenge yourself, and what I saw in this competition was exactly a way to do so. On top of that, we had the opportunity to travel, meet new people, and have fun together. How could we ask for more?

L.A.: I received a flier about the competition while I was studying at the library. The first thing I thought was: "This is the perfect chance to experience something different than usual, and I could do it with my friends".

E.T.: Do you think there are any special aspects in the idea you proposed for the competition that brought you a step forward with respect to the other teams and finally made you win?

L.A.: During the first phase in Terrassa, the collaboration and cohesion of our group helped for sure. Also, I believe we had more experience than the other teams, which was a game changer during the design phase. I think we understood well the problem given by the company.

G.T.: We have exploited a lot the theoretical knowledge that we gained in many of our university courses, but most important we were able to apply it efficiently, which was not trivial. I have great memories of the technical things we worked on during the competition, because I am passionate about aircraft. The challenge was the preliminary design of an aircraft for a specific mission objective, so I had a lot of fun working on it.



ABOUT THE INTERVIEWEES:

The Ideathon 2023 winning team, UNIBOss, from AS Forlì-Bologna based at the Forlì campus of the University of Bologna, is composed of:

Leonardo Agostini (L.A.), last year master student in Aerospace Engineering, currently interning at Airbus Helicopters;

Giulio Traversa (G.T.), last year master student in Aerospace Engineering, currently working on his thesis in radio science;

Alessandro Gazzotti (A.G.), first year master student in Aerospace Engineering;

Lorenzo Gola (L.G.), master student in Aerospace Engineering;

Maria Moretti (M.M.), last year bachelor student in Aerospace Engineering.

M.M.: Honestly, I think it helped that we discussed a lot between us during the design phase. We weren't properly arguing, of course, but our discussions were intense. I think that is also normal when you are a bit sleep-deprived *laughs*. Apart from that, I think that we answered well and properly to the problem, and this is why we won.

A.G.: It was a lot of work, that we delivered properly executed. And talking about sleeping, let's say that between us someone slept, and someone else not so much.



E.T.: How did you feel when they announced that you had won? Did you expect it, or did it catch you by surprise?

L.A.: Honestly, I was expecting it, especially in the second phase. The presentations were public, and I was confident of our work. The jury let us understand they really appreciated our work as well, so I was calm. Naturally, also the other team delivered high-quality work.

A.G.: When they announced that we won, we were very happy of course. I would say the correct word would be relieved.

G.T.: I agree, because although we were confident, the presenters were keeping the tension and the suspense high, putting some doubts on us! So, it was still exciting.



E.T.: What advice would you give to the finalists of the next Ideathon edition to succeed?

L.G.: My advice would be: Go with someone you care about because you will work better. Working with a group of people you know will allow you to assign better roles and tasks, and, on top of that, you will have way more fun!

G.T.: My advice is to have fun beyond the result that you might obtain.

M.M.: I agree, winning is important, in the end everyone's aim is to win. But the most important thing is to enjoy the experience. So, my advice is to participate in a chill way and to have fun as much as possible. Then, you might also end up winning!

A.G.: I would say, do it! It can always be useful to make experiences like this one. We learned a lot while having fun. With the other teams as well, we became friends. There were for sure no enemies, only passionate fellow students.

E.T.: Thank you a lot for your time, and congratulations again!



ABOUT THE INTERVIEWER: **ELENA TONUCCI**

Elena Tonucci joined EUROAVIA in 2019 a proud member of Communication WG since 2020. After graduating in Space Engineering from TU Delft, she is now a PhD student in Astronomy at Leiden Observatory. In her free time she loves to sing, crochet, and watch animes.

EVA- MARIA KOPETZKY - MTU AERO ENGINES

CHRYSANTHI SARASITI | CM PRESS MEMBER



Our vision is to make emission-free flights a reality. With that vision in mind, we are shaping the future of aviation. Hence, it is quite a cool job to do

Chrysanthi Sarasiti (C.S.): Tell us a bit about your company.

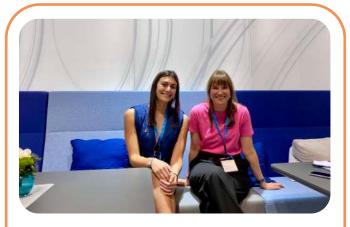
E.M.K.: We are MTU Aero Engines. We are experts in the design, development, manufacturing, and maintenance of commercial and military jet engines in all thrust and power categories. Our vision is to make emission-free flights a reality. With that vision in mind, we are shaping the future of aviation. Hence, it is quite a cool job to do.

