



ANNUAL REPORT 2022-23

**Pakistan
Aerospace
Council**

*High-tech
Industries Cluster*

www.pakaero.com.pk

Prepared by:

ABDUL HAFEEZ

Reviewed by:

ENGINEER ASIF JAH

Phone:

+92-51-8351031

PAKISTAN

AEROSPACE COUNCIL



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PAKISTAN AEROSPACE COUNCIL

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MISSION

Clustering high-tech industries under the umbrella of the Pakistan Aerospace Council for the emergence of global footprints.

VISION

Stimulates Pakistani business in aerospace, defense, high-tech electronics, and automotive on national, regional, and global platforms

VALUES

Improving the image of Pakistan's high-tech industries touching the high-tech sustainable growth touching all out state-of-the-art efforts

The Journey of Pakistan Aerospace Council

The Pakistan Aerospace Council (PAeC) was established with the vision of catalysing innovation, fostering collaboration, and advancing the nation's aerospace industry, PAeC embarked on a journey that would redefine the possibilities in this dynamic sector.

At its core, PAeC is a bridge that connects resources, talents, and cutting-edge technologies from various corners of the aerospace landscape, bringing them together in a symphony of innovation. It thrives on the collective knowledge, skills, and aspirations of its members, who range from seasoned aerospace experts to young, passionate enthusiasts.

As PAeC ventured into uncharted territory, the need for a cohesive strategy became apparent. The Council understood that success in this ever-evolving industry demanded a clear roadmap. This led to the identification of three crucial skill sets, seen as the cornerstones of effective development within the aerospace cluster:

1. Global Mindset: The aerospace industry is a global playing field, where innovation knows no boundaries. PAeC recognized that to thrive in this interconnected world, a global mindset was imperative. Members were encouraged to think beyond borders, to embrace diversity, and to seek inspiration from the rich tapestry of global aerospace developments. The global mindset allowed PAeC to learn from the best, adapt quickly to changing circumstances, and position Pakistan as a formidable player on the international stage.

2. Global Entrepreneurship: Innovation alone is not enough. The aerospace sector requires an entrepreneurial spirit, a drive to turn ideas into tangible solutions. PAeC instilled the spirit of global entrepreneurship in its members. The Council became a platform where visionaries could develop, refine, and launch their innovative aerospace projects. This not only created opportunities for economic growth but also fostered a culture of innovation where every challenge was seen as a potential opportunity.

3. Active Citizenry: The aerospace cluster's development was not just the responsibility of a select few; it was a shared endeavour. PAeC believed in active citizenry, where each member played an active role in the progress of the industry and the well-being of the community. Initiatives were launched to empower young talents, support educational programs, and promote aerospace awareness among the public. This active citizenry breathed life into PAeC's mission, creating a dynamic and engaged community of aerospace enthusiasts.

As the years went by, PAeC's influence began to ripple through Pakistan's aerospace landscape. Projects were born, research was conducted, and new talent was nurtured. The council became a symbol of innovation, collaboration, and progress.

The journey of the Pakistan Aerospace Council was, and continues to be, a testament to the transformative power of shared vision and collective action. As the aerospace industry soars to new heights, PAeC stands as a beacon of hope, demonstrating that when resources, talents, and cutting-edge technologies converge, the sky is not the limit - it's just the beginning.

Message of the President, Pakistan Aerospace Council

Dear Members, Colleagues, and Friends,

I am pleased to present the Annual Report for the Pakistan Aerospace Council for the fiscal year 2022-2023. It is an honor to reflect upon our accomplishments, challenges, and the exciting future that awaits us in the aerospace industry.

This year has been marked by significant milestones, demonstrating the strength and resilience of our aerospace community. Despite the challenges brought about by the global situation, our members and partners have shown unwavering commitment, dedication, and innovation.

Achievements and Highlights:

Technology: We have witnessed remarkable advancements in aerospace technology, driven by the passion and expertise of our members. Cutting-edge developments in aircraft design, avionics, propulsion systems, and space exploration have continued to push the boundaries of what is possible.

Industry: The collaborative spirit of our aerospace professionals and organizations has flourished. Partnerships formed within the council have led to groundbreaking research and development projects, bolstering Pakistan's position on the global aerospace stage.

Academia: Our commitment to nurturing the next generation of aerospace leaders has yielded fruitful results. Educational initiatives and scholarship programs have empowered young minds to pursue careers in aerospace and contribute to the growth of our industry.

Aviation: Addressing environmental concerns is at the forefront of our agenda. Efforts to develop more sustainable aviation technologies, reduce carbon emissions, and minimize the environmental footprint of our operations have been commendable.

Global Engagement: We have strengthened our ties with international aerospace organizations, promoting knowledge sharing, trade, and collaboration. These connections expand our horizons and bring new opportunities for the aerospace sector in Pakistan.

Challenges and Resilience

It's essential to acknowledge the challenges we've faced, including supply chain disruptions, economic uncertainties, and health crises. However, our industry's ability to adapt, innovate, and overcome these obstacles has been remarkable. We have showcased our resilience and determination in the face of adversity.

Looking Ahead

As we embark on the new fiscal year, the Pakistan Aerospace Council is committed to maintaining its role as a leading force in the aerospace sector. We will continue to strive for excellence, foster collaboration, and champion innovation. Our focus on sustainability, safety, and workforce development will remain unwavering.

Call to Action

I urge each and every elite member of PAeC to actively seek out and invite new members to join the Pakistan Aerospace Council. Whether they are seasoned aerospace professionals, bright young talents, academics, or enthusiasts passionate about aerospace, we welcome them with open arms. Here's how you can make a difference:

Identify Potential Members: Look within your professional network, academic circles, or industry-related communities to identify individuals who share our passion for aerospace and align with our vision and values.

Engage in Conversations: Initiate conversations about the benefits of PAeC membership. Share your own experiences and the opportunities you've gained from being a part of our esteemed council.

Extend Invitations: Extend warm and personal invitations to prospective members. Let them know that their unique skills, knowledge, and aspirations can contribute to the growth and success of PAeC.

