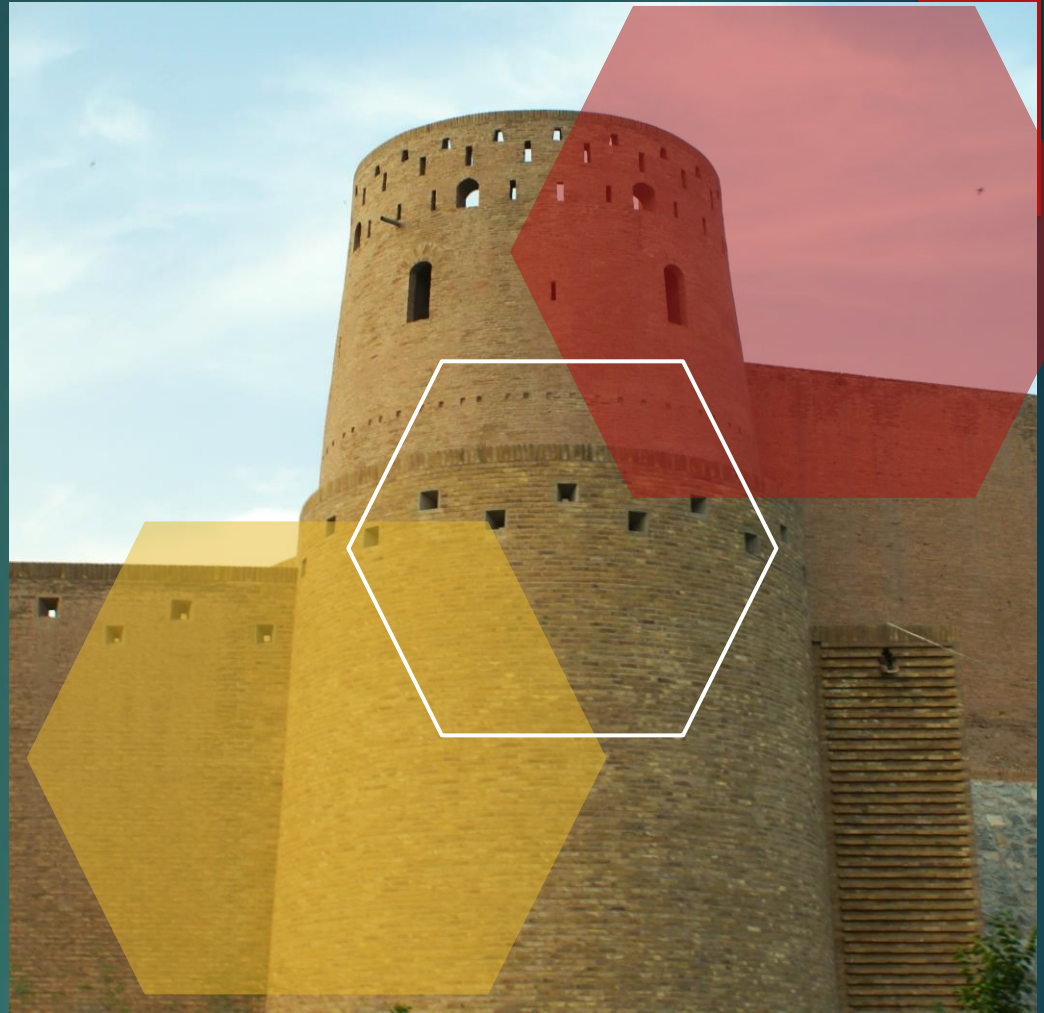




SOCIETY OF AFGHAN ENGINEERS

QUARTERLY
eNEWSLETTER

*CELEBRATING
13 YEARS OF
CONTINUOUS
SUCCESSFUL
PUBLICATION*



SAE eNEWSLETTER

VOLUME 14, ISSUE 1

JADI 1402

JANUARY 2024

SAE MISSION

TO PRESENT A FORUM FOR
AFGHAN ENGINEERS, ARCHITECTS
AND SCIENTISTS IN THE SHARING
OF EXPERIENCES AND
KNOWLEDGE AND FOSTER THE
PROMOTION OF SCIENTIFIC,
ARCHITECTURAL AND
ENGINEERING ETHICS IN OUR
QUESTS TO ENHANCE AFGHAN
CAPACITIES IN THESE FIELDS FOR
THE SERVICE OF AFGHANISTAN
AND THE WELL BEING OF THE
PEOPLE.



