

**Business Cockpit**

**Interviews**

**2020-2021**

**by @Team**

# AVIATION TURKEY

## **FINANCIAL REVIEW**

**RISK & RECOVERY IN THE  
AVIATION INDUSTRY**



## **PANDEMIC HASTENS THE END OF JUMBO JETS**

## **AIR CARGO**

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**BUSINESS COCKPIT  
INTERVIEWS  
WITH **SCOTT NEAL**  
SENIOR VICE PRESIDENT  
GULFSTREAM**



by Enes Kocatopçu

My name is Enes Kocatopçu and this year I graduated from Eskişehir Technical University, from the Department Aviation Management. During my university education, my aim was to learn and improve myself by accessing knowledge and by questioning, and also to mutually benefit from sharing what I learned with my social and professional environment. During my time at the university I volunteered for various scientific research teams and student clubs. Gaining knowledge is a precious journey, and I recently had the opportunity to have a conversation with an industry executive in the first edition of "Business Cockpit" Interviews, which gave me a glimpse into the field of aviation. I learned some new information and valuable insights about the future of aviation, which I am pleased to share.

## "Business Cockpit Interviews"

Before I share the interview, let me provide background on how this interview series came to be. During my last year at university I met Mr. Can Erel, who is known for his military and civil aviation activities, but especially for his efforts and dedication to training and mentoring aviators of the future as an aeronautical engineer. We held meetings to participate in the @Team project, which was planned and implemented at the beginning of the COVID-19 outbreak. A few weeks later, I learned that Mr. Erel was planning remote business conversations with aviation decision-makers under the title "Business Cockpit". He intended to prepare this project with a task group consisting of young aviators preparing to take part in the industry, and I became a volunteer candidate. After the necessary evaluations, I was very happy when I learned that I had been selected as the first member of that task group,

as a fresh graduate from Department of Aviation Management and the Vice President of the School's Civil Aviation Club.

During our frequent meetings with Mr. Erel, he highlighted that air cargo, business jets, air ambulances, and general / sports aviation are areas that have serious development potential in the aviation industry, significantly affected by the COVID-19 pandemic. I know that Can Erel was a member of the team to create the idea and strategize of my aviation school. During our meetings he has stated that the concept of the "Global Economy" and that its impact area would change with the effects of the COVID-19 pandemic. He said "Design and Production" oriented changes would occur in aviation as in every field, that the volume of business jets would grow more than expected. He wished to supply and put business jets into service with mobile EMS kits and start operating them

in our country if he had enough capital. He then shared his idea "Business Cockpit Interviews". We wanted our first interview to be on the subject of business jets and to associate it with China, which has the most significant development potential on a global scale, and it is one of the most ambitious regions in the field of "Design and Manufacturing."

I was given full support in this activity from my esteemed mentors; Mr. Hakan Çağlayan, Körfez Aviation Manager for business, and Dr. Ferhan Kuyucak Şengür, Professor, Department of Aviation Management of Eskişehir Technical University.

When we contacted Gulfstream Aircraft China General Manager Mr. Bin Zhang and with his positive response to the questions, we had prepared, the scope of our first e-interview finalized. I focused on this theme in my research afterwards. Our research showed that there are a total of 13 Gulfstream business jets in Turkey



consisting of 1 G450 and 3 G550s used by operators in general aviation, and 1 G-IV, 1 G150, 4 G450s, 2 G550s, and 1 G650 in the air taxi field used by seven operators. We conducted a detailed review of Gulfstream Aircraft company and its products in this field. The company has been developing its product range, placing particular importance on technological superiority.

I had the pleasure of conducting an e-interview with Mr. Scott Neal, the Vice President of the company responsible for global sales, after the mid-term review silence of Gulfstream, a subsidiary of General Dynamics. The anticipated developments in the field of business jets attracted my attention also in this interview. I would like to thank Mr. Zhang, the company's corporate communications managers, and of course Mr. Neal and my mentors who made this interview possible. We wish you pleasant reading!

## “Gulfstream Aircraft 2020”

with Scott Neal, Senior Vice President, Worldwide Sales, Gulfstream

**Enes Kocatopçu (EK):** Before the pandemic, how would you evaluate the business jet industry? What were the global trends in the business jet industry at that time?

**Scott Neal (SN):** Gulfstream entered the pandemic with an innovative product line, strong business and a great deal of interest in our products around the world, all of which have helped us weather the crisis. We are in a strong position thanks to our geographically diverse distribution of products, our unmatched customer service and outstanding support.

As far as trends, business-jet customers around the world are showing increased interest in the ultralong-range, large-cabin aircraft Gulfstream offers – the G500, G600, G650, G650ER and G700. This portfolio provides a compelling mix of range capabilities at high speeds, so customers can choose an aircraft that best

fits their mission requirements.

We also see continued interest in our super-midsize G280 for customers who need a nimble aircraft for shorter trips and one that can access hard-to-reach airports and does so with the performance features of a large-cabin aircraft.

**EK:** How has COVID-19 affected the Business Jet Industry? How would you evaluate this effect on operators and private ownership?

**SN:** The COVID-19 crisis and its impact on travel really make the case for business aviation. Business-jet operators and passengers have much more control over schedules and routes as well as health and safety when traveling on a private jet.

**EK:** What has changed in the customer experience during COVID-19? In terms of customer experience, what changes do you expect in the business jet industry post-COVID-19?

**SN:** Customers have become increasingly interested in features of the cabin environment that enhance health and wellness. Gulfstream leads the industry in providing a healthy cabin experience with 100% fresh, never recirculated air, low cabin altitudes, whisper-quiet noise levels and an abundance of natural light thanks to Gulfstream's large, panoramic windows.

Gulfstream has recently added even more enhancements to the signature Gulfstream Cabin Experience with an air ionization system. Gulfstream's plasma ionization system, which operates whenever the aircraft environmental control system is active, works by emitting positive and negative oxygen ions that actively seek out and inactivate harmful molecules in the air and on surfaces.

The plasma system is available as a retrofit on the Gulfstream G650 and G650ER, G550, G450 and GV models, with



© Gulfstream Aircraft

Gulfstream G500

additional installation options pending foreign certification. International certifications are currently in development.

**EK:** Does Gulfstream plan to expand its service network (maintenance center) geographically?

**SN:** Over the past few years, Gulfstream Customer Support has been expanding significantly around the world, and we have recently seen a number of new service center openings. In July, our new service center in Farnborough, England,

opened, following U.S.-based expansions in Savannah, Georgia; Van Nuys, California; and Appleton, Wisconsin.

These new expansions allow us to enhance service opportunities for our customers and construct even bigger hangars to accommodate the large-cabin Gulfstream aircraft that are in high demand around the world. The new facility at Gulfstream Farnborough, for example, can accommodate up to 13 G650, G650ER or G700 aircraft, once the G700 enters service.

**EK:** What do you think the most important difference is between you and your competitors?

**SN:** Gulfstream is a financially strong company, thanks to the backing of our parent company, General Dynamics.

With General Dynamics' support, Gulfstream has consistently

invested in research and development that has allowed us to bring new technologies to the industry. The G500, G600 and G700 are the latest results of that research and development and feature the Symmetry Flight Deck, the most technologically advanced flight deck in the industry, with the only electronically linked



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Gulfstream\_G280\_Groun



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Gulfstream\_G650ER\_Ground



active control sidesticks, most extensive use of touchscreen technology and the most robust data concentration network. These are all great safety differentiators for pilots and passengers.

**EK:** Is there a new Gulfstream aircraft model project in the near or far future?

**SN:** Our focus is to continue to deliver our outstanding products around the world, increasing deliveries of the G500 and G600 and continuing to progress the flight-test program of the new industry flagship G700.

**EK:** What would you say about the business jet industry in Turkey?

**SN:** Gulfstream has seen good interest from potential and existing customers in Turkey and is optimistic about the growth of the business-jet industry in the region. The market has responded well to Gulfstream's large-cabin, long- and ultralong-range aircraft offerings.

**EK:** Do you have any advice for the business jet industry in Turkey?

**SN:** As the world emerges from the COVID-19 pandemic, we expect the business-jet industry to see interest in flying privately increase. It's important to continue to innovate and ensure a solid support system and access for operators in the years to come 🌐



**Biography of Scott Neal**

Scott Neal has been senior vice president of Worldwide Sales since 2011. Before that, he was a top Gulfstream sales executive in the Eastern and Central United States sales regions.

In his earlier years at Gulfstream, Neal served in the pre-owned aircraft sales and sales engineering groups. Prior to joining Gulfstream, Neal held positions of increasing responsibility at Raytheon Corporate Jets and British Aerospace Inc.