Mentor and Support: For young professionals or students, offer mentorship and guidance. Show them how their involvement can shape their careers and the future of the aerospace industry in Pakistan.

Promote the Mission: Emphasize our mission of innovation, collaboration, and sustainability. Highlight the impact PAeC has had and will continue to have on the aerospace sector in Pakistan.

Together, We Reach New Heights

Expanding our membership isn't just a numerical goal; it's an investment in our shared future. With each new member, we enrich our pool of knowledge, experience, and insights. We expand our capabilities and influence in the aerospace arena. Together, we empower the aerospace community in Pakistan.

I encourage you to start this endeavor today, and let's set a goal to bring in 50 new members within the current fiscal year. Your efforts will contribute to our collective success and the realization of our vision.

Gratitude

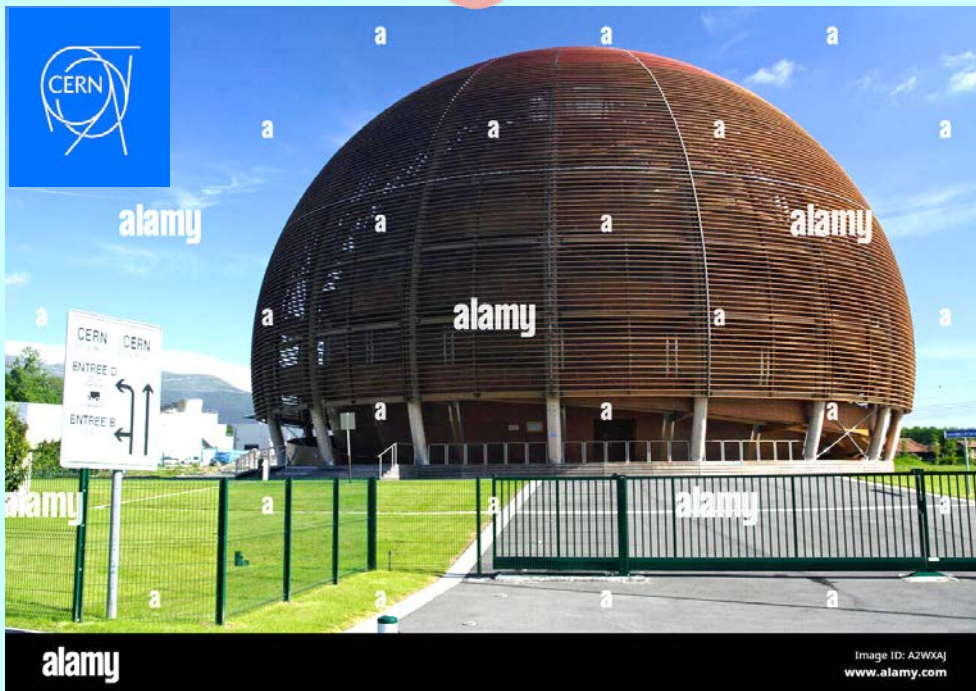
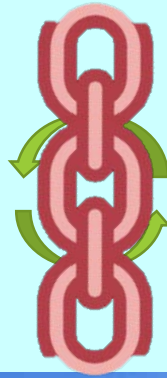
I would like to express my sincere appreciation to our members, partners, and all individuals who have contributed to our achievements. Your dedication and hard work are the cornerstones of our success.

Thank you for your continued support and commitment to the Pakistan Aerospace Council. I am eager to witness the heights we will reach in the coming years.

Warm regards,

Dr. Haroon Javed Qureshi
President, Pakistan Aerospace Council
Founder & CEO East West Infiniti

PAeC's
COLLABORATION
WITH CERN



PAeC COLLABORATION WITH CERN

The executive committee of the Pakistan Aerospace Council (PAeC) stands as a beacon of vision and commitment, devoted to pushing the boundaries of what's possible in the aerospace sector. With unwavering dedication, they are not content with the status quo; they are resolute in their mission to explore big horizons, mega avenues, and essential forums worldwide. PAeC's leadership believes in the power of global collaboration and the exchange of ideas, recognizing that innovation and progress often emerge at the intersection of diverse perspectives. Their tireless efforts extend far beyond borders, aiming to bring the latest advancements and best practices to the aerospace cluster in Pakistan. With an eye on the future and an unwavering commitment to excellence, the executive committee is driving change, pushing the aerospace industry to new heights, and ensuring a brighter and more promising future for all those it touches.

CERN at Franco-Swiss border at Geneva is the best option for PAeC to opt for its future mission and vision. The purpose of CERN, the European Organization for Nuclear Research, is to push the boundaries of human knowledge and advance our understanding of the fundamental laws of the universe. CERN serves as a global center for scientific research in the field of particle physics, with a commitment to fostering international collaboration and promoting peaceful uses of science and technology.

In this context, a Zoom Meeting was arranged on 20th January 2023 by the Founder / Convener PAeC, Mr. Imtiaz Rastgar with the topic of ***How is doing business with CERN.***

Following were the participants of the meeting from both sides:

PAeC	CERN
Dr. Hafeez Hoorani of NCP	Jérôme Pierlot
Mr. Asim Adnan of Teresol	Daniel Schoeling
Dr. Naveed of Teresol	Julia Ranya
Mr. Farrukh Amin of AKSA	
Mr. Khalid Mehmood of IRIS	

After the introduction by Mr. Jérôme Pierlot of CERN, the business with CERN was started in a detailed manner.

M/S AKSA-SDS and IRIS did not hopefully participate in the meeting. However, Dr. Naveed Iqbal COO Teresol Pvt Limited introduced himself and led his company's products' introduction with clear intonation. He introduced the following products:

- Power PC Architecture SBCs
- Single Board Computer
- Video ad Graphic Processing Card
- Quad Channel MIL-STD-1553B 6U VME Interface Module
- Quad-Core Single Board.
- AI Tracking System
- Digital Video Recorder

- Power Supply
- Mission & Data Recorder
- DSP Algorithm Implementation
- Harnessing

After displaying the products, Mr. Jérôme Pierlot showed keen interest in the products of Teresol and inquired about their availability in bulk. However, the product availability in bulk was not possible because the product-making facility is not available in Pakistan. And instead, the product is made by **Teresol** from South Korea or Thailand. The CERN side made the reservation that Korea & Thailand are not members of the CERN therefore we cannot do this business. Procurement is only authorized by CERN member states. A deliberate discussion took place between both sides. Dr. Hafeez Hoorani (**NCP**) explained that the algorithm & design of the product is purely by our physicists and scientists, only making it from South Korea and Thailand does not make it void.