C.S.: Indeed! Where are you located?

E.M.K.: Overall, we have three locations in Germany, one of which is in Munich, our largest facility. Here, we run our headquarters and also focus on our development & engineering as well as on the production of our jet engine modules. On top of the headquarter in Munich we operate two other locations, one in Hannover, and one in Ludwigsfelde, near Berlin. At these two locations, we are into the MRO business. MRO stands for Maintenance, Repair, and Overhaul.

C.S.: What do you look for in prospective applicants?

E.M.K.: What is important for us is that the applicants have a passion for engines and are motivated. In addition to that, it is quite important to us that they have technical expertise for the position they are applying to. We also want the applicants to stand out compared to other candidates and have a winning personality. Finally, we are looking for applicants who have a really great team spirit and can work successfully with the rest of their team members. All in all, when it comes to the application, candidates should always check the job advertisement thoroughly to see if they fit



ABOUT THE INTERVIEWEE:

Eva-Maria Kopetzky (E.M.K.) is working at MTU Aero Engines in the position of Employer Branding and HR Marketing. She started working for MTU in 2019, so she has been part of the MTU team for over five years now.

the description. However, even if they do not meet all the requirements, they should not hesitate to apply! So, it is all about motivation and wanting to become part of the team.

C.S.: Out of curiosity, how many employees are there in total?

E.M.K.: In total, we are over 12,000 employees, because we do not only have three locations in Germany, but also run additional locations worldwide – in total we have 18 different facilities - for example, our locations in Poland, in Serbia, but also in the US, in Dallas and Rocky Hill, as well as in Delta, near Vancouver in Canada.

C.S.: What advice would you give to young engineers that are now starting their career?

E.M.K.: I would say they should use the opportunity to gain practical work experience by doing an internship or by becoming a working student. They can also try to write their final thesis at MTU. It's important for us that they are open to try out different things and find their own passion.

C.S.: Currently, do you offer any internship positions at MTU? Where can prospective applicants be informed about them?

E.M.K.: Yes, we have a significant amount of openings for internships and some for theses. So, I would always recommend doing an internship first or becoming a working student, and if the opportunity pops up, then write your thesis with us. You can find all of our open positions online on our webpage, but it may also to find a topic for a bachelor or master thesis during your internship at MTU.

C.S.: What is the key factor that distinguishes you from other companies?

E.M.K.: I would say that, at MTU, every single individual can make a difference and really work on the product and become an engine expert. So, we always say that, at MTU, we have 12,000 engine experts working for us. And, even if not everybody is an engineer, everybody can participate in the final product. I am helping, for instance, with recruitment. We all work closely together, and everyone is valuable. In the end, the engine is part of the aircraft; no matter if your department is in engineering, finance, logistics, purchasing or manufacturing: We all work together. Together, we form our final product. So, for us, everyone at MTU is considered an engine expert. What's fascinating is that we work on cutting-edge technology, and that motivates me every day.

C.S.: How is your work environment?

E.M.K.: I would say we have a very open atmosphere. Everybody gets help from each other; we have a great team spirit because we all have the mutual goal of making better engines. We all share one vision and the mission of clean aviation. What's also good at MTU is that all experts love to share their knowledge so that young talents can learn and develop even further.

C.S.: Are there a lot of people that are interested in applying to MTU?

E.M.K.: Of course, as it is always, we have some positions where it's harder for us to find suitable applicants than others. For example, in engineering we are benefitting a lot from our reputation at the best universities. If someone

wants to work in the aerospace industry and is studying engineering, they know MTU and they can easily apply. However, for marketing or other commercial positions, finding applicants is rather more challenging I would say, because less people outside of the aerospace field know MTU Aero Engines as an employer.

C.S.: How did you decide to apply to MTU yourself?