# AVIATION TURKEY



**TURKEY & RUSSIA**  
CLOSE COOPERATION INDICATES  
**BIG OPPORTUNITIES**  
FOR ALL PARTIES  
**IN AVIATION**

В небе  
ВСЕГДА



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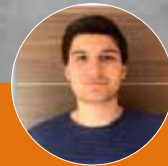
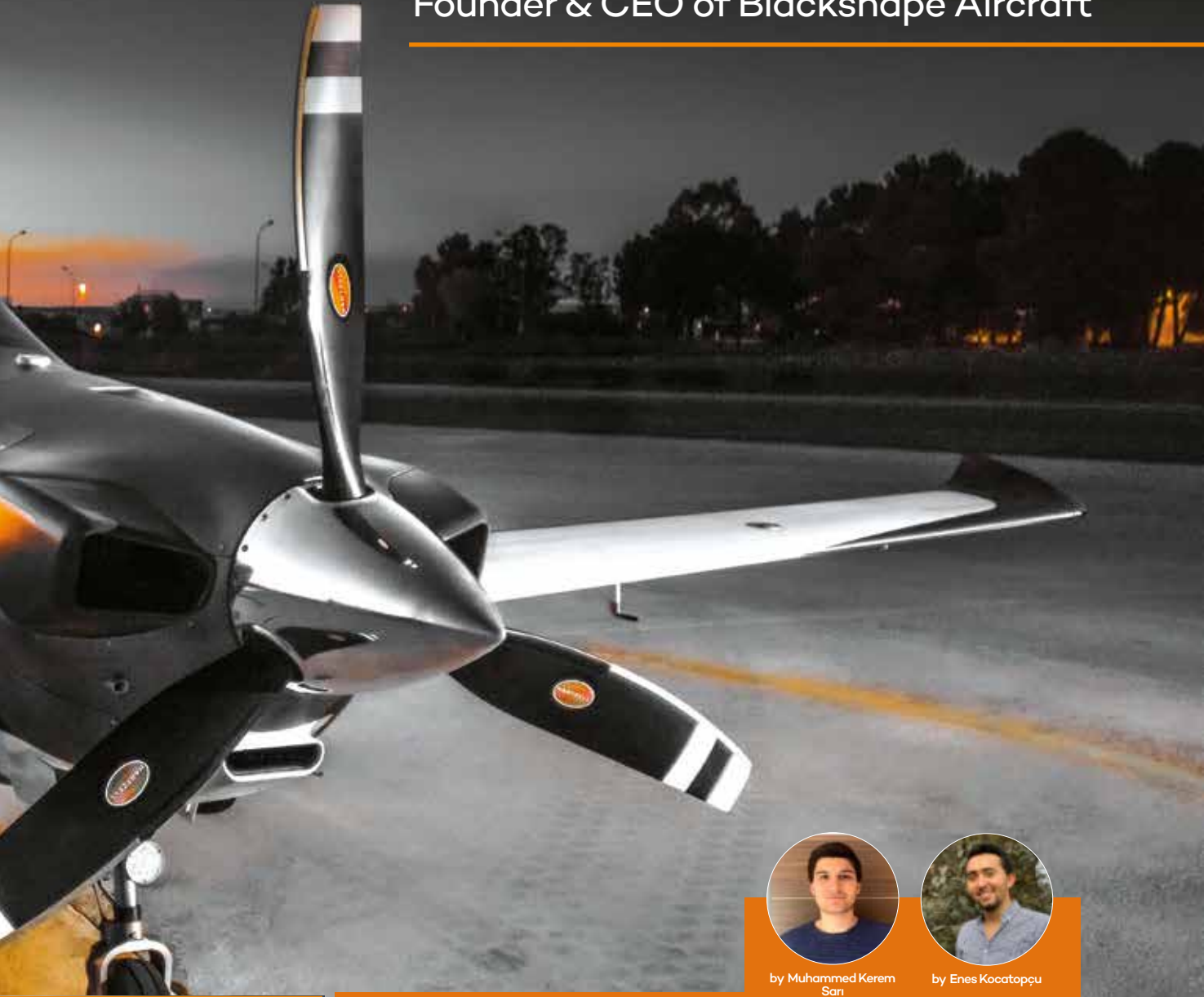
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# Blackshape Aircraft 2020

with Luciano Belviso,  
Founder & CEO of Blackshape Aircraft



by Muhammed Kerem  
Sari



by Enes Kocatoğlu

As a task force of young aviators, BCI4@ Team by the motto of "...understanding the future of aviation with the facts and figures of today!" was founded as a part of the CAN'CA Intellectual Projects by Can Erel.

With its business and academic mentorships, BCI4@ Team conducts interviews called "Business Cockpit Interviews (BCI)" with decision-makers and/or senior executives in the international and domestic aviation industries and shares.

In this interview with Luciano Belviso, Founder & CEO of Blackshape Aircraft, we focused on

his aviation background, Blackshape Aircraft, and general aviation and training technologies in this company. We would like to thank Mr. Antonio Amendolagine, Marketing Manager of Blackshape Aircraft, and Ms. Ilaria Trapuzzano, Communication and Media Manager of Angel Company, for their contributions in forming the structure of our questions and of course Mr. Belviso for his time and the thoughts he shared. Also, we would like to thank our adviser M. Celalettin Değirmencioğlu for his full support in this interview process. Enjoy the interview!



## BUSINESS COCKPIT INTERVIEWS

**BCI4@ Team:** Can you share a bit about yourself and your career path Mr. Belviso?

**Luciano Belviso:** I've always been fascinated by technologies and by all mobility industry. I learned my degree in Aerospace Engineering from the Polytechnic University of Turin and I completed my university studies with a Master's in Mechanical Engineering from the Federal Polytechnic School of Lausanne, Switzerland, and a Master of Laws from the University of Paris XI in France. I believe my curiosity and the desire to grow professionally, encouraged me to travel the world and have my first working experiences in Europe, Russia, Canada, India and South America. For unknown reasons, I think everybody gets "old" when they turn 23, so at 25 I decided to return in Italy and reinvest what I learned in one of my projects, with the dream to create something unique and to become a Made in Italy excellence. Funny enough, when you get "old" at 23 you are not really old, and I'm thankful for all the opportunities this season of my life is offering.

**BCI4@ Team:** How do you evaluate the future of the ultralight and light aircraft market, especially in the next decade? Also, what is the importance of investing in this area?



Luciano Belviso,  
CEO of Blackshape Aircraft

**Luciano Belviso:** With the new Basic Regulation, European countries have the possibility to increase the MTOW of ultralight to 600kg, like Germany did from 2018. This will certainly bring new life to the UL market. Concerning the light aircraft market, I believe the situation is different from country to country, depending on infrastructure and

taxation. However, most people probably didn't realize, but we all face a new era in aviation, due to the investment in technologies and their application to the aviation business.

For instance, VTOL or electric propulsion will likely have an outcome in the light aircraft market. Even though these

technologies are not mature yet, I believe in a short while the traditional feeling of the good and old times of the aviation community will leave the floor to the all-new excitement for what will come next.

A shift of the aviation culture is also likely to be soon, following what happened in the automotive industry. I refer – for instance – to shared mobility or to the experience market.

All these factors will probably contribute to a growth or – I would rather say – to a democratization of the aviation culture which will slowly enter everybody's life.

This will be a tremendous opportunity to expand the business to a much larger customer base, which – similarly to the automotive industry – will likely be polarized between those who choose an aircraft to travel from A to B and those who are focused on "how" that travel will be sharing our values in terms of performance, design, overall quality and emotions.

**BCI4@ Team:** How has COVID-19 affected the ultralight and light aircraft market?

**Luciano Belviso:** I believe COVID-19 is acting like an accelerator to bring processes to their outcome. Europe has



Blackshape Prime

different fragile markets that are suffering from this pandemic which will probably require attention by regulators, more infrastructure and more aviation culture. If COVID-19 made us aware of this, I think we should act soon. Blackshape has a presence on all continents, but our HQ is in Europe and we're committed to playing our role also to facilitate rulemaking processes.

**BCI4@ Team:** In which areas has Blackshape solutions made a difference in the period of COVID-19, a time when the search for private flights has increased?

**Luciano Belviso:** If we refer to the recreational market, our product has a high positioning, therefore our customers were only marginally affected by COVID-19 (logistics and test flights). We see very similar behavior with respect to other sectors (i.e. high-end sport cars) where some companies had record sales.

**BCI4@ Team:** Can you tell us about Prime and Gabriel? What are the differences between them? What are their superior characteristics compared to other aircraft?