SAE eNEWSLETTER

Volume 14, Issue 1

Jadi 1402

January 1, 2024

P.O Box 151584 Alexandria, VA 22315 USA

<http://www.afghanengineers.org>

CONTENTS

Cover Sheet

Table of Content	1
Notes from the Acting Editor-in-Chief	2
Greetings from Najim Azadzoi, SAE Outgoing President	3
Message from Jalal Masumi, SAE new President	4
Message from the Chairman, SAE Board of Directors	5
Reports from Afghanistan, SAE representative in Kabul	7
SAE Members Report, The Mechanics of Materials, By Hafizullah Wardak	9
SAE Members Report, The Hydro Politics of the Helmand River, By Amanullah Mommandi	13
SAE Members Report, The UN Program's in Afghanistan, By Sayed A. Azimi	19
Sad News, Loss of a Colleagues, Dr. Bashir Ahmad Sayar	21
SAE Election 20223 Voting Ballot	22
SAE Election Results	PDF
Tomb of Lovers, Part II (Selected Article)	PDF
Biography of Ustad Hashmatullah Atmar	24
Members Comments and Feedback, December 2023	25
Engineering Job Opportunities with Planate Company	28
The 2024 SAE Membership Renewal	30
The Society of Afghan Engineers Organization	31
The SAE Membership Application	33
SAE Membership Application for members living in Afghanistan	34
SAE Alternative Mailing Address	35
Membership News	36

NOTE FROM THE ACTING EDITOR-IN-CHIEF, SAE eNewsletter

Dear Readers of SAE eNewsletter

December 31, 2023

As the outgoing acting Editor-in-Chief of the SAE eNewsletter, I am pleased to present to you the first issue of 2024 SAE eNewsletter. This would be the last issue of the SAE eNewsletter that is being published under my administration. Since January 1, 2021, we have successfully issued thirteen (13) quarterly issues of the Newsletter. From July 2023, I had the honor to have the responsibility of preparing and publishing the SAE eNewsletter. I am thankful for the help and support of our Editorial Board members, Dr. Abdul Waheed Hassani and Ustad Manan Khalid.

SAE eNewsletter was published first in January 2011 under the guidance and supervision of Ustad Mujtaba Khan. In July 2021, Ustad Mujtaba Khan resigned from his post as the SAE eNewsletter Editor-in-Chief due to personal reasons and Ustad Hafizullah Wardak took the responsibilities of publishing the SAE eNewsletter. In April 2023, Ustad Hafizullah Wardak also resigned from his post as the SAE eNewsletter Editor-in-Chief due to other professional commitments.

The Newsletters is a great source of engagement with members in an organization. It is a good way to keep in constant communication with the society at large. SAE eNewsletters are currently prepared and produced as a PDF file and emailed to members and colleagues. There are multitude of ways to create and email the eNewsletter.. I suggest that the new administration seek alternative ways to publish the SAE newsletter in the future

I wish the new SAE Electronic Newsletter subcommittee lasting success in developing quality publications in the future. I encourage SAE members to take part in the publication of the future eNewsletters.

Najim M. Azadzoi, AIA
Acting Editor-in-Chief/SAE President
With Regards,

GREETINGS FROM NAJIM M. AZADZOI, AIA, SAE Outgoing President

Respected Members of the Society of Afghan Engineers
HAPPY NEW YEAR 2024.

December 31, 2023

It was a privilege for me to serve as the President of The Society of Afghan Engineers since January 1, 2021. I enjoyed working with each one of you. Allow me to thank and appreciate the support and assistance I received from the honorable **Board of Directors** in the past three years. We began our services to the Society in a very difficult time and stormy political and social transition in the country. The board of directors under the leadership of **Manan Khalid** helped paving the way to implement some of the strategic plans drafted by various SAE committees and subcommittees in the past three years. We, together, accomplished much successes and achieved most of our objectives.