Dr. Naveed Iqbal, COO Teresol, further explained that making such a high-tech production facility is not available in Pakistan and that is the main reason why we make it from these two countries. We are trying to contact member states if such a facility is available to them. The conversation ended with further clarification of these products at a later stage with both ends via email.

Pakistan Aerospace Council
Collaboration with
University of Glasgow Scotland/UK

The University of Glasgow, located in Scotland, is one of the oldest and most prestigious universities in the United Kingdom. It plays a vital role in education, research, and community engagement. The primary roles and tasks of the University of Glasgow include; education, research, knowledge transfer, global perspectives and economic impact.

This initiative started in Sep 2022 with Founder / Convener Engineer Mansoor Malik visited University of Glasgow. Two points of contact were found by Mansoor Malik Sahib. **One** is Dr. Imran Qureshi, Head of James Watt School of Engineering; who nominated Dr. Shuja Ansari, Head of Industrial Communication. It was planned that a Zoom meeting be held with PAeC team to understand what each side is looking for and can offer in the bilateral interaction.

Second was Mr. Junaid Ashraf a Pakistani-origin Scottish gentleman, an Engineer who is a local Political Activist and plays a major role in Scottish local politics. He got PAeC introduced to the Scottish Wing of the British Aerospace Trade Organization called ADS (Aerospace, Defense, and Security).

The President of PAeC Dr. Haroon J. Qureshi had an initial Zoom meeting with their 4 person team on 7th October 2022 and he briefly introduced PAeC to the ADS Scottish Team. They were very excited and proactive, but as they represent a Euro ADS cluster they proposed that we have a formal Zoom presentation to the ADS member team so that a proper B2B partnership can be arranged.

The matter was of immense importance and it took the prime agenda points in consecutive four meetings. In mid-March, the factual work started with hunting passionate businessmen for the visit. Their company's data were collected under a detailed form. Passports were made ready, and the base work was started with the Glasgow University and relevant Scottish government machinery. Various options were made considered as to how the visit could benefit both sides. Visa formalities were finalized after taking its stipulated timeframe. The visit is planned to be conducted in October 2023.

Collaboration with Pakistan Aeronautical Complex Kamra

The Pakistan Aerospace Council (PAeC) serves as a pivotal platform for fostering collaboration and knowledge exchange within the aerospace sector. One of its most significant initiatives is the regular meetings held with key national tech players, representing both the public and private sectors. These interactions serve as a vital nexus for aligning strategies, sharing expertise, and catalyzing innovation across Pakistan's aerospace landscape. The participation of esteemed organizations such as the Pakistan Air Force (PAF), National Aerospace Science & Technology Park (NASTP), National Incubation Center for Aerospace Technology (NICAT), Pakistan Army, Pakistan Navy, and Pakistan Aeronautical Complex (PAC) in Kamra underscores the breadth and depth of the aerospace ecosystem's involvement in PAeC's mission.

These collaborative gatherings are more than just meetings; they are dynamic forums where cutting-edge research, technological advancements, and strategic insights are exchanged. The presence of such influential stakeholders from the public and private sectors highlights the commitment to a shared vision – one that promotes aerospace innovation, strengthens national defense capabilities, and contributes to the advancement of science and technology in Pakistan. Through these interactions, PAeC facilitates not only the exchange of ideas but also the forging of partnerships that have the potential to redefine the nation's aerospace landscape, positioning Pakistan as a significant player in the global aerospace arena.

It started in December 2022 when PAeC felt that there should be a meeting with the Chairman PAC Kamra with respect to mutual interest. A call on meeting letter was sent to the Chairman but the meeting couldn't be realized due to his early retirement. A meeting with the Acting Chairman after a delay of 3 months was sought. The meeting was delayed for the appointment of a new Chairman.

Consequently, the meeting will take place once a permanent Chairman appointment is done.

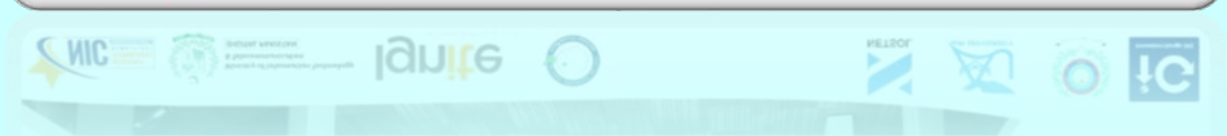
COLLABORATION WITH NICAT (NATIONAL INCUBATION CENTER FOR AEROSPACE TECHNOLOGY)

Exploring new avenues for the consolidation of PAeC with national, regional, and international arenas are the main functions of the executive body. To work cohesively with other clusters PAeC wants to join a competitive market in this regard. For this very need the government of Pakistan has recently build-up the National Aerospace Science and Technology Park (NASTP) for the promotion of Aerospace Technology in the Old building of Islamabad Airport at Chaklala Rawalpindi. NICAT is inside NASTP and is a pivotal organ of it. NASTP is under Aviation City duly organized by the government of Pakistan and functioning under Pakistan Air Force. PAeC has liaised with NICAT for the needful.

The delegation of The Pakistan Aerospace Council (PAeC) comprising of Mr. Mansoor Malik (Convener), Mr. Asif Jah (Gen Secretary), Mr. Tanveer Ahmed (Treasurer) of Pakistan Aerospace Council (PAeC) visited NICAT on 30-1-2023 and discussed collaboration for the country's private sector Aerospace industry.