E.M.K.: To be honest, I just found a job posting online and what really drew my attention at the beginning was the description of the tasks, in Employer Branding and HR Marketing. I was a bit uncertain to apply, but in the course of the recruiting process I learnt so much more about MTU, the specific tasks, the fascinating products and met very friendly future colleagues so it just got more and more appealing. For new starters we have this onboarding event where all the new employees get invited, and they get a tour of our museum and also through our factory and all our plans and it's really cool to see the final product. I mean, really, we rarely see whole engines in Munich. There are more in Hanover and in Ludwigsfelde, but just seeing the production parts of the engines is really catching.

C.S.: So, to close the interview, any last advice that you want to share?

E.M.K.: My advice is not to be discouraged if you don't meet all the requirements of a job posting. Always persevere, even if things don't work out, and never give up. As I mentioned before, it's crucial to gain practical experience not only for the purpose of securing a job, but also for personal growth. Explore different opportunities by doing internships in various departments and with different companies to experience the nuances and differences. Yes, really find out what you're interested in - find your own passion!



ABOUT THE INTERVIEWER: CHRYSANTHI SARASITI

Chrysanthi Sarasiti is a last-year Master student in the National Technical University of Athens. She has been a member of EUROAVIA since 2020.

WINFRIED-HAGEN FRIEDL - EUROAVIA ALUMNI

CHRYSANTHI SARASITI | CM PRESS MEMBER

Chrysanthi Sarasiti (C.S.): How did you find out about EUROAVIA?

W.F.: In my last year in school, I went to visit the ILA in 1990 in Hannover, and I came across the EUROAVIA booth. I saw that there was a EUROAVIA group in Stuttgart in the university that I was planning to attend. I liked the concept, so, when the time came, I joined them.

C.S.: What did you study in Stuttgart?

W.F.: I studied Aerospace and Aeronautical Engineering as a diploma degree. It is comparable to a Master degree. Back in the day, Bachelor and Master degrees did not exist in Germany.

C.S.: What was your path in our Association?

W. F.: At that time, we also had the EUROAVIA News in Stuttgart, so I was interested in participating in it as much as I could; I took part in a few Fly-In events, and then started to get interested in leadership. Therefore, I joined my Local Group Board as a representative of EUROAVIA Congresses and I went to the Congress in Leuven in 1993.

C.S: When did you realize that you wanted to be a president of the whole Association?

W.F.: Well, I don't think it was a realization. It was just that I thought I wanted to do more. In 1994, after talking to people from other Local Groups, I became the Secretary of the International Board, and, in the following year, I was elected President, because the president of the previous year, Alexander Klotz, finished university.

C.S.: In your years in the IB, which was the accomplishment that you were most proud of?

W.F.: I think I'm most proud of having helped in the continuation and expansion of EUROAVIA. One example is the Local Group in Pisa, where I helped the students there to restore the Local





ABOUT THE INTERVIEWEE:

Winfried-Hagen Friedl (W.F.) is a EUROAVIA Alumni in the years of 1991 and 1996 from AS Stuttgart. After being really active on a local level, he became the IB Secretary for the B.Y. 1994 - 1995 and the IB President for the B.Y. 1995 - 1996!

Group by visiting them and giving a speech to the students there. I also supported the Local Group in Aachen when they had a bit of a downturn by delivering a presentation about EUROAVIA in front of approximately 800 students.

C.S.: So, you were, in total, two years in the IB. How did you manage to combine your EUROAVIA responsibilities with your studies?

W.F.: Well, I think my time at university was a bit longer than it would have been without EUROAVIA. Chronologically, I started university in 1991 and finished in 1998. Maybe I could have been a year or two quicker but finishing in 1996 would not have really helped me, because, at that time, there was quite a downturn in industry, meaning that I did not have good prospects of getting a job. All in all, I think I benefited a lot from EUROAVIA and the unique experiences that it offered. For example, I participated also in the EUROAVIA Design Contest in 1995 at ESTEC in Noordwijk.

C.S.: What was your career path?

W.F.: In my last year of university, I managed to get my final thesis at BMW Rolls-Royce. Afterwards, I joined BMW Rolls-Royce that later became Rolls-Royce Deutschland and stayed there for 22 years.

After that, I decided it was time to do something different; the company had grown quite significantly- from a small company to being part of the big Rolls-Royce consortium. Since 2021, I'm with a very small company and enjoying it.

C.S.: What was that the prowess EUROAVIA offered you?