I also thank and sincerely appreciate the support and assistance I received from my administration team; **Hamayon Ibrahim**, the Vice President of the Society, and **Mahmoud Samizay**, the past Treasurer.

Many thanks to Mr. **Rafaat Ludin**, former Chairperson for the subcommittee of SAE/Afghan Government Agencies Liaison. Many thanks and appreciation also go to **Bashir Kazimee** who served as the Chairperson of SAE-Subcommittee of Architecture and Urban Planning. Mr. Kazimee's team included architects such as Rafi Samizay, Reinhard Goethert, Mehdi Sabet, and Tooba Rooshan.

Amin Mahmood, a prominent member of the Society joined me as the Chairperson of Students committee and made tremendous contribution to Society's online education for Afghan universities. Mr. Mahmood designed several pilot projects including the use of metal containers for emergency shelters for in Afghanistan.

Ms. Donya Amiri joined the Society as the Chairperson of the SAE Membership Committee. Ms. Amiri proved to be one of the stars of the Society by making tremendous contribution to the Society's activities. The SAE website was redesigned and updated. Donya took part in many other professional activities and helped organizing the SAE General Assembly meetings.

I thank Ustad **Hafizullah Wardak** who took over the responsibility of SAE eNewsletter and he was responsible for designing and producing the SAE eNewsletter starting in July, 2021. Many thanks and appreciation to Dr. Hassani Sahib and Ustad Manan Khalid, members of the Editorial Board.

Mr. Walid Howaida joined the Society as SAE representative in Afghanistan in July 2021. We would not have been able to accomplish much without the help and support of Mr. Howaida in Afghanistan. I am grateful for the help and support of Mr. Howaida and the SAE first representative, **Mr. Habib Rahman Rahmat Mayar** who served from January 2021 to July 2021.

The SAE, in collaboration with the **Afghan Education for Better Tomorrow (AEBT)**, provided online training courses on a variety of engineering topics to Universities in Afghanistan. Many thanks and appreciation to the collaboration of Engineer Sahib Fedaa.

With Regards, Najim M. Azadzoi, AIA, Outgoing SAE President

MESSAGE FROM JALAL MASUMI, SAE New President

Dear Society Members

As the President/CEO of SAE for the term of 2024-2026, I am fortunate and happy to welcome the opportunity of addressing you.

I first would like to thank all those who chose to put their trust and confidence in me when I accepted to be nominated for the President position during last August elections. I appreciate, and am grateful for, their consideration. I then would like to acknowledge the efforts that my predecessor Mr. Najim Azadzoi made running the Society in his tenure during 2021-2023. He has assured me that going forward he will offer cooperation and assistance with the incoming administration, drawing on the experiences he encountered during his term. As some of you may know, I served as vice chairman of SAE Board of Directors under the chairmanship of Mr. Manan Khalid during the 2021-2023 term. His outstanding ability of sailing the ship together with Mr. Azadzoi – under turbulent conditions at times – earns both of them credit.



The political earthquake of August 2021 in Afghanistan by way of government change had deep and far-reaching impacts. It obviously touched SAE too. With the hope that the gravity of the impacts would lessen, as we look into future, my focus will be to strive and work together cooperatively with Board members, Executive members, all members, and every member toward making SAE a functioning and responsive organization so that it readily meets the architectural/engineering challenges that a promising future in Afghanistan would/could entail.

I am confident a wealth of knowledge and experience in the collective of us is out there in the architecture and engineering disciplines. I charge myself to endeavor alongside with SAE technical and administrative staff – and more importantly alongside you the general Membership – to find and tap on associated human resources, who would sincerely desire and believe that together we work for SAE success. I consider the first step of the success ladder to being active SAE member, genuinely and sincerely embracing and accommodating teamwork spirit, abiding by the code of conduct and ethics of the profession. The end of that success ladder for me is when a group of young members succeed the incumbents in 2026, when hopefully political earthquakes have subsided, and take over the administration of SAE to steer it to gainful and productive course aimed to benefit the people of our dear homeland Afghanistan.

At the dawn of a new era in SAE life, I pray that 2024 gets to be a year filled with so many positive thoughts and deeds for the good of our Society and that of humanity all over the world. I close by wishing each of you and your loved ones a blissful and prosperous Happy New Year.