To start an office under the umbrella of NICAT, Pakistan Aerospace Council (PAeC) expressed its interest to shift its office from Islamabad to Chaklala. In response, NICAT super excited to work in close collaboration with PAeC to support private-sector Aerospace & High-tech manufacturing growth in Pakistan.

This is a solid step by PAeC to promote its business and thus improve the footprints in the country's pivotal development, and achieve its objectives.







Ignite










Ignite










Ignite






Meetings' Review - Yearly

A strong and organized department arranges regular meetings to stay abreast with the community, foresee predictions and speculations, review the previous regulations, and decide appropriately for forthcoming agendas. PAeC holds informative, consultative, and executive meetings regularly.



Following are the agenda points discussed extraordinarily in the regular meetings held in the capacity.

Meeting Date	Meeting Agenda Points
37 th 11-8-2022	<ul style="list-style-type: none"> • Progress on registration of PAeC as an NPO • Debrief on PAeC participation in NICAT and NASTP events. • Collaboration between the University of Glasgow and PAeC, leading to B2B Closure Agreements.
38 th 01-9-2022	<ul style="list-style-type: none"> • Progress on registration of PAeC as an NPO. • Discussion on exhibiting at IDEAS-2022. • Progress on collaboration between the University of Glasgow and PAeC, leading to B2B Closure Agreements.....way forward.
39 th 03-11-2022	<ul style="list-style-type: none"> • Discussion on follow-up of the Meeting with STZA Leadership. • Progress on Collaboration b/w PAeC and IST • Invitation by National Center for Physics (NCP) to Visit their Facilities for Business Collaboration with PAeC Members. • Discussion on Collaboration b/w PAeC and NASTP, Chaklala.
40 th 27-1-2023	<ul style="list-style-type: none"> • Preparatory Visit to Scotland/England to establish PAeC Global Footprint in UK • Registration of PAeC • Outstanding payments from members • Recoverable outstanding payments with CDA & Ministry of Science & Technologies against Expos registration fees • Future Expos • PAeC office location • Continuation/replacement of old or selection of new office bearers in the Executive Committee for PAeC in all chapters • Chairman PAC Kamra Meeting
41 st 10-2-2023	<ul style="list-style-type: none"> • Preparatory Visit to Scotland/England to establish PAeC Global Footprint in UK • Registration of PAeC • Outstanding Payments from Members • Recoverable Outstanding Payments with CDA & Ministry of Science & Technologies against Expos Registration Fees • PAeC Future Vision 2023-25 • PAeC Office Status at F-11 & NICAT • Continuation/replacement of old or selection of new office bearers in the Executive Committee for PAeC in all chapters • Chairman PAC Kamra Meeting.
42 nd 17-3-2023	<ul style="list-style-type: none"> • Preparatory Visit to Scotland/England to establish PAeC Global Footprint in UK • Registration of PAeC • Outstanding Payments from Members • Recoverable Outstanding Payments with CDA & Ministry of Science & Technologies against Expos Registration Fees • PAeC Future Vision 2023-25 • PAeC Office Status at F-11 & NICAT

	<ul style="list-style-type: none"> • Continuation/replacement of old or selection of new office bearers in the Executive Committee for PAeC in all chapters • Chairman PAC Kamra Meeting
<p>43rd 05-5-2023</p>	<ul style="list-style-type: none"> • Scotland / UK Visit • NICAT Update • PAeC Registration • New Membership • Pakistan and KSA Collaboration with KSA visiting delegation on 22nd of May 2023

REGISTRATION OF PAEC AS A CLUSTER WITH THE GOVERNMENT

It was started in November 2022 with Corporate Law Consultant, Nishtar Law Associate Islamabad to register PAeC as a Non-Profit Organization (NPO) with the government. By-laws, Justification, Name or Organization, Associates list, and other legal formalities submitted to the law firm in Dec 2022. The Treasurer, Mr. Tanveer Ahmed of PAeC was tasked for its registration.

In the next meeting, it was decided that PAeC is to be registered as a private company. As the case was taken up on this aspect, the following suggestion were made by the concerned department i.e. Security and Exchange Commission of Pakistan (SECP):

- A. Words like **Pakistan**, **Council**, and **Aerospace** are an issue for Registration with SECP as these have a resemblance to Govt.
- B. **PAeC** Acronyms must be explained
- C. Word **PAK/PAKISTAN** may only be allowed to Government patronage companies.
- D. Word **AEROSPACE** may only be allowed after obtaining NOC from National Command Authority (NCA).

After these objections, different names were considered that should appropriately describe the function and acronym's resemblance with PAeC. In the next step, President PAeC took this issue with the relevant government offices at his own level. Then further objections were as follows:

- E. For the name "Pakistan" PAeC may write to
 - i. Engineering Development Board (EDB)
 - ii. Ministry of Defence Production
- F. Requesting a letter of support due to the "**Engineering Cluster**" nature of the proposed organization to satisfy SECP.
- G. For Name "**Aerospace**" PAeC is to write a letter to:
 - i. Ministry of Planning & Development
 - ii. National Command Authority
 - iii. Strategic Plans Division (SPD)
 - iv. Ministry of Industries
 - v. Ministry of Defense Production
 - vi. PAC Kamra

The registration process is still in progress.

EVENTS APPRAISAL & INFORMATION TO MEMBERS

The executive team of PAeC consists of robust minds with adept aptitudes. It has technical and industrial luminaries, and they have deep insight & foresight in industry challenges. They have already global footprints in the technical and industrial arenas. An event is made after a deliberate critical debate during meetings so that all the pros and cons of the event are managed and manipulated wisely. After a multilateral study and proper appraisal, the event is pragmatized with all the relevant stakeholders for the needful. Necessary data pertaining to each and every segment of the event is shared with the members. Roadmaps are drawn, bridges the gaps, sleeks the ground, and finally, the event is held smoothly.

The events of the Pakistan Aerospace Council (PAeC) have been incredibly successful for a multitude of reasons, each contributing to the organization's remarkable journey. Here are the key factors that have contributed to PAeC's success:

Decades of Experience: The wealth of experience within PAeC is a fundamental cornerstone of its success. Members, partners, and leaders alike bring decades of collective knowledge, expertise, and insights to the table. This experience not only provides a solid foundation but also serves as a guiding light in navigating the complexities of the aerospace industry.