**Luciano Belviso:** Blackshape Prime is a two-seater ultralight aircraft conceived for the recreational market.



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Blackshape Aircraft  
Production Team

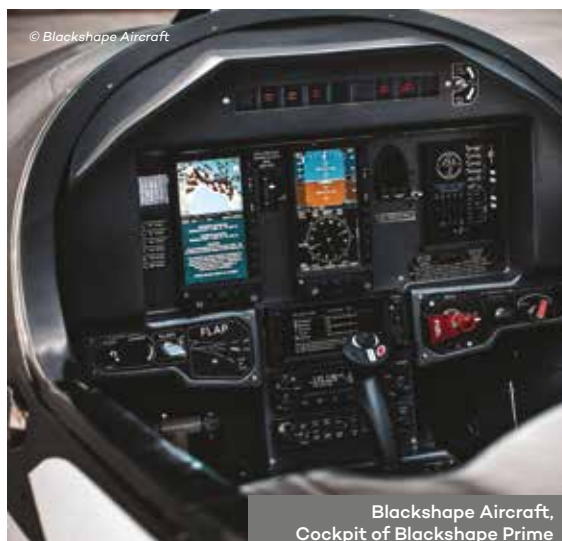
We've been working hard on its flight performance and details to offer an amazing flight experience and our design is made in Italy. The Prime is a "Supercraft", unique in its category and already in use in 18 countries worldwide. In Europe, it is possible to pilot it with an ultralight aircraft pilot license. The Prime is in use also in different training organizations outside Europe and this brought a

lot of experience with it for our future design. When we started to think about the Gabriel we already had the experience of our customers in mind and we wanted to make the perfect ab-initio trainer to suit modern training needs. Thus, the Gabriel is a general aviation aircraft conceived for the training of professional pilots, both civil and military. Thanks to its versatility, Gabriel can also be configured

as recreational, for the extreme performance lovers, who have a Private Pilot License (PPL). The aircraft has data-recording systems onboard that make it a sort of 'flying lab', with state-of-the-art equipment and avionics and with dual controls to carry out a detailed analysis of the cadet's skills. These features allow Gabriel to fill a gap in the aviation market and train the next generation of cadets.

**BCI4@ Team:** What type of innovations have come to the market as a result of Blackshape's approach to design and production processes, training, and flight activities?

**Luciano Belviso:** We use concurrent design from the very beginning, and we involve our customers at a very early stage of the development. We manufacture all our



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Blackshape Aircraft,  
Cockpit of Blackshape Prime

## BUSINESS COCKPIT INTERVIEWS

aircraft in CFRP with autoclave moulding – same process of the Boeing 787 – which makes the airframe last for its entire life without need of intermediate actions.

But apart from design and manufacturing, we are always driven to deep dive into specific market needs (training, ISR, etc.) and approach them in a holistic way to build our “innovation”. That’s the most attractive part of our work.

**BCI4@ Team:** You have accomplished to participate in the largest EU funded defense research project for maritime surveillance. What do you think about its significance for your company?

**Luciano Belviso:** ISR (Intelligence Surveillance and Reconnaissance) and autonomous flight constitute a pillar in our developments and strategy. We live in a geopolitical climate that requires, for needs ranging from the fight against smuggling to piracy, a series of strategic and tactical surveillance actions. We



created an aerial platform capable of intercepting and recognizing threats, generating an alarm to favour an intervention that contrasts the threat itself. Among the technologies used, there is also remote piloting.

**BCI4@ Team:** How are Blackshape's aircraft used for beginner flight training of amateur aviators? Does Blackshape Aircraft have educational solutions for this?

**Luciano Belviso:** We normally take care of our customers from all points of view. We offer tailored solutions based on every

specific need, and we have many customers who learned how to fly directly in our aircraft. Some of them decided to learn how to fly because of our aircraft as they wouldn't have been attracted to start their license on another kind of airplane.

**BCI4@ Team:** What are your thoughts on the importance of civil pilot training programs in this and future era?

**Luciano Belviso:** We started to be active in the field of pilot training but, unlike most solutions offered, we specialized on the skills to be delivered to pilots. In other words, we create

tools to train captains, not simply pilots. Until autonomous commercial flights will be possible (we don't have the enablers today) this sector will need captains accountable and responsible to keep air transportation the safest way to move people. As suppliers of integrated systems that allow the selection and training of pilots, this is our mission and our commitment.

**BCI4@ Team:** How would you evaluate the future of autonomous piloting? What is Blackshape's position in this industry? Are there any new projects on this subject?



**Luciano Belviso:** Autonomous flight has great potential and like all technologies with a possible disrupting impact need to be considered very carefully. We already flew remotely our ISR platform and for some markets this technology already has the right level of maturity. We're investing in this sector and we do have new projects in our pipeline.

**BCI4@ Team:** Do you think use of VTOL aircraft will expand in the future? What action can Blackshape take in the VTOL-aircraft market? What aspects will set it apart from its competitors in this market?

**Luciano Belviso:** The VTOL market is very attractive, and it was anticipated to expand the customer base and enable other forms of mobility (i.e. urban areas, goods delivery, etc.). However, the technology to enable such a revolution needs uncompromised attention to go through its growth and become ready for certification. I believe there's a huge difference between demonstrating that vertical flight is possible (of course, it is) and making it a realistic solution, certified and available to customers.

We've always been interested in the aviation business itself; we unveiled our last aircraft (the *Gabriel*) only after its certification, so what I can say – for now – is that we're considering very seriously all perspectives that technology offers.

**BCI4@ Team:** What does Blackshape and Angel have in mind for the Turkey market in terms of products? What do you think about the future market in Turkey?

**Luciano Belviso:** The Turkey market is surely interesting to us, and we are confident the next years will unlock important opportunities in the aerospace and aviation sectors. Moreover, we have an historical proficient relationship with Turkey within Angel Group: MERMEC, global leader in Railway Diagnostics and its sister company, provides Diagnostics Solutions helping to monitor the health status of the entire Turkish Railway.

**BCI4@ Team:** What would you recommend to young people aiming for a career in the ultralight and light aircraft industry?

**Luciano Belviso:** Be passionate. Every sector with the right passion is good, but if your taste brings you to aerospace, you're lucky. We face very interesting times rich with opportunities and those who have the passion to go through difficulties will be happy to be in the domain which will potentially re-shape our world 🌍



**Luciano Belviso, Founder & CEO of Blackshape Aircraft**

Luciano Belviso holds a Bachelors in Aerospace Engineering from the Politecnico di Torino, Italy, as well as a Master of Science in Mechanical Engineering from the Ecole Polytechnique Fédérale de Lausanne, Switzerland, and a Master of Laws from the Université Paris XI, France. He is a member of the Space Generation Advisory Council in support of the United Nations Space Program, member of the International Institute of Space Law. His academic and professional experience includes Europe, Russia, Canada, India and South America.



Blackshape Aircraft Hangar

# AVIATION TURKEY



**WILL COVID-19  
VACCINATION ENABLE  
THE REOPENING OF BORDERS?**

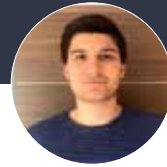


Enes Kocatopçu ve Muhammed Kerem Sarı made an interview with Directorate General for Civil Aviation's former Director General Bahri Kesici, who has retired due to age limit in the beginning of the previous month. In this interview, Enes Kocatopçu ve Muhammed Kerem Sarı had the opportunity to ask Bahri Kesici questions about Civil Aviation activities and initiatives in Turkey.

**BCI4@ Team: Who is Bahri Kesici? Could you briefly tell about your aviation enthusiasm since your youth and your career in this area?**

**Bahri Kesici:** I was born in 1956. I went to elementary school in Emirli village, secondary school's first grade in Kavak Secondary School in Samsun, then studied at Kırıkkale High School including the second grade and studied the senior year at Ankara Atatürk Anatolian High School and graduated. I got into METU Electrical and Electronics Engineering Department, continued my academic studies as a military

## Ambulance, Air taxi and General Aviation will Gain Momentum



by Muhammed Kerem Sarı



by Enes Kocatopçu

student as Aeronautical Engineer Lieutenant, and graduated. I worked as an engineer and manager for twelve years in fields such as aircraft maintenance, calibration, and electronic systems. After working as the Calibration Laboratory Commander at the 4th Main Jet Base Command, I worked for two years as a Technical Liaison Officer at the U.S. Wright Patterson AFB. I was appointed to Ministry of National Defense's F-16 Department in 1996 and during 1997-2000 worked at the Project Management Department at Air Force Command's Plans and Principles Directorate. Voluntarily retired as a Senior Lieutenant Commander in early 2000, I worked freelance for a while, and in 2002, I became a candidate to be nominated as Samsun MP. Later, I worked as a business development manager at a

factory at OSTİM, acted as the Mayor of Kavak Municipality in 2004-2009 and was assigned as the Deputy Director General at Directorate General for Civil Aviation in 2009. Performed as the Director General for the last four years, I retired as of 5 January 2021 after my career of nearly 40 years.