With warm and kind regards,

Jalal Masumi

Message From the Chairman, SAE Board of Directors

Message from the Chairman, SAE Board of Directors

Dear Readers of the SAE eNewsletter

Happy New Year and hope the new year brings health, prosperity and happiness to you and your families and brings lasting peace to our beloved country.

By the time you read this message, it will be year 2024 and a new administration will be in place at SAE. I would like to extend my sincere thanks to the outgoing administration under the leadership of Mr. Azadzoï and wholeheartedly congratulate Mr. Masumi, the new president on his appointment. I owe sincere thanks and appreciations to Masumi Sahib for his service as the Vice Chairman of the previous Board of Directors and for his valuable contributions and advices.



I would like to extend my sincere and special thanks and appreciations for the selfless and volunteer service of each member of the Board of Directors who served during the past three years. Those three years were full of turbulence and despite that, they plowed through with the agendas at hand wholeheartedly and with the sole aim of service to their country and people. While most of the last Board of Directors were reelected and will continue as members of the new Board, Dr. Sahib Hassani and Dr. Sahib Saleh will not. Dr. Sahib Hassani opted not to be a candidate for personal reasons and Dr. Sahib Saleh could not have been nominated due to limitation of the Bylaws.

Dr. Sahib Hassani has been a member of the Society for long time and has made tremendous contributions by serving many times as a member of the Board of Directors and as the Vice President of the Society. He is one of the founding members of the eNewsletter and has been a member of its Editorial Board since inception. Personally I, and the Society as a whole owes deep appreciations to his selfless and sincere services. We will miss his candid views in the new Board.

Dr. Sahib Saleh has served as a member of the Board of Directors twice. In the last Board, he was the Executive Director in charge of documenting the affairs of the Board. You will surely agree, that never during any time before, minutes were written with such details and dedication. Thank you, Dr. Saleh, for your contributions. We will miss you in the new Board.

We also owe huge thanks and appreciations to the sincere efforts of the election committee under the leadership of Mr. Panjsheri in the successful completion of the 2023 elections. Elections are full of responsibilities and excitements.

As has been said, new year brings with it new hopes and a new outlook to the future. However, our beloved country and people continue to go through very difficult times. Luck of economic opportunities which has

tremendously affected the job market, education for girls, disconnect from the world, and above all, the natural disasters that have been taking lives and adding further misery to the life of our people. For now, we have to just hope that things will change for our sorrow-stricken people and the year ahead will bring the very needed relief.

With that hope, I once again wish you and your families a happy, healthy and prosperous year ahead.

Sincerely,

Abdul Manan Khalid, P.E., LEED (BD+C)
Chairman, SAE Board of Directors

REPORTS FROM AFGHANISTAN, SAE Representative in Kabul

By: Walid Howaida

I started working as SAE representative in Afghanistan on January 1, 2022 and since then, I have been involved in the following activities:



- 1- **January 2022-** Participated in distribution of winter donations of SAE through Afshar foundation to needy people of Kabul.
- 2- **February 2022-** - Visited Bamiyan province for survey of those families that live in caves around the Bayman Statues. During this visit all the related local authorities were met and shared with them the Bamiyan Housing International competition.
- 3- **March 2022** - Visited Bamiyan province again and shared SAE message with Bamiyan governor regarding providing land for implementation of the project and the governor promised to provide land for the mentioned project.
- 4- **April 2022** - Contacted some senior officials at the Ministry of Urban Development regarding new housing in Kabul and informed them that SAE could help with the design if need be.
- 5- **May 2022** - Visited Balkh university and met Dean of Engineering Faculty and introduced SAE and its background and capacity.
- 6- **June 2022** - Visited Dean of Engineering Faculty of Kabul University as well as head of civil engineering and architecture departments and shared with them the information about Bamiyan Housing International competition.
- 7- **July 2022** - Met Dean of both engineering faculty of Kabul University and Polytechnic University and discussed the Bamiyan Housing International competition. During the same month several groups of boys and girls students of the architecture departments were met too.
- 8- **August 2022-** Travelled to two earthquake affected districts, Geyaan & Barmal, in Paktika province to survey the affected areas.
- 9- **September 2022-** Visited Paktia University's leadership and introduced SAE..
- 10- **October 2022** Distributed SAE donations to 48 affected families in two earthquake affected districts (Geyaan and Barmal) of Paktika province.
- 11- **November 2022** - Provided the requested/needed stationery, equipment and materials to the students of architecture department of Kabul University and Polytechnic University who were participating the Bamiyan Housing International competition.
- 12- **December 2022-** Met candidates for the competition at Polytechnic University and Engineering Faculty of Kabul University to listen to their concerns..
- 13- **January 2023-**Participated in the first Engineering Faculty of Kabul University National/Academic Conference on “**Challenges, Solutions and Recent Engineering Developments in Afghanistan**”. I participated on behalf of SAE and shared my opinions.
- 14- **February 2023-**Was invited to participate in the reception ceremony of the new students of architecture department of the Engineering Faculty of Kabul University and delivered a speech to the new students.
- 15- **March 2023** -Visited several areas in Kabul for collection of information about the old irrigation canals.
- 16- **April 2023** -Prepared certificates for the students who participated and were the winners of the Bamiyan Housing International competition..