High Minds and High Thoughts: The caliber of individuals associated with PAeC is truly exceptional. The council attracts high-caliber minds driven by visionary thinking and a commitment to excellence. This culture of intellectual curiosity and forward-thinking has consistently fuelled innovative ideas and strategies that have propelled PAeC to success.

Decisive Aptitudes: In the fast-paced world of aerospace, decisions need to be made swiftly and with precision. PAeC's ability to demonstrate decisive aptitudes has been pivotal. Leaders and members are known for their agility in making informed choices, allowing the organization to seize opportunities and overcome challenges.

Resolute Pragmatism: The aerospace industry demands practical solutions and a clear understanding of real-world challenges. PAeC has thrived due to

its resolute pragmatism, which means that while maintaining high ideals, it remains grounded in the practical application of knowledge. This pragmatic approach ensures that the council's initiatives are not only visionary but also implementable.

Untiring Souls: The aerospace sector can be demanding, requiring unwavering commitment and determination. PAeC's members are untiring souls, driven by a relentless passion for aerospace. They are not discouraged by obstacles, but rather, they view challenges as opportunities for growth. This unwavering dedication has been a driving force behind PAeC's continued success.

In essence, the success of the Pakistan Aerospace Council is a result of the perfect alignment of experience, intellect, decision-making capabilities, practicality, and unyielding commitment. It's the collective effort of individuals who believe in the power of aerospace to shape a better future. With these attributes as the foundation, PAeC has achieved milestones that have not only advanced the aerospace sector but have also contributed to the broader growth and development of Pakistan.

The aftermaths of the event are then categorized, analysed, synthesized, evaluated, and finalized for present and future applicability. Post Event Report (PVR) is generated and kept as a record for the young engineers and entrepreneurs at the Head Office.

INFORMATION MANAGEMENT MECHANISM FOR MEMBERS

Since its inception, PAeC organized its executive body of learned titans and exemplary luminaries. They were not only leading their own businesses but also craving for globalizing Pakistan's image in High-Tech products.

As a result, very fruitful mechanisms were formulated in order to establish PAeC with strong footholds. The member companies were informationally organized via email, WhatsApp, and cellular communication. As the membership has two categories - paid and nonpaid – so were the categories organized for WhatsApp Groups.

As far as cellular contact is concerned, in the case of urgency the member is being contacted via call so that the opportunity may not be missed for any negligence.

The email is for all but the executive committee incorporates in it hopefully. Each and every piece of information is shared via email at coord@pakaero.com or info@pakaero.com.pk.

Organizational information and interactions were grouped as Paid Groups consisting of PAeC Executive Committee and paid members, while the other group is of nonpaid members. Prolific information on various charts are being provided on a daily basis.

The non-paid group is being informed about various trade fairs nationally & internationally. Each group is permitted to share any information related to technical & technological know-how of aerospace, developments on latest advancements in any field, questions, queries, and problems with high-tech issues, ideas pertaining to the country's pivotal development, etc. The distribution of information is not limited to:

- Seminars
- Exhibition
- Airshows/Autoshow
- Learning Modules
- Symposium
- Books opening ceremonies
- Technological information videos
- Latest developments in aerospace technology
- Modern robotics
- History of automobile and aircrafts

A healthy discussion on the reason why **Pakistan's Car Industry May Shut Down Permanently: Auto Part Association – PAAPAM** is reproduced at the bottom of the chapter in this context:

The following verbatim took place on the WhatsApp Group of Non-Members of PAeC on the reason titled above with the first reactive comments by PAeC Executive Member, Mr. Mohammad N. Daud. The dialogs in tabular form are reproduced exactly from the WhatsApp Group on the topic actuated in the Holy Month of Ramadhan 17/18 April 2023. The dialog was among junior, senior, and expert engineers.

This is one of the main characteristics of the Pakistan Aerospace Council that promotes contemporary engineering business problem and their solutional-thoughts.

**Pakistan's Car Industry May Shut Down Permanently:
Auto Part Association – PAAPAM**

Person	Verbatim
Mr. Daud	Pakistan's Car Industry May Shut Down Permanently: Auto Part Association
Mohsin Syed	Salaam I'm in Auto sector since 30 years. All our Textile and sports goods export dollars are eaten away by Japanese, Korean, and Chinese Principals. We have the capacity to make 100% local Busses, Tractors and Cars and of course motorcycles plus loaders. This Dollar shortage is a blessing to achieve 100% indigenization
Waseem Pasha Tajamul	Absolutely, all these principals are our biggest curse. 🖱
Saad Ahmad Khan	Unfortunately, this sector has achieved very little in terms of research and design. Honda Sheikhupura plant is the longest-running Honda overseas partnership in the world since early 1962, even then they have never attempted to design a single indicator light in these years. There might be multiple reasons for this scenario, my top pics would be; A- Narrow vision from owners and top executives. B- Absence of govt. will promote indigenously produced products. C- Skill sets scarcity. Looking at India 2 wheelers industry they have become a global player in just a few years and have captured African markets in no time. I don't when we will rise from Ashes ٥٥٥... When will our time come ☐
Farid Akram	Our time will come when 1. Bhutto dies. 2. Shareef mafia is eliminated 3. Diesel and his likes are exterminated. 4. The khaki wand stops wandering.
Saad Ahmad	You have missed out two other factors: 4- Molvi Factor 5- Hybrid regimes extension of big boys.
Farid Akram	Diesel and his likes include Molvis sir.
Saad Ahmad	🖱
Saad Ahmad	Well to sum up State of Pakistan and it's organs have failed miserably to behave as enablers, facilitators and protectors of the society rather it has evolved like a mafia ring leader who just collect resources and give back nothing.
Waseem Pasha Tajamul	With due respect, I will strongly disagree. Skill set can be source / trained. Govt Employees have always been bribed by the Industry (owners) not to promote indigenisation / look away. It is sheer greed and unwillingness of the management of the assemblers that we are where we are.