**BCI4@ Team: Would you briefly speak about the level reached in "Manufacturing in Aviation" and "Utilization in Aviation" during your term as the Director General, and about civil aviation in Turkey?**

**Bahri Kesici:** Without doubt, Manufacturing in Aviation and Manufacturing in Aviation are not the concepts that can be described with our term. From a historical perspective, similar with other nations of the world, a movement occurred in our country's aviation in

1910s, a fruitful progress was made in the advancing years, within the scope of Manufacturing in Aviation, countless heroes of the times worked at the Turkish Aeronautical Association such as Vecihi Hürkuş, Selahattin Alan, Nuri Demirağ and achieved major success. However, especially during the World War II and in its aftermath, aviation became stationary. Still, during the term of late Turgut Özal, substantial progress was achieved in defense industry aviation production, though the goods were imported or the production was made under licenses. Significant progress was achieved after 2003 in civil aviation or air transportation fields in terms of infrastructure and aircraft and passenger numbers, even records were set, and our country remained among top twenty countries in the world. These developments were specific to Utilization in Aviation and they led to major achievements in social welfare. When we speak of Manufacturing in Aviation, we think of factors such as design, domestic manufacturing, certification, generated projects, number of people employed at foreign aviation organizations, thesis written in our universities and international publications. During our term, Hürkuş Aircraft designed by TUSAŞ was certified,

substantial progress was achieved in Gökbey Helicopter's certification process, engine certification process of TEI production engine was launched, progress was made in the design and production of the indigenous balloon, certain initiatives were made regarding some amateur air vehicles' design, UAV field gained ground, İGA İstanbul Airport was built and certified. These are gains for our country, yet thinking of our country's potential, we need to achieve more. There have been major achievements in infrastructure required for transition to Manufacturing in Aviation and the focus will be intensively on design and production in the upcoming period.

**BCI4@ Team: We know that you are interested in amateur aviation, hot air balloons and unmanned air vehicles. How do you evaluate the developments in these areas and the future of them through the perspective of "Manufacturing in Aviation" and "Utilization in Aviation"?**

**Bahri Kesici:** To begin with, amateur aviation is in fact the basis of aviation. When we look at the countries with developed aviation, we see great number of amateur air vehicles and amateur aviators, and kit plane building is also popular. Another field is

the hot air balloons and I believe that the highest number of commercial balloon operations in the world exists in Turkey. Developed countries have rather amateur or sportive operations or fly hot air balloons in festivals. Certain regions and countries, mostly Africa, also operate commercial balloon tours. Regarding Unmanned Air Vehicles – UAVs, though relatively new, this sector has the potential to become quite popular in the future. We unfortunately remain at the forefront in Utilization in Aviation in terms of amateur aviation, hot air balloons and UAVs. I should mention that hundreds of hot air balloons currently performing flights in our country have been imported. Then again, we are witnessing certain pleasing developments. Our two companies active in the design and manufacturing processes of hot air balloons are located at the Cappadocia region and we are pleased with their existence. I am optimistic about the following process since Manufacturing in Aviation has been launched in this field. Domestic air vehicles used by amateurs or for training purposes are foreign origins. This is unfortunate because many of our engineers and technicians return astonished from their business travels for purchasing training

aircraft, as they cannot understand how we cannot build such platforms in our country despite all the facilities we own. The know-how, equipment and infrastructure to achieve the production of such platforms exist in our country but the entrepreneurial spirit has not reached the required level. We encouraged many companies, including TUSAŞ to step in such areas in many conferences yet no progress has been made. Certification culture is still not in the sufficient level and this issue is quite overrated by the governmental authorities. Surely, these factors discourage the entrepreneurs. We are gradually overcoming this obstacle as well. Regarding the UAVs, Chinese companies are fully dominating the market. Though it has been slightly challenging, we strived to operate cargo drones when I was a Board Member at PTT yet we failed to receive concrete results. However, UAV use in civil area continues to spread now, as it becomes more popular, the businesses and processes will become faster and more economical. UAV activities in governmental and defense areas have climbed to the top of the list in the world, therefore, designing and manufacturing our own UAVs in the civil area and launching the utilization of

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UAVs in all stages of life, in agriculture, in mapping, healthcare, search and rescue activities, in press, monitoring forest fires, cargos and in all other areas seem essential. I project that we will become more successful in UAVs in the future. If we manage to design and manufacture all platforms, from amateur aircraft to hot air balloons and to UAVs, we will have more say in the world and then achieve Manufacturing in Aviation. Obviously, our country has the sufficient know-how.

**BCI4@ Team: Could you briefly tell about the SGHM's activities during the global COVID-19 pandemic?**

With the outbreak of the pandemic, even when the virus first hit China we initiated meetings with the sector and made plans to minimize the pandemic's impacts. However, we had to adopt restrictions in line with our government's decision when all countries imposed flight restrictions. We made new regulations with international aviation organizations, with ICAO in particular and with ECAC, EUROCONTROL, EASA and ACI and started to adopt measures to prevent the spread of the pandemic.

As we accomplished these actions, we strived to adopt measures required to conduct the flights and normalize

the life. We also took certain steps to prevent financial bottlenecks in our sector. Within this context, the exams have been delayed, license and authorization periods have been extended and face-to-face training has been limited.

The measures need to be adopted by the airlines, security units and entire sector for preventing the spread of the pandemic have been identified and issued as a circular. For the first time in the world, all our airports have been certified. Additionally postponements and discounts have been made in our tariffs to support the sector financially.

Our government also provided support through methods such as the short-time working allowance and VAT rate discount. From where we stand now, we can see that the recovery of the sector will take time due to the ongoing travel restrictions.

Domestic lines are expected to become more active after the vaccination but the international flights are projected to return to their normal course in nearly 3 years. I expect a boom in aviation and tourism sooner if the vaccination reaches success, as people are tired of the travel restrictions.

**BCI4@ Team: In respect with today and future,**

**upon the pandemic, we have been observing an increase in the demand and business volume of general aviation segments such as air cargo, air ambulance, business aviation and air taxi. This increase is expected to remain in the future, the process is projected to linger. In fact, a certain customer group is expected to prefer general aviation more. Related air vehicle manufacturers are claimed to develop certain strategies that align with this change. Concerning this development, starting from areas with high potential, what is your opinion on the launch of FBO implementation in airports and even the construction and operation of General Aviation Airports that enable cultural aviation activities?**

**Bahri Kesici:** There are no problems regarding the airport infrastructure particularly in our country, partially the problem lays in our understanding. Cargo bears great importance in the following process and it will continue to matter. Ambulance, air taxi and general aviation will gain momentum.

In my opinion, whether there is a General Aviation Terminal or not, our existing airports are sufficient for such services. However, the

services to be provided should be regulated and service prices should be lowered accordingly. General Directorate of State Airports Authority and other airport operators should evaluate this issue well. In my view, specialization regarding FBO concept is of essence as during business travels especially conducted with small aircraft, time and quality come into prominence more. The demand should be perceived well and timely adjustment should be provided when delivering the services. Our private sector already has such dynamism. Perhaps, the privatization activities should be increased.

**BCI4@ Team: This year, you mentioned in your message regarding the International Civil Aviation Day, "...for the 2019-2023 period, ICAO identified the theme for the International Civil Aviation Day as 'Advancing Innovation for Global Aviation Development'...from now on, no sector can survive without data sharing and cooperation..." What are your evaluations and suggestions for the young people regarding developing cooperation and efforts towards communication and data sharing technologies?**

**Bahri Kesici:** As you have also mentioned, ICAO identified the theme for 2019-2023 as Innovation,

so there is a need to achieve new and different things, tell new things, innovations that will excite the society and aviation society are required. On the other hand, data and information will increase as it is shared and will be serving the humanity. Growth is not possible by being introverted, constant interaction is mandatory. What should the young people do? Youth already implies energy and at the same time divergent thinking, in a sense youth means innovation, surely I do not imply anarchism. The pie will grow bigger as we share our knowledge and will be enough for all to survive. Besides, your effort as the BCI4@ team is to share this interview via certain channels, what Aviation Turkey magazine does, is the share of know-how and experience. In fact, we all should, and in particular, the youth should be open to innovation and sharing. Sometimes people refrain from sharing information due to competition, but the master is never scared of his apprentice as he is already ahead of the apprentice with this know-how and experience. In short, we will not be scared to share.

**BCI4@ Team:** As Turkey, how do we contribute to the NGAP (New Generation Aviation Professionals) initiation formed by the ICAO

**to train qualified and competent aviation experts to operate, manage and maintain the global air transportation system of the future? What are your projects regarding this and what do you expect from the youth?**

**Bahri Kesici:** Our country is among the pioneers of the NGAP program introduced by the ICAO. We have been attending the events and conferences within this scope and many universities in our country have been included in the program. However, the COVID-19 pandemic slowed down all such activities. We consider NGAP as a program compatible with the ICAO's theme for 2019-2023. Perhaps one or more country-wide conferences can be arranged to increase awareness and enhance the participation when the pandemic retreats.

**BCI4@ Team:** What type of capabilities in terms of "Knowledge", "Skills" and "Competence" do you think the young people should have who are receiving education and training in aviation area? What are your comments on building "Authority-Educational Institution-Industry" cooperation and its effective functioning?