- 17- May 2023** -Provided photos and clips of the old irrigation canals in Kabul to Mr. Mommandi's for his research.
- 18- June 2023-** I successfully arranged a celebration ceremony for the distribution of certificates to four girl students who participated the Bamiyan Housing International competition.
- 19- July 2023** -I was invited by Kabul Polytechnic University on the occasion of graduation ceremony of the students. In this year 504 male and 144 female engineers & architects graduated, but unfortunately just the male graduates were allowed to attend the ceremony. I spoke on behalf of SAE and congratulated the new graduates.
- 20- August 2023-** On advice of SAE, I met the president of the new Afghan International University and its senior academic team. I introduced SAE and acquired about the master's degree curriculum of its engineering faculty..
- 21- September 2023** -An international conference was held in Kabul on “**Afghanistan Trade and Economic Relations in 2023**”. The conference was held at Serena Hotel. Mr. Jeffrey Grieco our SAE member and member of Afghan American Chamber of Commerce chaired the conference and invited me too.. He gave me a chance to speak on behalf of SAE..
- 22- October 2023-** I attended the engineering faculty of Kabul University to attend the graduation ceremony of that faculty . .
- 23- November 2023** -Visited some earthquake affected areas in Herat province.

It is worth mentioning that in addition to the above activities during the last two years, I attended many online meetings with SAE and provided reports for publication in the SAE Newsletter and also provided requested information to some SAE members to help with their research.

I also supported AEBT team in Kabul to manage electricity/solar power and internet for the IT lab of the engineering faculty of Kabul university.

During the last two years the detailed monthly reports were shared with SAE that the content of the reports were also reflected in the SAE quarterly Newsletters.

Regards

Walid Howaida

SAE MEMBERS REPORT, December, 2023

The Mechanics of Material in Pushto Language

By: Hafizullah Wardak

It is great pleasure and blessing to inform the readers of the SAE eNewsletter and the Afghan engineering community inside Afghanistan as well as around the world that we have completed a second great book in the field of Civil and Mechanical Engineering in our native Pashto language that will be distributed to universities, libraries, and other educational institutions inside Afghanistan.

This second book is a Pushto translation of The Mechanics of Material by R.C. Hibbeler, 10th edition, 2017. The book is presently used in many engineering programs, both for Civil as well as Mechanical engineers. We selected this book based on two criteria, (1) a popular book in the field that is presently used in many universities, (2) changes in the field are slow and the book will be used for a longer duration.



It took us almost three years to obtain official and legal permission from the original publisher of this book, so we could translate the book into Pushto language and make it available to Universities and Engineering Communities in Afghanistan free. It took us another two years to complete the translation, Alhamdulillah we achieved that milestone.

This book provides the student with a clear and thorough presentation of the theory and application of the principles of mechanics of materials, which lays the foundation for civil and mechanical engineers. It is hoped that both the instructor and student as well as the engineering community in Afghanistan and around the globe will find it valuable.