W.F.: In EUROAVIA, one of the main skills that you establish is understanding different accents! As you get to know many people from different backgrounds, countries, and cultures, the one common thing is communication in English. As everybody speaks slightly differently, you get more used to understanding different accents and pronunciations. This helped immensely at work, as I could talk to people from all areas in Europe without any pressure. Once, while I was at Rolls-Royce, I was translating between two colleagues - one from the US, one from the UK. We were talking about scheduling meetings, and one said bi-weekly, and the other said fortnightly. And one didn't know what the other meant, but I told them, you're talking about the same thing- every other week! It's a simple thing, but experience is just something you gather as you go along and being observant of everything. Trying to learn whatever you can is very important, and I try to learn with everything that I do as much as I can. You never know when it may come in handy.

C.S.: We just celebrated 65 years of our Association in Istanbul, Turkey. How do you feel about the recent growth of **EUROAVIA?**

W.F.: I am happy to see our Association still going strong. Things are changing though. I heard that Aachen is not as strong anymore as it used to be. It was the cornerstone at some point, one of the founding members, and quite strong in the beginning of the 90s, but it is natural for things to change through time...

C.S.: What advice would you give to EUROAVIAns regarding their career that is now starting?

W.F.: It is important that you like what you do, so that you can do what you like, and if you follow your dreams, your goals, your ambitions, you'll always do the right thing.

Not everybody will be CEO or make a stellar career, but the important thing is that you enjoy what you do as much as possible and be open. Take every bit of experience that you can. Chances are it will come in handy at some point in time.



Take every bit of experience that you can. Chances are it will come in handy at some point in time.

C. S.: Is there anything that you think we can improve in our Association?

W.F.: The only thing that comes to my mind is to stay updated about EUROAVIA news! The older I get, the more I think it would really be nice to see some of the people from back in the day again, as well as meet new people who have come in the time since, or maybe people who have been around for longer than I have been.

C.S.: Well, we have a LinkedIn Alumni group, where the Alumni share a newsletter whenever there is something important. In this group, you can also reach out to some of your friends from that time.

W.F.: I'm not a digital native, as you can tell from me being back from the last millennium. However, when I started to set up a profile on LinkedIn, I started to look out for a few names, and then I found my secretary in the International Board when I was President, Martijn Gram. We had a few conversations, but, so far, I haven't managed to meet him.

A lot of thanks certainly goes to him! While he was a secretary, with his grand European tour, he visited a lot of the Local Groups, and he helped in the communication a lot-face to face communication.



ABOUT THE INTERVIEWER: CHRYSANTHI SARASITI

Chrysanthi Sarasiti is a last-year Master student in the National Technical University of Athens. She has been a member of EUROAVIA since 2020.

ASRW '23 WINNERS - AS NAPOLI

CHRYSANTHI SARASITI | CM PRESS MEMBER

C.S.: What urged you to apply to the competition?

M.M.: One of the funniest things is that our team was formed quite randomly. It was me, Pierluca, and then each one found another person to form the team. Our goal was to do hands-on projects and practice what we learnt at university. We came up to be an exceptional team, as we were well specialised in different aspects of the project; fluid dynamics, structural analysis, and avionics...

G.M.: The idea started because I wanted to do something different from my regular studies, something more practical than theoretical. Gabriele and I discussed finding a competition that included both theoretical and practical aspects. We discovered that Maria, our team leader, wanted to apply for this competition, and the rest is history.

V.R.: Personally, I read about it in the EUROAVIA newsletter, and I applied. I asked Pierluca if I could join the team, and they accepted me!

P.M.: My main purpose was to make a reality a concept that I had in mind about the design to see if it can work or not. It was a way to double check how well I understand Aerospace Engineering.

G.S.: I applied to the competition to take part in a project where I could face practical challenges as well as test my technical background.



ABOUT THE INTERVIEWEES:

The Airbus Sloshing Rocket Workshop 2023 winning team, AirSloths, from AS Napoli is composed from:

Pierluca De Felice (P.F.), third-year bachelor student in Aerospace Engineering, IT WG coordinator;

Piercarlo Mirto (P.M.), last-year master student in Aerospace Engineering, has published multiple research articles in the Structural Engineering and Aircraft Design;

Maria Mattiello (M.M.), last-year bachelor student in Aerospace Engineering, former member of AS Napoli LB;

Vincenzo Di Rosa (V.R.), first-year master student in Fluid Dynamics and Propulsion, passionate about Space Propulsion;

Giulia Monti (G.M.), last-year master student in Aerospace Engineering, currently writing her thesis on Fluid Dynamics and Propulsion;





C.S.: Did you face any difficulties or challenges while writing the report and how was your experience with the Airbus workshops?