**Bahri Kesici:** As you know, we have various educational institutions focusing on aviation,

and our universities contain departments on aeronautical engineering, air transportation management/ aviation management, cabin services. There are also trainings on pilotage, air traffic control, aircraft maintenance areas which require licenses from the aviation authority. The content, scope and competence of these training programs have been designed at international standards. Universities, academies and vocational and technical high schools under the Ministry of National Education (MEB) have to train professionals in cooperation with the DGCA in line with sector and country's requirements. This is partly achieved, but many people graduate from schools or departments within the body of Council of Higher Education (YÖK) and MEB. People who received vocational or professional education in aviation can hardly find jobs in sectors other than our sector. Therefore, it is useful to align with the requirements and expectations of the sector in this field in a more controlled manner. In this way, instead of establishing redundant schools or departments, training people in accordance with the demands will be achieved. Perhaps this can be accomplished by building councils on a legal ground.

**BCI4@ Team:** You also recommend aviators to place "PhD" and "Pilot" titles before their names. Could you explain further the reason of this?

**Bahri Kesici:** We have to enhance our professional careers to gain more reputation in Manufacturing in Aviation along with Utilization in Aviation in the world or have a say in global aviation. First thing to do is not refraining from air platform and flying or in other words not perceiving aircraft, flying or being a pilot as a taboo. Our professionals employed at civil aviation should have doctorate diplomas so that we could gain accountability in the international arena. Of course, as I express these words, I use and/or, as all professions regarding aviation are important; being a pilot, an air traffic controller, and technician require license. Other than that, there are ATSEP, AIM, Flight operation and engineering as well as miscellaneous expertise. I advise them not to only focus on one of these professions but at the same time get a PhD degree in one of these or in other branches. Otherwise, we cannot exceed the average level, and in that case, we cannot have a say in the world. Our country has a high level of moral geography and sphere of influence; we already have the potential to become a model alone.

## BUSINESS COCKPIT INTERVIEWS

**BCI4@ Team:** During your term as the Director General, as a Turkish civil aviation authority, a directive on “Developing the Social Gender Balance” in aviation was issued. Based on this directive, an “Advisory Board for the Social Gender Balance Development Commission” was formed as working groups that embrace the entire sector. Turkey was the first country to accomplish systematic implementations in “Developing Social Gender Balance” area by holding regular meetings and events with these groups. Aware of Turkey’s efforts at ICAO level, a special invitation was sent for the “Social Gender Balance Development Commission” for the event held in the following period. What do you think about “Social Gender Balance” in Turkish civil aviation and the future of the activities to that end?

**Bahri Kesici:** Maintaining the gender balance is not easy, sometimes challenges arise. The rate of female professionals is lower in aviation; perhaps these rates are different in education and healthcare industry. In fact, there is no gender discrimination in aviation in our country, but we need to raise more awareness and encourage women. With

the approval and support of the sector, DGCA has conducted remarkable activities in this area, made regulations and gained success, even though these activities slowed down due to the pandemic, they are expected to expand in time. Aviation is an industry with professional activities where women and men have equal opportunities. More awareness is required.

**BCI4@ Team:** Do you believe that founding a “Council of Youth” comprised of persons who will contribute to the management of the Turkish civil aviation authority and aspire to work at such jobs is useful? Do you have plans to such end? Do you think building a “Council of Seniors” from the persons who have know-how and experience and worked in this sector is beneficial? Are there any plans in this context?

**Bahri Kesici:** Concepts such as youth council and seniors’ council are quite critical. The Student Pilots Association and Aviation for All Association are mostly formed by young people and we executed certain programs with them. More programs may be conducted later. I suggested these associations to build a federation, in that case,

they are able to embrace every segment and major events can be organized easily. On the other hand, we could not carry out many activities regarding the Council of Seniors. At least we planned an event with the former director generals of DGCA but it was cancelled due to the pandemic. In my opinion, there is great advantage in executing these institutionally with a certain degree of authority. Why not? The youth of this land wishes to become more successful, it should be made possible.

**BCI4@ Team:** Is there a plan to launch a regular “Aviation Summit” based on the yearly activities and progress evaluations in aviation to identify the points and resources in the related period? What are your comments on this issue?

**Bahri Kesici:** Actually, an aviation summit was planned but it was postponed due to the pandemic. Then again, the 12th Transportation Council will be held at İstanbul Atatürk Airport on 6-8 October 2021 and subjects related to aviation will be examined. We held various meetings, conferences and events regarding aviation but we did not have the chance to carry out an aviation summit because of the pandemic. I believe they

will be organized in the upcoming period.

**BCI4@ Team:** Do you have additional remarks for the readers?

**Bahri Kesici:** Thank you for giving me this opportunity. Aviation is a field without any borders. The world is connected through two factors; one is the internet and the other is aviation. During my career at the DGCA, I always said, “I am collaborating with the best team in the world”, and now I am repeating it. All units of our civil aviation sector are in this best team. Records have been set during the last ten years, our flight network has expanded; these achievements have been reached particularly with the contribution of our President Recep Tayyip Erdoğan and all our ministers and employees. I have acted as the DGCA’s 16th Director General; I would like to mention all the services and achievements gratefully. I believe that the future of aviation is bright in our country.

We, Enes Kocatopçu and Muhammed Kerem Sarı are very delightful to make this interview and we also thank our interview mentors dear Esmâ Gökem Ersoy and Dear Cem Akalın for their major contributions in building our questions.



SOLARSTRATOS

R. DOMJAN  

# Understanding the Future of Aviation with the Facts and Figures of Today!

BCI4@ Team interviewed with SolarStratos Initiator and Pilot Raphaël Domjan.

**BCI4@ Team:** Where did the Solar Stratos idea come from and would you please tell us about this plane?

**Raphael Domjan:** The idea was born when I crossed the pacific ocean aboard PlanetSolar, I was wondering what I could do once our successful adventure more ambitious than the first round the world with solar energy. At night in the middle of the South Pacific, the Milky Way is bright and every minute a shooting star passes over your head. This is where the idea of trying to reach the stratosphere with solar energy was born. A dream came true 4,000 years later.

**BCI4@ Team:** What are the key steps to initiate a start-up like SolarStratos?

**Raphael Domjan:**

- Find the idea
- Carry out a feasibility study
- Bring together a team and skills
- Find the financial means and technical partners
- Succeed

**BCI4@ Team:** You are trying to achieve something that has not been done before. What is the main disruptor you have encountered so far?

**Raphael Domjan:** The goal is to achieve something that has never been attempted, but with existing technologies. At this stage we have not yet really made a break or disruptor in our adventure. But we learn a lot every day.

**BCI4@ Team:** Did the COVID-19 pandemic have any effect on this project?

**Raphael Domjan:** The Covid19 made our life more difficult of course, but we are explorers, we try to use this difficulty as an advantage.

**BCI4@ Team:** It seems you are very dedicated to using renewable energy in your projects. Why is it important to use solar power rather than fossil fuels globally?

**Raphael Domjan:** We are currently burning 300 tonnes of fossil fuel per

second. First of all, it is not sustainable and also dangerous for our climate. We want to show that we can achieve incredible things thanks to renewable energies and electricity

**BCI4@ Team:** Technically speaking, there are some formidable concerns about high altitude solar powered aircraft, such as that their aerostuctures become very fragile due to high power/weight requirements. What would be your technical team's modern approach vis-a-vis those challenges different from legacy work?

**Raphael Domjan:** We want to fly at high altitudes with a light aircraft, which must consume little energy and therefore fly slowly. We think outside the box and learn with my team and our technical partners every day how to solve complex problems. It's exciting.

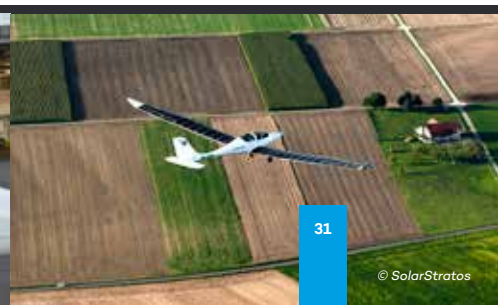
**BCI4@ Team:** Would you be thinking in the future about maybe enriching your approach by also considering hydrogen

energy alternative, despite its own challenges?

**Raphael Domjan:** We are always open to new technologies, hydrogen is one of the solutions of the future for the aviation of the future. But its use is not appropriate in our project.

**BCI4@ Team:** We know that fearless pioneers like you live and experiment at the extremes of flight-test, but would you ever consider having extra safety measures in your designs like ballistic parachute etc?

**Raphael Domjan:** I am an adventurer; but, my job is to limit risks. All flights where the wearing of a parachute is possible, are carried out with a parachute for each crew member. Certain flights cannot be carried out with a parachute; but, we have to test the plane and the flight profiles beforehand. In this case, the risks are greater; but, a risk-free adventure is no longer called adventure.





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**BCI4@ Team:** Would you tell us about your technical and management team?

**Raphael Domjan:** We have a small team, very motivated and super competent that enables us to carry out this adventure, with brilliant and passionate people. It is a privilege for me to work with these incredible people.