The translation to Pushto language has kept all the contents of the original book, to the best of our ability as practicing engineer and educator for engineering and technology. All pictures, diagrams and formulas have been kept in the original form of the book.

The Pashto translation of the book is over 1600 pages, which is organized into 14 chapters, and the problem sets are located after each group of examples. In this way, the students can have a better understanding of the covered materials. Solutions to the problem sets are provided at the end of the book.

Due to printing requirements, the book is divided into two volumes. The first volume covers Chapters 1-8, and the second Volume covers chapters 9-14. Appendices and problem solutions are provided at the end of each volume.

CONTENTS

The subject matter in the book is organized into 14 chapters. Chapter 1 begins with a review of the important concepts of statics, followed by a formal definition of both normal and shear stress, and a discussion of normal stress in axially loaded members and average shear stress caused by direct shear.

In Chapter 2 normal and shear strain are defined, and in Chapter 3 a discussion of some of the important mechanical properties of materials is given. Separate treatments of axial load, torsion, and bending are presented in Chapters 4, 5, and 6, respectively. Transverse shear and combined loadings are covered in

Chapters 7 and 8 respectively. In each of these chapters, both linear-elastic and plastic behavior of the material covered in the previous chapters, where the state of stress results from combined loadings. In Chapter 9 (start of Volume II) the concepts for transforming multiaxial states of stress are presented. In a similar manner, Chapter 10 discusses the methods for strain transformation, including the application of various theories of failure. Chapter 11 provides a means for a further summary and review of previous material by covering design applications of beams and shafts. In Chapter 12 various methods for computing deflections of beams and shafts are covered. Also included is a discussion about finding the reactions of these members if they are statically indeterminate. Chapter 13 provides a discussion of column buckling, and lastly, in Chapter 14 the problem of impact and the application of various energy methods for computing deflections are considered. Sections of the book that contain more advanced material are indicated by a star (*). Time permitting, some of these topics may be included in the course. Furthermore, this material provides a suitable reference for basic principles when it is covered in other courses, and it can be used as a basis for assigning special projects.

We would like to recognize and express our thanks to the Pearson Publishing Company for permitting us to translate this important and valuable book into Pushto language the national language of Afghanistan.

There is one dear and special lifelong friend, and my former professor at the faculty of engineering, Dr. Soorgul Wardak, who is currently a professor at California University, that I would like to recognize him for his review of the several chapters and for providing valuable comments. His review is greatly appreciated.

We would like to express our sincere thanks to Dr. Yahya Wardak of the Kinderhilfe-Afghanistan in Germany for the publication and distribution of this book. Dr. Yahaya Wardak has helped to publish for higher education in Afghanistan 389 different textbooks of Medicine, Engineering, Science, Economics, Journalism, and Agriculture where the authors are from Nangarhar, Khost, Kandahar, Herat, Balkh, Al-Beroni, Kabul University, Kabul Polytechnic, and Kabul Medical universities since 2010. This book, The Mechanics of Material by R.C. Hibbeler, will be a great addition to the above list.

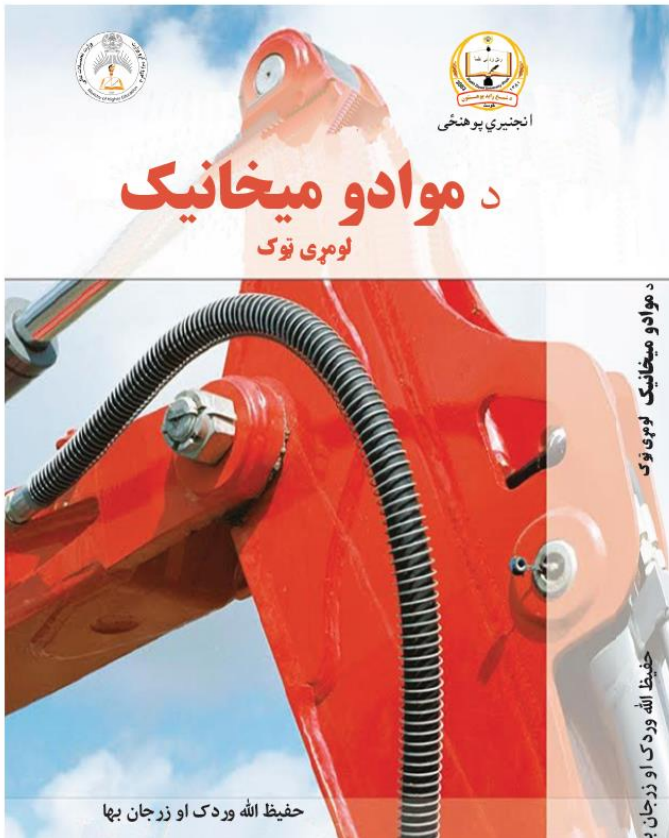
We also are thankful and would like to express appreciation for the efforts of Dr. Yahya's team member Hekmatullah Aziz, and other members of his team in the Kabul office for publishing and distributing this textbook and our previous Structural Analysis book to universities, libraries, and engineering organization in Afghanistan.