M.M.: At the beginning, we were really confused, as we didn't know where to start. However, we did good and detailed work because, in our university, we frequently write reports. Some challenges occurred in the manufacturing phase, as we did not have experience and, consequently, made some mistakes. After the first test, we realised our design had some problems. Lastly, the Airbus webinars were really useful, because they were practical, and the people were really supportive; they answered all our questions and guided us a lot.

V.R.: The most challenging part, as Maria said, was the start; we needed to understand how to face the challenge and approach the problems. In the end, we managed to find solutions. Also, we realised that, while still designing, we need to think about the manufacturing, because in paper, everything is beautiful, but when you have to do it, a lot of complications arise.

P.F.: Fortunately, we managed to test our rocket in Naples before going to the competition. So, in the finals, everything went quite smoothly. Not everything of course; we had some problems with the tubes for the launching pad, where we used a lot of tubes to manage to make it work.

G.S.: I think what helped us is the fact that the design solutions of both the model configuration and for tackling the sloshing were quite innovative.

P.M.: In my opinion, the main challenge was to truly understand the practical aspects, as our knowledge was totally theoretical. Of course, when you have to build an aircraft, you understand that there were many things that you were ignoring, and you face them for the first time, you see them for the first time. So, I think that understanding all the manufacturing limitations in a design was the most difficult part.

C.S.: Is there a certain aspect in your design or in your manufacturing that actually led you to win compared to other teams?

V.R.: Actually, we worked a lot on every part of our design. We managed to make simulations for the sloshing tank, which was surely an innovative idea, and to have a good launch system. We also had a precise idea on how to control the rocket. What probably made a major difference was the trajectory we designed, where we used the angle of attack of the cave plane as a variable.

P.F.: From my point of view, what made us win was the reusability of the rocket. Because, funny thing, when we were working on it, a professor approached us and said that he was unsure that the plane would last. I said, trust me, it works. In the end, during the competition, we managed to launch it five times without breaking it; it was stable!

G.S.: At the beginning, we would never expect to win since there were teams that took part in past editions and that had a solid background on this competition. Nevertheless, we performed good both in the presentation and during the launches, so we were aware we could win.

G.M.: When we started preparing for the competition, we aimed to create something unique. In particular, I believe the tail wings and the distinctive shape of our sloshing tank helped us gain the judges' favor. While I can't speak much about the wings, Gabriele and I focused on the fluid dynamics aspect of the sloshing. After extensive study, we found a shape that stabilised the rocket regardless of the baffle.

P.M.: One of the key aspects of our project was that we performed it on an iterative cycle. I think that the work of other teams was more focused on the concept rather than on the actual product. We double-checked our ideas with the actual results of our flight tests. We started from a concept, performed flight tests, and then came back to the concept and modified it to fit our initial goals multiple times. I think this was the key aspect that brought us to victory.



C.S.: How did you feel when you won? Did you expect it or did it catch you by surprise?

M.M.: At the beginning, we were just happy to be in the finals. After the flying tests that went well, we were aware that we may be the winning team. But, of course, there were other parameters, like presentations and records, so it was always a lot. When we won, it was the best feeling ever. We put a lot of effort into this project and worked hard for two months and seeing the result was amazing. So, indeed, we want to thank EUROAVIA and Airbus for this opportunity, because it was amazing. We really felt like engineers, while making and testing the prototype and it felt amazing.



We really felt like engineers, while making and testing the prototype and it felt amazing.

V.R.: As Maria said, our first goal was to arrive at the finals. Well, at first, just to face the challenge. We did everything with enthusiasm, curiosity, and dedication. But then, while testing, manufacturing, and talking with the professors also in Belgrade, when we validated our design, we understood that was quite the point of the competition. And yes, we were not expecting that, but we were fully aware of our good work.

P.M.: The experience was life-changing for me! When they announced us as the winners of the competition, I was euphoric, which is rare for me. For the first time, we felt like engineers, as we saw our ideas becoming a reality. It was a beautiful experience from the beginning until the very last moment.