	The Khakis , molvis, Bhutto don't stop you, if you really want to do it. We should stop apportioning blame on others for our own failure.
Saad Ahmad	I believe they do have roles at macro level. Their inability is one of the factors. After all every businessman requires consistent and favorable govt policies to form up his future investments and plan.
Mumshad Ali	A fish doesn't outgrow the aquarium it resides in.
Daud	It usually dies due to lack of resources / nutritious environment
Waseem Pasha Tajamul	Agreed, but there has been zero intent by the assemblers to promote local development.
Mumshad Ali	Our ill-found obsession with religion, martial history, and it's flawed notions of superiority complex is at the heart of our vows and these discussions considered taboos are being discussed now.
Saad Ahmad	I do agree on this point.
Waseem Pasha Tajamul	Indus Auto people have no shortage of resources. In fact, they build the entire vehicles on the money deposited by the buyers without any investment of their own.
Hameed Ahmad	<p>[All the factors are sub-factors of only one main factor ' the Pakistan army.</p> <p>Whether it comes to the 1971 division and formation of Bangladesh or Bhutto or Nawaz Shareef or Imran Khan - each one is the by-product of the army from 1958 Ayub Khan, Yahya, Zia UK Haq, Musharraf and Bajwa, etc till 2022. There were others who did not interfere directly but seriously interfered with the functioning of civil governments behind the scene, like of Raheel Shareef etc.</p> <p>After army, the judiciary is the second factor for our disasters. Corrupt politicians and corrupt incompetent bureaucracy are the third factors.</p> <p>Maybe the people of Pakistan are the topmost reason for all the disasters who watched all disasters and coups without protests and instead used to distribute sweets. How we can exclude ourselves as public, and also at least 90% of Pakistanis are corrupt, liars, and incompetent?</p> <p>In my opinion above are the bitter facts which have led to and continue the downfall of our country.</p> <p>Religious card was also used and brought in by the Army.</p>
Mumshad Ali	A callous selfish bigoted people it is then.
Waseem Pasha Tajamul	<p>When we were looking for engineers familiar with System Engineering, I approached the head of the Auto Wing of NED University, Mr. Mushahid Hussain. He told me that he had been a test engineer when Yasoob Truck was being developed and was familiar with the concept of System Engineering. He said he tried to implement system engineering in the curriculum of the University but was told off by Indus People. He was given strict instruction that we don't need engineers who think. Just produce good workers who follow instructions, otherwise, we will stop hiring your graduates.</p> <p>Please don't try to just make Army the scapegoat for everything. it is very easy to blame others.</p> <p>If anyone wants to verify this, I can share the telephone number of Mr. Mushahid Hussain.</p>

Mr. Shoab	All the pillars of state have to be criticized for the mammoth whirlwind we are facing right now. all of them are equally responsible no one pointed a gun at the Judiciary, media, politicians, and bureaucracy they have taken their due share of the cake that was on offer since 1948.
Mumshad Ali	It's the fabric of society then with its hypocrisy and self-proclaimed piety and virtues.
Hameed Ahmad	I have come to Pakistan two years ago and the competence level and professional knowledge of general workers and so-called professionals are extremely low with minor exceptions. I searched all computer markets of Saddar Rawalpindi and 6th road but found just 2 or 3 persons who can upload software and they were not available even until noon (asleep at home) the one known as big expert in the market was found to have very shallow knowledge of common day to day use computer software. Whenever you discuss any technical issues with any general plumber, electrician, mechanic, ac and fridge technician, you ll find them giving strange illogical, and nontechnical reasons for the cause of any defects and their corrective measures. Just the final answer is Ustad taught me like this. Of course, there are minor exceptions here as well but 90% are ignorant.
Waseem Pasha Tajamul	That is very true, but we as a Nation accept this incompetence.
Mr. Shoab	Sorry I forgot to mention the dirty role of our media who have no moral values and also have played a significant role in bringing about the disaster.
Mumshad Ali	A deodar tree cannot grow in the desert and not. Can a dates tree grow in alpine climates? This land is suitable for traders of imported goods and property developers military-civil bureaucracy and lawyers. Engineers should plant themselves in Germany America Italy India Japan Korea Taiwan China and plenty more...
Hameed Ahmad	With due respect and regard to your opinion, my opinion is that the major responsibility for the disasters lies with the army who in addition to military rules have also been interfering with the functioning of every institution.
Waseem Pasha Tajamul	The only reason the British were able to rule over a huge country like India with just a handful of people was that they administered Justice during their rule. Till the time Judiciary administers Justice to everyone irrespective of their status, No Nation can rise.
Mumshad Ali	I think it's way past bedtime so I would like to say this When all is said and done A lot More Is Said than done
Hameed Ahmad	Please check my message in your inbox. I need some guidance in the Electric bikes sector.
Waseem Pasha Tajamul	Military may have its flaws, but it is one institution that has some semblance of Justice within its own ranks. You destroy that as well with constant bickering and propaganda, and you will soon be slaves again.