It should be mentioned that all these books have been distributed among Afghan universities, public libraries, and many other institutions and organizations for free.

A few sample pictures of the pages of the Mechanics of Material in Pushto language are shown below.

Hafizullah Wardak

Dr. Zarjon Baha



د تحلیل کرنلاره

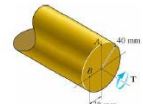
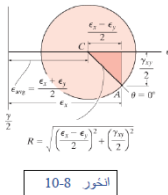
بنسټیز پوښتنې

PROCEDURE FOR ANALYSIS

FUNDAMENTAL PROBLEMS

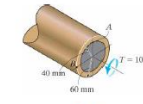
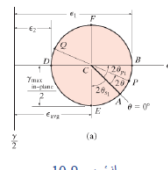
د سترین لپاره د موهراډايري رسمول او کارول د سترین ورته تکلاره تعقیبوی.

5-1. په یو جامد گرد د شافت داخلی توره $T = 5 \text{ kN.m}$ عمل کړي. په ټکیو A او B کې شپیر سترس معلوم کړي. د سترس هر حالت په حجمی توگه وښايي.



- د دایري جوړول (Construction of the Circle)
- محوري سیستم داسې رامینځته کړئ، کوم چې افقی محور د نارمل سترین σ استازیتوب وکړي او په ښي خوا به مثبت وي. صودی محور نیم ارزښت د شپیر سترین، $\tau/2$ ، استازیتوب کوي، مثبت به په لاندی لوري وي، انځور 10-8 وگوري.
 - σ_{avg} ، τ_{avg} ، انځور 10-2، پلاټ لپاره د مثبت علامی کنوانسیون کارول کېږي. د دایري مرکز C ، د σ په محور کې په فاصله $\sigma_{avg} = (\sigma_x + \sigma_y)/2$ له مرکز څخه موقعیت لري، انځور 10-8.
 - د "د پرفینس نقطه" A چې کوردینات یې $(\sigma_x, \tau_{xy}/2)$ دي پلاټ کوو. دا ټکی استازیتوب د هغه حالت کوی کله چې د x محور په x محور سره مطابقت لري، دا څرگنده وي چې $\theta = 0^\circ$ ، انځور 10-8 وویږي.
 - نقطه B د دایري د مرکز C سره وصل کړئ اوله سیوري شوی مثلث شعاع د دایري مشخص کړئ. انځور 10-8 وگوري.
 - کله چې R وټاکل شي، دایره سکچ کړئ.

5-2. دا لاندی منځ خالی گرد شافت $T = 10 \text{ kN.m}$ پلي شوی. په ټکیو A او B کې شپیر سترس معلوم کړي. د سترس هر حالت په حجمی توگه وښايي.



- اصلی سترین (Principal Strains)
- اصلی سترینونه σ_1 او σ_2 له دایري څخه معلوم کېدی شي او هغه د B او D کوردینات دي، چیرته چې $\theta = 0^\circ$ ، انځور 10-9a.
 - چیت د هغه سطحه چې σ_1 ورباندی عمل کوي له دایري پیدا کېږي، او زاویه θ_1 د مثلثاتو په کارولو محاسبه او په لاس راځي. دلته دا زاویه خلاف د ساعت د سترې، له کرني C_1A تر CB پوري ده، انځور 10-9a وگوري.