G.M.: I couldn't believe what I heard. I thought something was wrong and it took me a few moments to realise what had happened. After that, I was as happy as a child.





G.S.: When we were awarded with the first place, I felt joyful for the result and proud for all the work that we had done. I was also relieved because such an intense week of work was over.

C.S.: What advice would you give to the finalists for this year in order to succeed?

M.M.: My advice is to really get into detail and prepare your manufacturing phase before arriving at the final. Because, at that day, you will have to work with different instruments and materials and many things can go wrong.

V.R.: My advice is to test whatever you can test; the more you can test, the best you can and try to extract data, analyse it, and improve. But just test, do not arrive at the final that you've never tested anything, because this way it won't fly.

G.M.: I would suggest trying hard and pushing through even when you feel tired. Months of hard work are behind every team, and this is the moment to showcase your best skills. You can do it. Also, try to enjoy the journey. It lasts only five days, but the experience will be a lasting memory for the rest of your life.

P.F.: My advice is just to enjoy your time there and have fun.

G.S.: What I can suggest is to think of all the practical issues before the final and to think of strategies to smooth the manufacturing and reduce the workload of the final lighter.



ABOUT THE INTERVIEWER: CHRYSANTHI SARASITI

Chrysanthi Sarasiti is a last-year Master student in the National Technical University of Athens. She has been a member of EUROAVIA since 2020.

PAS PRESENTATION

Let's all welcome PAS Lyon to the EUROAVIA Family! Learn about their recent projects and get an early taste of the Symposium happening there, next spring!

LYON

EUROAVIA Lyon performed its maiden flight in September 2023, brought to life by a group of six enthusiastic Aerospace engineering students from INSA Lyon. Our journey began with an alliance with the rocket club at our university, laying a solid foundation for what we knew would become a thriving chapter.

Our debut event, an Aerospace Trivia Night, was a soaring success! It was exhilarating to witness the incredible turnout and the enjoyment on everyone's faces. It's safe to say that the trivia night set a high bar for our future events.

Of course, it hasn't all been smooth sailing. Our biggest challenge to date has been navigating the notoriously tricky French administrative system to get officially registered. Let's be honest, French administration can be quite frustrating. After facing rejection four times, we finally registered out association after a gruelling five months and about 50 man-hours of persistence. Despite the bureaucratic hurdles, we persevered, and the sense of accomplishment when we were finally accepted was immensely rewarding.

When we embarked on this adventure to cofound EUROAVIA Lyon, our understanding of the association's potential was limited. We had no idea the number of doors EUROAVIA could open for us. But as we explored deeper, we discovered the vast array of opportunities it offers. The more we learned, the more excited we became about being part of this dynamic and supportive community.

Looking ahead, we are thrilled to announce that we are working on organising our premier International Event for the next B.Y. Planning this event has been a roller coaster, but we are up for the challenge. We are eager to welcome participants from across the globe!



We are incredibly excited about the journey ahead and the opportunity to contribute to the EUROAVIA community. We can't wait to meet all of you and be part of such a big Association! Until then, we'll keep pushing boundaries, overcoming challenges, and making the most of every opportunity that comes our way. Here's to a future filled with innovation, collaboration, and fostering the EUROAVIA spirit!

SPONSORS

AIRBUS AIRBUS

Airbus is a global aerospace leader, pioneering cutting-edge aviation technology and sustainable solutions. With a diverse portfolio that includes commercial aircraft, helicopters, defence systems, and space exploration, Airbus is at the forefront of innovation in the aerospace industry. The company is committed to designing and manufacturing advanced, ecoefficient aircraft and systems that shape the future of aviation. Airbus connects people and cultures around the world, contributing to a safer, more sustainable future.

IGA Academy



IGA Academy is an aviation academy accredited by ICAO, ACI, IATA, EUROCONTROL, and TSA. It provides signature training sessions such as Accessibility, Sustainability, Women Leadership, Security, and Turkish Hospitality training. It has more than eight sister airports and provide its own Aviation management programme with partner universities. Finally, there are also personal development and training programmes for its employees.

ANSYS



Ansys is a global leader in engineering simulation software, empowering organisations to achieve breakthrough innovations and accelerate product development. By providing advanced tools for physics-based modelling, analysis, multiphysics structural and simulations, Ansys enables engineers to solve design challenges, optimise performance, and ensure reliability across industries—from aerospace automotive to electronics and energy. Trusted by thousands of companies worldwide, Ansys drives innovation, reduces costs, and helps bring cutting-edge products to market faster.