**BCI4@ Team:** What would be the next steps for further development of SolarStratos?

**Raphael Domjan:** We hope to participate in the

development of electric aviation and also we hope that our know-how could allow the development of high altitude solar drones in the future.

**BCI4@ Team:** Do you expect SolarStratos and similar initiatives increase in number in the near future?

**Raphael Domjan:** This is already the case. There are more and more adventure projects and communication explorations emerging for promotion of environmental protection.

**BCI4@ Team:** Is there any interest or support from

Turkey to SolarStratos? What do you think about collaborating with some institutions in Turkey? For example, Turkey Space Agency who manages Turkey's National Space Program.

**Raphael Domjan:** We are a project born in Switzerland, but we are very happy when other countries or institutions are willing to engage with us in this dream of reaching to the stratosphere with solar energy. So, yes we are open to any collaboration.

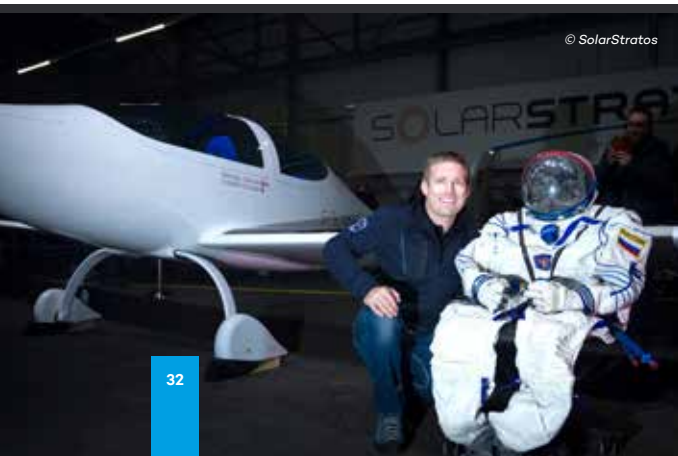
**BCI4@ Team:** What would you recommend to young aviators

who dream to work at SolarStratos?

**Raphael Domjan:** Just follow us, maybe we will need new talents very soon.

**BCI4@ Team:** Anything else do you want to add?

**Raphael Domjan:** We are destroying the world, but we are very happy when we have all it takes to change and become sustainable. Renewable energies, technology, raw materials. This will also be profitable for our economy, and especially for countries like Turkey which has a good geographical location with a high potential for renewable energy production. We are



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all responsible for change in order to preserving our beautiful blue planet.

### Characteristics

SolarStratos is the first commercial two-seater solar plane in history, it will also be the first manned solar plane penetrating the stratosphere. Calin Gologan (Elektra-Solar GmbH – technical partner SolarStratos) is the designer. The basis of the commercial aircraft will be used and the aircraft will be pushed to the limit of its ability to succeed in our crazy bet. This tandem two-seater, with a wingspan of 24 meters

and a weight of 450 kilos will fly like any other aircraft.

### An Aeroplane To Science

Exploring distant space we wish to contribute primarily to the protection of our atmosphere, this requires

a better understanding of what is happening. The SolarStratos Mission will fly at an altitude little frequented in a fragile environment, propelled solely by solar energy without any pollutant emissions and will give us the possibility to make new measurements,

never done before. In the future, the exploration of the stratosphere may allow us to extend and to understand humanity... Who knows...

Reference: <https://www.solarstratos.com/en/plane/>



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## Mühendis İrem YÜCESOY ile "Jean Monnet Bursu" Üzerine...



### 1. Kendinizden biraz bahsedebilir misiniz; İrem Yücesoy kimdir?

*Eskişehir Osmangazi Üniversitesi İnşaat Mühendisliği bölümü mezunuyum ve çok yakın bir zamanda da 30 yaşına girdim 😊 2015 yılında mezun olduğumda yaklaşık üç sene özel sektörde çalıştıktan sonra 2018 yılında SHGM iş ilanlarına denk geldim ve başvurum sonucunda Sivil Havacılık Genel Müdürlüğü'ne alınan iki inşaat mühendisinden birisi oldum. Yaklaşık iki seneye yakın Havaalanları Dairesi'nde çalıştım. Bu süreçte Annex 14 diye bilinen havaalanı tasarımı konularında mühendislik bilgisi gerektiren çeşitli başlıklarda çalıştık ve ülkemizdeki havaalanlarını regülasyon uyumluluğu kapsamında denetledik. Denetimlerimize gittiğimizde de birincil odağımız her zaman havacılık emniyetiydi ve ben de kendimi özellikle bu konuda geliştirmek istiyordum.*

*Önceden bildiğim ancak daha önce başvurmadığım Jean Monnet (JM) Burs Programı ile ilgili JM koordinasyon ekibinden kurumumuza bir yazı geldi. Sizin de bildiğiniz üzere özellikle kamu çalışanları mevzuat yönetim çalışmalarına direkt dâhil olabilen kişiler ve Avrupa Birliği (AB) mevzuat uyumluluk çalışmalarındaki bilgilerini direkt ülkeye getirebilme potansiyeline sahip adaylar onlar olduklarından daha fazla kontenjan sağlanıyor.*

*Kurumumdan izin alarak sınava başvurduğum ve üç-dört aylık yoğun bir çalışma sürecine girdim. Sonucunda da bursu almaya hak kazandım. Odak noktam her zaman havacılıkta emniyetin temin edilmesi olduğundan (Fransa Sivil Havacılık Üniversitesi- Ecole Nationale de l'Aviation Civile) ENAC'ta "Havacılıkta Emniyet Yönetimi" Master Programına başvurduğum ve kabul aldım. 6 aylık teorik eğitimimin ardından hem tezimi yazmak hem de staj yapmak üzere 1 yıllık Eurocontrol Safety Management Traineeship programına dâhil oldum. Çok güzel tecrübeler edindim ve şu an SHGM'de Hava Seyrüsefer Departmanı - Hava Trafik Yönetimi Bölümü'nde görev yapıyorum.*

### 2. JM Bursu öncesi herhangi bir yurt dışı deneyiminiz oldu mu?

*Lisedeyken yine bir AB Projesi kapsamında Comenius Değişim Programı ile kısa süreliğine İtalya'ya gitmiştim. Yurtdışında yaşama ile ilgili öyle bir tecrübem olmuştu ama*

*tabi ki, o zamanlarda henüz lisedesiniz bazı şeylerin çok fazla farkında olamayabiliyorsunuz. Yine de çok güzel bir maceraydı ve bitti diye düşünmüştüm. Okuldan mezun olduktan sonra farklı şeyleri deneyimlemek adına yurtdışında bir sertifikasyon programına gitmek veya yüksek lisans yapmak her zaman aklımın bir kenarında vardı. Dolayısıyla böyle bir şans da karşıma çıkınca başvurmak istedim.*

### **3. JM Bursuna başvurma sürecinden bahsedebilir misiniz?**

*Öncelikle bu burs hakkında bilgileri ne kadar çok genç, yeni mezun, bu konuda isteği olan kişilere ulaştırabilirsek o kadar faydalı olacağına inanıyorum. Çünkü JM burs programı çok eskiden beri verilen ancak birçok insanın haberinin dahi olmadığı bir program. Ayrıca özel sektör çalışanları, üniversite son sınıf öğrencileri veya yüksek lisans öğrencilerinin de başvurabildiği bir program sadece kamu çalışanlarının değil; bunun altını çizelim. Oldukça değerli bir burs programı, hatta Türkiye'deki diğer burs programları ile karşılaştırdığınızda en prestijli olan ve en iyi koşulları sağlayan burs programı diyebiliriz. JM Burs Programı destek ekibi ise mükemmel çalışıyor diyebilirim, her konuda hızlı çözümler sunup program süresince size her konuda destek oluyorlar.*

*JM ile ilgili şöyle bir özet geçmek isterim; bildiğiniz üzere Türkiye Avrupa Birliği'nin aday ülkesi ve tam adaylık için Türkiye'nin mevzuatları çerçevesinde AB mevzuatlarına uygun düzenlemeler yapması bekleniyor. JM Bursiyerleri ise bu burs sayesinde Türkiye'nin AB müktesebatı konusunda bilgi sahibi insan kaynağı güçlendirilmekte, böylece müktesebatın etkin bir şekilde uygulanabilmesi için gerekli idari kapasitenin oluşmasına katkı sağlamaktadır. Bursiyerlerin eğitim aldıkları alanda yetkinlikleri artmakta, AB'nin işleyişi ile ilgili bakış açıları genişlemektedir.*

*JM burs programının işleyişi ise şöyle; Avrupa'da bir üniversiteden kabul alıp orada bir sene staj, çalışma, araştırma, yüksek lisans programı yapıp öğrendiğiniz bilgileri Türkiye'de çalıştığınız kurumlara aktararak AB uyumluluk sürecini hızlandırmak şeklinde gerçekleşiyor. Türkiye'ye dönmek zorunlu değil elbette fakat sizden beklenen ve programın asıl amacı bu.*