Hameed Ahmad	They need to be put in the right place like India, Bangladesh, China, Russia, European, and US militaries which are totally under the control of civil governments and not vice versa.
Waseem Pasha Tajamul	It's just a fallacy. All militaries rule the civilian Governments. Some do it overtly and some covertly. 😊 You think US is any different. It is just a big military in Civilian Clothes. Pentagon Rules.
Dr. Suhail Malik	Assemblers are in their comfort zone. Local development needs effort, patience, and ability to bear loss. Nobody is ready to that. Begging PAPAAM to look towards own design and development and hardly get an answer. Introduced designing and analysis tools to support but they need concrete profits without patience. Name anyone is the auto sector using advanced CAE and FEA.
Dr. Haroon Q	Totally agree - God bless you! Ameen
Mian Sultan Mahmood	100% agreed strong will is required.
Imtiaz Rastgar	👍👍
Dr. Kashif	In general, the responsibility for promoting indigenous development in any country lies not solely with the military, but with various stakeholders, including government agencies, private sector entities, academic institutions, and civil society organizations. While the military may play a role in supporting and facilitating certain aspects of technology development, such as defense research and development, it is not solely responsible for overall indigenous development. It is also important to consider that countries may choose to collaborate with other nations or international organizations to leverage external expertise, technology, and resources for their development goals. International collaborations can sometimes play a significant role in advancing indigenous development in a country. Overall, the development of indigenous technology and industry in any country is a complex and multifaceted process, involving a wide range of stakeholders and factors, and it would be oversimplifying to attribute the responsibility solely to the military or any other single entity.
Hameed Ahmad	In Pakistan, nobody is expecting the military to promote indigenous development. Instead, we just want them not to obstruct it by creating hurdles in the name of security etc.
Waseem Pasha Tajamul	My question is that why nobody wants to apportion the blame to the people who are actually responsible for indigenous development like Engineering Development Board, Pakistan Engineering Council, Ministry of Industries etc. No one wants to blame them because most of us on this forum are or have been somehow associated with these bodies and blaming them is like blaming ourselves. So it is easy to blame the Military.
Waseem Pasha Tajamul	SRO 827 (I)/2001 is still valid which makes it mandatory for the public sector entities to place 10% of the procurement budget for indigenous development. Who was supposed to ensure the implementation of this SRO? Please don't say Military.

	<p>The biggest cost in Indigenous development is the qualification of the product for which you require test equipment. How many test Homologation facilities have been created by the entities I mentioned above to facilitate that?</p> <p>If India has grown in Automotive Industry, it is because they establish ICAT, a homologation facility. Please look it up on Google.</p> <p>And they stopped International Players from using their Homologation certificates for passing the vehicles in India.</p> <p>A Toyota made in Japan and a Toyota made in Pakistan are totally different animals. Yet our EDB accepts the Homologation certificate of the Japanese Toyota.</p> <p>How can quality improve?</p>
Hameed Ahmad	Thanks for the above comments, worth pondering and follow up.
Waseem Pasha Tajamul	<p>The indigenous manufacturers make good money making substandard products. There is no compulsion or test facilities to improve. So we continue making substandard products which can't compete in export markets. So no exports</p> <p>We all are equally to blame.</p>
Imtiaz Rastgar	Thank you @all for a healthy discussion.

Financial Report

2022~2023

PAeC
Pakistan Aerospace Council

PAeC Financial Statement: 2022-23

Pakistan Aerospace Council		
<i>COMPANY REGISTERED UNDER SECTION 42 OF THE COMPANIES ACT 2017</i>		
<i>INCOME AND EXPENDITURE STATEMENT (Extracts For PAeC)</i>		
Year Ended 2022-23		
Nomenclature	Amount (Rs)	Amount (Rs)
Membership Fee & Contributions		1,345,500.00
Expenditures		
<i>Administration Expenses</i>	790,700.00	
<i>Marketing and Selling Expenses</i>	147,000.00	
Total Expenditure		937,700.00
Total Surplus or (Loss) during the Year		<u>407,800.00</u>
Net Surplus or (Loss) during the Year		407,800.00

RECOVERY OF AMOUNT DEPOSITED FOR EXPO 2022

An Expo under the sponsor of Ministry of Science and Technology was scheduled on 16~17 May 2022. An amount of PKR 160,000/- had been deposited with the Ministry of Science & Technology against Expo in 05 January 2022. Similarly an amount of PKR 15,000/- was deposited on 04-1-2022 as Advance Token Money for PAeC Exhibition & Conference at the Pak-China Friendship Centre.

The Expo was postponed by the Ministry due to unavoidable circumstances. However, the amount (PKR 15000/- & PKR 160000/-) deposited took one year to recover with the reasons that the expo will be held soon. The former amount recovered in March 2023 and the latter was recovered in June 2023. The concerned ministry took long time recovery.

The following officials were communicated in this regard:

Authorized Persons for Recovery + Contacts Nos

Mr. Saifullah Azim	051-9248111, 9215064 0333-9248111, 0305-1655515, Fax # 051-824113	Focal Person of Expo saifullahazim@yahoo.com
Mr. Asif Taj	03318941238	asiftaj266@gmail.com
Mr. Akhtar Munir (DG)	051-9210429	Director General Pak China Expo Center
Professor, Dr. Muhammad Akram Shaikh	051-9248106 Fax # 051-824113 Email: dg@pastic.gov.pk	DG PASTIC
Professor, Dr. Shahid Mahmood Baig, S. I.	051-9204522 (Ext 102) Email: chairman@psf.gov.pk	Chairman, Pakistan Science Foundation



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HIGH TECH INDUSTRIES CLUSTER



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(Founder/Convener)**



**Engr. Mansoor Malik
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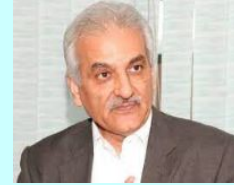
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**Engr. Tanveer Ahmed
(Treasurer)**



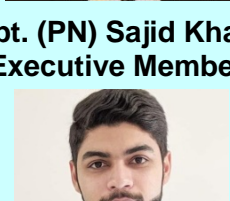
**Mr. Mohsin Syed
(VP Lahore Chapter)**



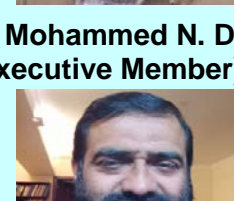
**Engr. Capt. (PN) Sajid Khan Tareen
(Executive Member)**



**Engr. Mohammed N. Daud
(Executive Member)**



**Mr. Waleed Shahid
(Executive Member)**



**Mr. Abdul Hafeez
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The entire system has been shared under a technology sharing agreement between East West Infiniti and the respective OEMs. EWI has been an authorized integrator & regional technology associate for GARMIN since last 30 years, giving us very deep understanding of Avionics deployment in various Military and General Aviation Aircraft.