EDUopinions



EDUopinions is an online platform where students and alumni share their experiences and universities and academic reviews of programmes worldwide. By offering first-hand insights into campus life, faculty quality, and **EDUopinions** career prospects, prospective students make informed decisions about their education. With thousands of reviews from diverse institutions across the globe, the platform fosters a transparent and supportive community for learners at every stage of their academic journey, empowering them to find the right educational path for their future success.

OTHER SPONSORS:



ALTER









PARTNERS

CANSO



(Civil Air Navigation Services Organisation) is the global voice of the air traffic management (ATM) industry, representing air navigation service providers (ANSPs) and industry suppliers worldwide. CANSO drives development of safe, efficient, sustainable air traffic management solutions by facilitating collaboration, sharing best practices, and advocating for industry advancements. CANSO plays a critical role in shaping the future of global aviation, ensuring the skies remain safe and accessible while supporting the industry's growth and innovation.

EIIL



The European Institute for Industrial Leadership (EIIL) is a leading organisation dedicated to developing the next generation of industry By offering specialised mentorship, and networking opportunities, EIIL equips young professionals with the skills and knowledge needed to excel in industrial management roles. With a strong focus on leadership, innovation, and sustainability, EIIL partners with top companies and academic institutions across Europe to ensure that participants are prepared to meet the challenges of an evolving industrial landscape.

ICAS



The International Council of the Aeronautical Sciences (ICAS) is a global organisation dedicated to advancing the field of aerospace sciences. By bringing together leading experts, researchers, and industry professionals from around the world, ICAS fosters collaboration and the exchange of knowledge in aeronautics and astronautics. The organisation hosts conferences, publishes research, and supports the development of innovative technologies that shape the future of aerospace. ICAS plays a crucial role in promoting scientific excellence and driving progress in the aerospace industry.

International Space University



The International Space University (ISU) is an institution dedicated to space education, research, and collaboration. Located in Strasbourg, France, ISU offers interdisciplinary collaboration. Located programmes that cover all aspects of space science, engineering, policy, business, and law. With a diverse, global network of students, faculty, and alumni, ISU fosters innovation and international cooperation in the space sector. The university's approach combines academic rigour with hands-on experience, preparing graduates to lead and drive advancements in the evolving space industry. ISU is committed to shaping the future of space exploration and ensuring that space benefits all of humanity.

Junior Enterprises Europe (JEE)



Junior Enterprise Europe (JEE) is a network of student-run consulting firms across Europe that provides real-world business solutions while fostering entrepreneurial skills among students. These junior enterprises offer consultancy various fields, including marketing, finance, management, engineering, bridging the gap between academia and industry. By engaging in handsbetween on projects and collaborating with companies, students gain valuable experience and insights into the professional world.



Space4Geo is an initiative focused on advancing the application of space technology in the field of geospatial sciences. By leveraging satellite data and space-based observations, Space4Geo aims to enhance the accuracy and efficiency of geographic and environmental monitoring. The initiative fosters collaboration among stakeholders, including researchers, industry policymakers, and develop innovative solutions for land management, urban planning, environmental protection, and disaster response.

SGAC



The Space Generation Advisory Council (SGAC) is a global non-profit organisation dedicated to representing the interests and ideas of young professionals and students in the space sector. SGAC provides a platform for the next generation of space leaders to engage in discussions, develop policies, and contribute to international space initiatives. By organising events, workshops, and conferences, SGAC fosters collaboration and knowledge-sharing among young students and professionals, helping to shape the future of space exploration and development.

SEAC



The Space Economy Academy (SEAC) is a leading educational institution dedicated to advancing knowledge and expertise in the field economy. The academy space specialised programmes, workshops, training sessions designed to equip students and professionals with the skills needed to navigate and thrive in the space industry. SEAC focuses on various aspects of space economy, including space commercialisation, satellite technology, space policy, and market analysis. By fostering a deep understanding of the economic and strategic dimensions of space activities, SEAC plays a crucial role in shaping the future of space exploration and utilisation.