*Burs kapsamında birçok fasıl var; ben 14. fasıl olan "Transport Policy" başlığından başvurmuşum. Başvuru süreciyle ilgili olarak da beklenen bazı şartlar var (değişmediyse eğer). Üniversite son sınıf öğrencisi olarak başvuruyorsanız ortalamanızın en az 2.50 olması bekleniyor. IELTS'ten minimum 6,5 skoruna sahip olmanız gerekiyor (Diğer dil sınavlarından gerekli olan denk puanlara JM internet sitesinden ulaşabilirsiniz). Mezun olurken eğer ortalamanız en az 2,50 değilse direkt başvuramıyorsunuz. Sektörde belirli bir süre çalışmış olma şartı aranıyor. Kamu çalışanı, akademisyen ve yüksek lisans öğrencisiyseniz de başvurabiliyorsunuz.*

*Başvurunuz sonunda şartları sağladığınız kontrol edildikten sonra tarafınıza bir mektup geliyor. Mektupta sınava katılmaya hak kazandığınız belirtiliyor. Sınavı genel hatlarıyla anlatmak gerekirse ise genellikle dört soru soruyorlar. (Dikkat; son yıllarda soru sorma yöntemleri biraz değişti.) Çoğunlukla sorulardan iki tanesi başvurduğunuz konu başlığınızla ilgili olarak Türkiye'nin AB mevzuatlarına entegrasyon süreci ve hangi aşamada olduğuyla ilgili oluyor.*

*İlk Soru Örneği: Başvurduğunuz fasılın Türkiye AB uyum süreci hangi aşamadadır? Ne gibi çalışmalar yapılıyor? Neler yapılması bekleniyor?*

*İkinci Soru Örneği: Avrupa Birliği'nin seçtiğiniz fasıl olan konuda kendi politikası nedir?*

*Yani sınavda sadece Türkiye'nin bulunduğu nokta değil aynı zamanda AB'nin bu konudaki kendi iç mevzuat ve politikalarını da bilmenizi sizden bekliyorlar. Bu konularla ilgili Avrupa Komisyonu'nun web sitesinde yayınlanmış olan White Paper'lar, rehber dokümanlar ve AB'nin dört yıllık planlarına ulaşabilirsiniz ve mutlaka bu başlıklara çok iyi hakim olmalısınız. Avrupa Birliği'nin her sene Türkiye için yayınladığı bir ilerleme raporu var. Bu raporda hangi fasılda hangi noktaya gelmiş, hangi konularda eksik kalmış, neler tamamlanmış, neler tamamlanmış, neler iyi gidiyor? gibi konular yer almakta. Bu dokümanları okuyarak bu bölümü çok rahatlıkla halledebilirsiniz.*

*Diğer sorular ise genellikle AB'nin mevcut gündemi ile ilgili oluyor. Bu konulara da hakim olmak sizin yeteneğiniz, ilginiz ve emeğinize bağlı olarak değişiyor. Tabi ki bu konular "derya deniz" diyebiliriz ama özellikle son dönemde çok sık gündeme gelen konular seçiliyor mesela; 2018-2019 yıllarında Birleşik Krallık'ın AB'den ayrılması neredeyse AB'nin tek gündemi olmuştu ve sınavda da bununla ilgili kapsamlı bir soru sorulmuştu.*

*Özetlemek gerekirse; JM burs programı tamamen AB Komisyonu bütçesinden finanse edildiği için sizden AB konuları ile ilgili ne kadar meraklı, araştıran, bilen, politikalarını, gündemini takip eden bir kişi olduğunuzu kanıtlamanızı bekliyorlar. Gündem maddesi Türkiye-AB ilişkileri veya AB'nin kendi iç politikası ile ilgili de olabilir. Bu konulara hâkim olursanız ve sınavda da size verilen sürede güzel bir dille bildiklerinizi kompozisyon haline getirerek cevaplarsanız sınavı rahatlıkla geçebilirsiniz.*

*JM Bursu kapsamında AB Komisyonu bütçesinden karşılanacak olan giderler de şu şekilde;*

- Okul ücretiniz
- Aylık yaşam giderleriniz
- Vize masrafları ve öngörülemeyen giderleriniz

*için belirli bir miktar karşılanmaktadır.*

#### **4. Avrupa'nın en iyi havacılık okullarından biri olan ENAC'ta eğitim almak üzere burs kazandınız. ENAC'ta eğitim almış biri olarak sizden bu okul ile ilgili gözlemlerinizi ve düşüncelerinizi alabilir miyiz?**

*Öncelikle ENAC'ın Güney Fransa'daki Toulouse şehrinde çok güzel bir kampüsü var. İngiltere'deki Cranfield Üniversitesi ile yarışıyorlar. Birleşik Krallık da artık AB üyesi olmadığı için aslında artık Avrupa'nın en iyi havacılık okulu şu anda "ENAC" diyebiliriz.*

*ENAC'ın en önemli özelliklerinden birisinin de şu olduğunu düşünüyorum; ENAC'ta ders veren eğitmenler bizzat sektörde çalışan üst düzey yöneticiler oluyorlar (Örneğin; Havayolu Modülü'nü anlatmaya size Air France'dan bir üst düzey yönetici geliyor). Dolayısıyla siz de direkt gerçek hayattan ve sektörün kalbinden gelen o kişiye sorular sorabiliyorsunuz. Diğer önemli konu ise modülün sonunda siz bu kişi ile tanışmış ve bağlantı kurmuş oluyorsunuz, "networking" dediğimiz konuda muhteşem bir kazanç elde etmiş oluyorsunuz. Sadece Air France'daki yöneticiler, uzmanlar değil; Fransız Sivil Havacılık Otoritesi'nden yöneticiler, Fransa Kaza-Kırım Komitesi veya EASA'dan üst düzey yöneticiler de gelmişti. Yani dersinizin konu başlığında uzmanlaşmış kişiler kimse o kişileri sektörden çekip size eğitmen olarak getiriyorlar. O kişilerle bir-iki hafta zaman geçiriyorsunuz. Yeri geliyor öğlen beraber yemek yiyorsunuz, kahve içiyorsunuz ya da case study yapıp sınavlara hazırlanıyorsunuz. ENAC'ın yine bir başka önemli özelliği de bence "kariyer günleri" organizasyonları olduğunu düşünüyorum. (Şu anda Pandemi şartlarından dolayı etkinlikler biraz olumsuz etkilenmiş diye duydum ama mutlaka yüz yüze*

olacak şekilde bu uygulamayı tekrar geri getireceklerdir.). Kariyer günleri etkinliklerinde de Air France, Airbus, NavBlue gibi önemli şirketlerin yetkililerinin (insan kaynakları, teknik departman uzmanları) katılımıyla bu etkinlikler gerçekleştiriliyor. Öğrenciler bu sayede sektörden önemli kişilerle birebir iletişime geçerek tanışıyorlar. Gelecek dönem stajınız için de bir bakıma sizi hazırlıyorlar diyebiliriz.



Bunların dışında ENAC pilotaj eğitimi de alabileceğiniz bir okul ve Air France ve Çin ile de anlaşması var. Önemli başka özelliklerinden biri de bence havacılıkta spesifik konuları alanlara bölerek dilediğiniz bir konuda uzmanlaşabileceğiniz bir eğitim programı sunuyor size. Örneğin; sizin ilgi alınıyorsunuz "emniyet" ise : Havacılıkta Emniyet Yönetimi ya da "havayolu" ise Havayolu Yönetimi ya da başka örnekler vermek gerekirse ; Havaalanı Yönetimi, Hava Trafik Yönetimi...

**5. Bildiğimiz kadarıyla ENAC'ta birçok alanda çalıştınız. Bu çalışma alanlarından bahsedebilir misiniz?**

Dâhil olduğum programın tam adı "Safety Management in Aviation-Advanced Master Program" ve bahsedilen Advanced Program 6 ay teorik-6 ay uygulama(staj) olarak gerçekleşiyor.

İlk başta havacılıkta finans, havacılıkta emniyet farkındalığının seneler boyunca gelişimi gibi genel konularla başlıyorsunuz. SMS (Safety Management Systems-Emniyet Yönetim Sistemi)'in dört bileşeninden yola çıkarak SMS'in bir havaalanları dairesinde, hava trafik yönetimi dairesinde veya bir bakım işletmesinde nasıl uygulanması gerektiği gibi konuların üzerinde duruluyor. Bununla birlikte SSP (State Safety Program-Devlet Emniyet Programı)'nin nasıl yazılması ve içeriğinin neler olması gerektiği üzerine eğitimlerimiz olmuştur. Teorik eğitim sürecinde yazılı ve sözlü sınavlar da oluyor. Programın ikinci döneminde ise havacılık emniyeti ile ilgili bir konuda, bir şirket veya kurumda stajyer öğrenci olarak stajınızı gerçekleştiriyorsunuz ve bir proje yaparak tez yazıyorsunuz.