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Contacts Us:

Head Office 146 Industrial Triangle Kahuta Road, Humak, Islamabad 44000, PAKISTAN
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Sherani Engineering PVT LTD

www.sheraniengineering.com

Sherani Engineering, a founding member of the Pakistan Aerospace Council, has successfully designed, manufactured, and commissioned jigs for the assembly of unmanned aerial vehicles (UAVs). This ground-breaking accomplishment, the first of its kind in Pakistan, opens the doors for the mass production of Medium Altitude Long Endurance (MALE) UAVs, placing Pakistan on the global map for UAV manufacturing.



Wing Jig



UAV

The current global UAV market, valued at USD 22.5 billion, is anticipated to soar to a staggering USD 58.4 billion by 2026. Sherani Engineering's achievement represents a significant step, signalling Pakistan's readiness to carve a substantial niche in this rapidly expanding market.

Renowned for its expertise in the automotive industry, Sherani Engineering stands as the only Pakistani company that exports jigs, reinforcing its credibility and reputation as a trusted partner for Auto OEMs. From establishing complete plants and assembly lines to designing and manufacturing jigs, Sherani Engineering's capabilities extend far and wide.



Fuselage Top Skin Jig

Notwithstanding, that truly distinguishes Sherani Engineering is its in-house design capability, bolstered by a rich experience in Computer-Aided Design (CAD). With a dedicated team of experienced engineers, Sherani Engineering takes pride in its ability to transform complex requirements into functional, high-quality products.

In the aerospace sector, Sherani Engineering displays proficiency in machining critical components from aluminum, stainless steel, and titanium. It also excels in producing composite molds, jigs, and specialized products such as tripod jacks, ground support equipment, drogue testers, and engine overhauling tools.

The successful transition from automotive to aerospace underlines Sherani's adaptability, innovation, and commitment to meeting international standards. It also echoes Pakistan's potential to contribute significantly and compete in the global aerospace sector.

Sherani's breakthrough in UAV production positions Pakistan to not just participate in, but to lead in the expanding arena of aerospace manufacturing. This significant stride underscores Sherani's unwavering commitment to innovation and quality, establishing its role as a leading catalyst in the advancement of Pakistan's engineering landscape.

SoluNox Pvt Ltd started its business with multifaceted mandate to undertake Research & Development projects in dual technologies used in Aerospace and Maritime. SoluNox Pvt Ltd is the 1st company in Pakistan Pvt Sector to develop its maritime and aerospace design house.

SoluNox UAV Solutions & Launching System has the expertise in design and development of fourth generation launching systems for High Mass and High Speed Target Drones. Whereas, high performance drones are being designed and developed through foreign collaboration. SoluNox is using its expertise in commercial applications as well like pesticide spraying, reconnaissance and survey, underwater and offshore systems.



When performance and efficiency cannot be compromised 'MANJNEEQ MR1-1' is the ultimate solution, developed in joint collaboration with SoluNox launching Systems and Pakistan Aeronautical Complex Kamra. It is designed to meet the current and emerging operational requirements of optimized launch for up to Group-III (less than 1350kg and less than 250 kts)

Unmanned Aerial Systems and Target Drones

Gas turbine engine is an essential power plant in modern day high speed UAS (Unmanned Aerial System) for various applications

SOLUNOX had taken an initiative, to indigenously develop our own Gas Turbine Engine (Turbojet) with automatic starting capability.



Member Companies of PAeC

 <p>East West Infiniti (Pvt) Ltd</p>	 <p>GIS Pus Pvt Ltd</p>	 <p>Elektro Control Industry Pvt Ltd</p>	 <p>Sherani Engineering Pvt Ltd</p>
 <p>Trojans Pvt Ltd</p>	 <p>AE Design Pvt Ltd</p>	 <p>Daudsons Armory Pvt Ltd</p>	 <p>Teresol Pvt Ltd</p>
 <p>SoluNox Pvt Ltd</p>	 <p>RubaTech Pvt Ltd</p>	 <p>Aviation MRO Pvt Ltd</p>	 <p>Zia Engineering Pvt Ltd</p>
 <p>International Vacuum Cleaner</p>	 <p>National Textile University Pakistan</p>	 <p>RWR Pvt Ltd</p>	 <p>Infinity Engg Pvt Ltd</p>
 <p>Rethink Engineering (Pvt) Ltd</p>	 <p>Ravi Autos Sundar Pvt Ltd</p>	 <p>Tecno Pack Industries Pvt Ltd</p>	 <p>FZN Electronics Pvt Ltd</p>

Message from the Founder and Convenor

Dear Members and Supporters of PAeC,

I am delighted to address you as we conclude another remarkable fiscal year at the Pakistan Aerospace Council (PAeC). It brings me immense pleasure to reflect on our collective achievements and the strides we have taken to advance the aerospace industry in Pakistan.

This journey, which began as a dream of fostering innovation, collaboration, and excellence, has turned into a reality, thanks to the dedication of each member and the commitment of our supporters. We've come a long way, overcoming challenges, celebrating milestones, and embracing innovation at every turn.

As we compile our Annual Report for this fiscal year, it's evident that our accomplishments are not mere statistics; they are stories of innovation, resilience, and progress. It is a testament to the power of a shared vision and the unwavering dedication of our aerospace community.

Together, we have built a platform where knowledge, talents, and cutting-edge technologies converge, a platform that ignites the flames of innovation and entrepreneurship, and a platform that empowers each member to be an active contributor to the progress of our industry.

I extend my heartfelt gratitude to every individual, partner, and supporter who has contributed to our success. Your dedication is the driving force behind PAeC's achievements.

I encourage you to explore our Annual Report, not just as a record of our achievements, but as a source of inspiration. It showcases our journey, our values, and our unwavering commitment to shaping a brighter future for aerospace in Pakistan.

As we move forward, let us continue to dream bigger, innovate bolder, and collaborate tirelessly. Together, we can reach even greater heights, contributing not only to the aerospace sector but to the nation's development as a whole.

Thank you for your support, and I look forward to the exciting opportunities and challenges that the next fiscal year will bring.

Warm regards,

Mr. Imtiaz Rastgar
Founder and Convenor
Pakistan Aerospace Council (PAeC)



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Annual Report 2022-23

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