EASA



The European Union Aviation Safety Agency (EASA) is the regulatory body responsible for ensuring the safety and environmental sustainability of civil aviation within Europe. EASA develops and enforces regulations, conducts safety inspections, and provides guidance on best practices to ensure high standards across the aviation industry. The agency works closely with national aviation authorities, industry stakeholders, international partners to promote safety, innovation, and efficiency in air transport. EASA the continuous improvement of safety and contributes the development of a unified European aviation system.

AeroShift



envisions AeroShift dynamic a ecosystem where human talent and advanced technology work together to build a sustainable future with people at its core. Dedicated to prioritising individuals, acknowledges that people are a constant in the aviation ever-evolving landscape. organisation's mission focuses on investing in workforce, promoting diversity, enhancing resilience—key pillars for industry's success. By cultivating a culture that integrates safety with growth, AeroShift aims to maximise returns on investment and pave the way for a more sustainable and prosperous future in aviation.

COLLABORATORS

























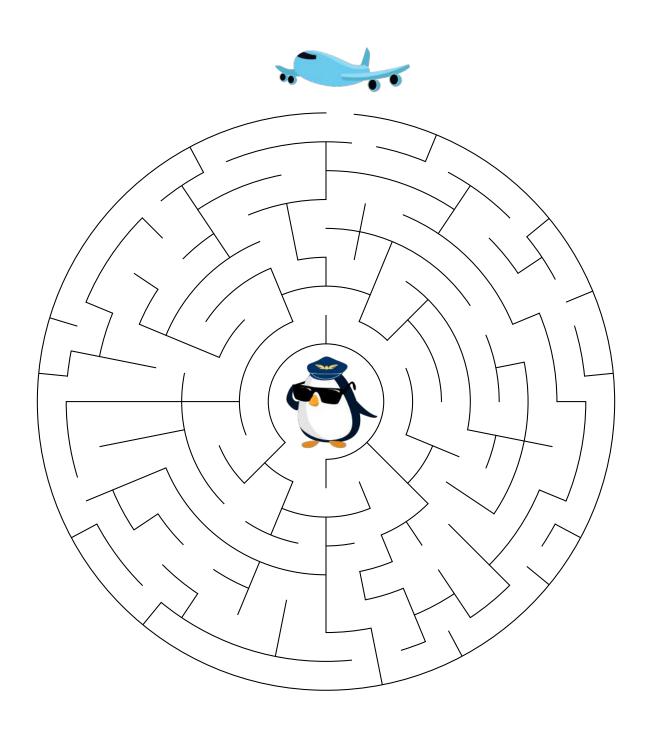




GAMES

THE MAZE!

You are eager to go to the next International Event but, oh no! The pilot of your plane is lost! Help him get to the airplane quickly and you will arrive just in time for the welcome dinner!



LIST OF (P)AS/(P)AM

AS Aachen AS Forlì-Bologna AS Paris

AS Ankara PAS Gaziantep AS Patras

AS Athens PAS Glasgow AS Pisa

AS Beograd AS Istanbul AS Rzeszów

AS Bordeaux PAS Izmir PAS Samsun

AS Bremen AS Kocaeli AS Sevilla

AS Braunschweig PAS Kyiv AS Stuttgart

AS București AS Leuven AS Terrassa

AM Cairo AS Lisboa AS Tampere

AS Castelldefels PAS Lyon AS Toulouse

AS Cádiz PAS Milano AS València

AS Cluj-Napoca AS München AS Zagreb

AS Covilhã AS Napoli

AS Delft PAS Oeiras

AS Dresden AS Oostende

LIST OF ACRONYMS

ACC Air Cargo Challenge AM Adjunct Member

AMEAC Annual Meeting of the EUROAVIA Congress

AS Affiliated Society

ASRW AIRBUS Sloshing Rocket Workshop BR WG Business Relations Working Group

BY Business Year

CM WG Communication Working Group

COE Council of Europe

DIB Designated International Board

DN WG Design Working Group

DroWo Drone Workshop

EG WG European Grants Working Group

EMEAC Electoral Meeting of the EUROAVIA Congress

EYF European Youth Foundation

FoWo Formation Workshop

HR WG Human Resources Working Group

IB International BoardIE International Event

PAS Prospective Affiliated Society
S&B WG Statutes & Bylaws Working Group

WG Working Group











& Other project specific SPONSORS

PARTNERS





















COLLABORATORS



