**6. Bildiğimiz üzere eğitiminizin ikinci yarısında Eurocontrol'de staj hakkı kazandınız bu tecrübenizden bahsedebilir misiniz?**

*Eurocontrol'den staj için kabul aldığımda çok heyecanlanmışım. Kabul aldığım programın adı "Safety Management Traineeship". Ayrıca şunu da belirtmem lazım; Eurocontrol'de staj yapabilmemiz için Eurocontrol üyesi bir ülkenin vatandaşı olmanız gerekiyor. Türkiye'de Eurocontrol'ün çok eskiden beri üyesi ve dolayısıyla Türk öğrenciler kendi imkanlarıyla da bu ilanları takip ederek Eurocontrol bünyesinde staj yapabilirler. Fakat bu imkânlar Türkiye'de maalesef çok bilinmiyor bu vesile ile de bu kurumların ilanlarını takip etmenizi mutlaka tavsiye ediyorum.*

*Stajım sürecinde de olay (incident/accident) raporlama sistemlerinin geliştirilmesi, analiz edilmesine yönelik Eurocontrol'ün geliştirdiği "TOKAI" isimli bir aplikasyon üzerinde çalışmalar yaptık. Bir de "just culture-adil kültür" olarak adlandırılan dürüst raporlama kavramları kapsamında araştırmalarım oldu fakat maalesef global anlamda havacılık dünyasında bu konuyu aşabilmek için biraz daha zamana ihtiyacımız var. Emniyetin geliştirebilmesi için çok fazla veriye ihtiyacımız var ve dolayısıyla bizim beklentimiz de direkt/indirekt olarak emniyete etkisi olan veya olabilecek her hadisenin tarafımıza raporlanması ve data ağıımızı geliştirerek sistem hakkında daha çok bilgi sahibi olmak ve kapsamlı analizler yapabilmek.*

## **7. ENAC'ta ve Eurocontrol'de çalıştığınız konuların şu anda SHGM'deki göreviniz için size katkıları nasıl oldu?**

*Havacılık emniyeti yönetimi konusunda uzmanlaşmak için seçtiğim master programının devamında stajımı Eurocontrol'de yapmış olduğumdan kaynaklı olarak hava trafik konuları ile ilgili oldukça fazla şey öğrendim. Konularım; Emniyet Yönetim Sistemi, Adalet Kültürü'ydü ama bu konulara hep hava trafik tarafını baz alarak çalıştık. Keza, benim yazdığım tez de sistematik olarak emniyetin tahmin edici yöntemlerini araştırmak adına tasarlanmış bir metodoloji üzerinedir. Bu da daha çok hava trafik kontrolörlerinin davranış ve çalışma şekilleri üzerinden giden bir konuydu. Dolayısıyla benim döndükten sonra Havaalanları Dairesi değil de Hava Seyrüsefer Departmanı'nda olmamın bu süreçte yaptığım çalışmalara daha paralel ve uygun olduğu kurumumca da uygun görüldü. Şu anda da Hava Trafik Yönetimi Birimi'nde çeşitli konularda severek çalışıyorum.*

## **8. Havacılık emniyeti eğitimi konusunda Türkiye ENAC'tan neler öğrenilebilir?**

*Türkiye havacılık konusunda bence gerçekten iyi iş çıkarıyor. Hatta birçok ülkeye ders verebilecek konumda olduğumuzu söyleyebiliriz ayrıca adını dünya çapında duyurmuş çok değerli Havayolu firmalarımız sayesinde de güzel bir repütasyonumuz oluştuğunu bizzat deneyimledim. Avrupa'da ise bence Fransa havacılık anlamında ileri bir boyuta ulaşmış ve gördüğüm kadarıyla Avrupa'da bu konuda organizasyonel yapı ve idari insan kaynağı biraz daha gelişmiş durumda.*

*ENAC ve Türkiye'deki üniversitelerin kıyaslanmasına gelince; belki bölümlerin isimleri biraz daha spesifikleştirilerek program çeşitlerini arttırmak Türkiye'deki havacılık dünyasını daha cazibeli hale getirebilir. Bu konularda Türkiye'nin gerekli kaynağı ve çok vizyonlu eğitimcileri zaten var ve inanıyorum ki mutlaka ilerleyen dönemlerde bizim program başlıklarımız da daha spesifikleşecek.*

## **9. Master ve Staj dönemine geri dönebilseydiniz farklı yaparım dediğiniz bir şey var mı?**

*Çok dürüstçe söylemek gerekirse inanın yok!*

ENAC'a 2019-2020 dönemi öğrencileri olarak başladığımız ilk gün bir önceki dönemin (2018-2019) de mezuniyet günüydü. Mezun olanlar bir saatlerini bize ayırdılar ve tanıştık. Dersler ve sonraki süreç hakkında çok değerli bilgiler verdiler, tavsiyelerde bulundular. Orada da bir mezun öğrenci Eurocontrol'de staj yaptığını söylediğinde hepimiz gıpta etmiştik ve sonunda ben de bunu gerçekleştirenlerden biri oldum. Dolayısıyla geri dönsem farklı yaparım diyebileceğim inanın ki hiçbir şey yok. Belki sadece şunu söyleyebilirim; daha çok insanla tanışsaydım keşke diyorum bazen. Bölümdeki diğer eğitimcilerle, öğrencilerle... Networking denilen şey gerçekten çok önemli, kıymetli ve havacılık dünyası aslında düşündüğümüzden daha küçük. Dolayısıyla bu konuyu önemsenizi ve sizlere de aynı şekilde yaklaşmanızı tavsiye ediyorum. Aynı şekilde benimle de LinkedIn aracılığı ile bağlantı kurabilirsiniz. İletişim kurmaktan çekinmeyin, denemekten de hiçbir şey kaybetmezsiniz. İllaki bir çıkarınız için veya iş ilanı için iletişime geçmeniz gerekmez yeni bir bilgi öğrenmek, bilgi paylaşımı yapmak için de yeni insanlarla tanışmak bence çok keyifli ve havacılık dünyasında konuşacak konu çok ☺

#### 10. Genç havacılık öğrencilerine ve tutkunlarına tavsiyeleriniz neler olurdu?

Öncelikle herkesin iyimser olmasını istiyorum. Maalesef yüz yılda bir olan korkunç bir pandeminin içerisine girdik ve tabii ki bu durumdan en çok etkilenen sektör de şüphesiz havacılık sektörü oldu. Birçok yeni mezunla görüştüğümde geleceğe çok umutsuz bakıyorlar. Fakat durum aslında o kadar karamsar değil hatta son dönemde çok güzel alımlar, ilanlar görüyorum çoktan toparlanmaya başladık diyebiliriz. Türkiye özellikle İstanbul Havalimanı'ndaki yoğunluk ve hava trafiği sayısı ile de birçok istatistikte sektörde halen öncü konumu koruyor. Diğer tavsiyem ise belki; saha tecrübesinin önemi olabilir. Dolayısıyla zamanınız enerjiniz uygunsa bence okurken çalışmaktan hiç çekinmemelisiniz. Kendinizi erkenden hazırlayın ve fark yaratın. Örneğin Havacılık Yönetimi'nde henüz öğrenci olan birinin yer hizmetleri personeli olarak part-time çalışabilmesi. Tabii programı müsaitse ve mümkünse bence bunu kesinlikle yapmalı, çok basit gözükse işlerden bile ne kadar çok şey öğrenebileceğini görecektir.

Bir diğer tavsiye ise; Türkiye'nin üye olduğu uluslararası organizasyonların (ICAO, Eurocontrol vs.) hepsinin iş ilanlarını, staj programı duyurularını aktif bir şekilde takip etmelerini de özellikle tavsiye ederim. Havacılığa bir de uluslararası gözden bakmak ve Türkiye'nin Avrupa havacılığında ne kadar kıymetli bir konumda olduğunu görmek muazzam bir tecrübe olacaktır. Ve tekrar ediyorum sektörde çalışan insanlar ile de bağlantı kurma konusunda açık olun, korkusuz olun, istekli olun, girişimci olun. Şanslıyız ki Türkiye'de çok güzel bir sektör var ve bu sektörün insan kaynağına ihtiyacı her zaman olacaktır.

#### 11. Son olarak eklemek istedikleriniz var mı?

Şimdiden bile güzel ilerlemeler kaydeden havacılık sektörü kısa sürede inanıyorum ki 100% toparlanacak, gelişecek ve hatta daha da büyüyecek; bunu asla unutmayalım. Umutlu ve vizyonlu olursak hepimizin çok güzel işler başaracağına inanıyorum. Umarım bir gün başka yerlerde seneler sonra yeni JM Bursiyerleri ile tanışırım. Bu bilgilerin herkese faydalı ve yol gösterici olmasını diliyorum!

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