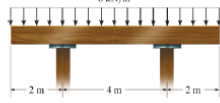
5-3. دا لاندی شافت له ټر B پوري منځ خالی دی او له C پوري جامد دی. احملي شپیر سترس په شافت کې وپوښي. د شافت بهرنی قطر 80 mm او د دیوال ضخامت په خالی برخه کې 10 mm دی.



سوالونه

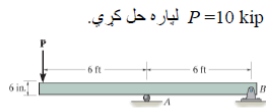
PROBLEMS

س 11-1. بيم له لرگيو څخه جوړه شوي، د منلو وړ د کوروالي ستريس بې $\sigma_{allow} = 6.5 \text{ MPa}$ او د منلو وړ د شيبير ستريس $\tau_{allow} = 500 \text{ kPa}$ دي. ابعاد يې داسې معلوم کړي تر څو مستطیلی شکل ولري او دلور والي نسبت سورته يې 1.25 وي. فرض کړي چې بيم په بنويه (صافه) سطحه اټکاوي لري.



س 11-1

س 11-2. لږ تر لږ سور د بيم نږدی 1/4 inch ته د بيم لپاره مشخص کړي تر څو بنودل شوی بهرنی بار $P = 8 \text{ kips}$ په خوندي توگه يو وړلشي. د منلو وړ کوربيدونکی ستريس $\sigma_{allow} = 24 \text{ ksi}$ او د منلو وړ د شيبير ستريس $\tau_{allow} = 15 \text{ ksi}$ دي.

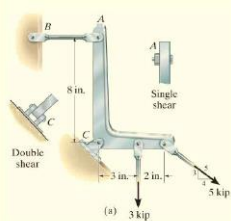


س 11-2/3

س 11-3. سوال 11-2 د $P = 10 \text{ kip}$ لپاره حل کړي.

مثالونه

مثال 1.12

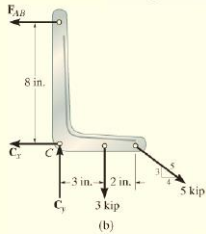


يو د کنترول بازو چې په دی لاندی انځور 11-25a کې بنودل شوی دوه بهرنی بارونه ورباندی پلي شوي. که چېرې د شير سترس د خونديتوب فکتور $F.S. = 1.5$ او ماتيدونکی حد بې $\tau_{fail} = 12 \text{ ksi}$ وي، تاسو د فولادو د بينونو اړين قطر په A او C کې پيدا کړي. د قطر اندازه تر 1/4 انچ ته نږدی وټاکي.

حل (SOLUTION)

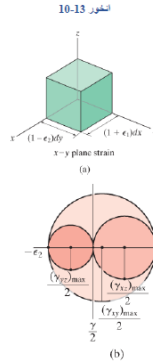
بين قواوي (Pin Forces). د کنترول د بازو آزاد دايگرام جوړه وو، انځور 11-25b، د توازن لپاره داسې ليکلی شو:

$$\begin{aligned} \sum M_C = 0; & F_{AB}(8 \text{ in.}) - 3 \text{ kip}(3 \text{ in.}) - 5 \text{ kip}\left(\frac{3}{4}\right)(5 \text{ in.}) = 0 \\ & F_{AB} = 3 \text{ kip} \\ \sum F_x = 0; & -3 \text{ kip} - C_x + 5 \text{ kip}\left(\frac{3}{4}\right) = 0 \quad C_x = 1 \text{ kip} \\ \sum F_y = 0; & C_y - 3 \text{ kip} - 5 \text{ kip}\left(\frac{3}{4}\right) = 0 \quad C_y = 6 \text{ kip} \end{aligned}$$



C په بين کې د مقاومت محصله قوه په لاندی ډول ده:

$$F_C = \sqrt{(1 \text{ kip})^2 + (6 \text{ kip})^2} = 6.083 \text{ kip}$$



$$\gamma_{\text{abs max}} = (\gamma_{xz})_{\text{max}} = \epsilon_1 \quad (10-14)$$

ϵ_1 and ϵ_2 have the same sign

دا ارزښت مطلق اعظمی شيبير سترين د موادو لپاره ورکوي. تاسو به ياد ولری چې دا له اعظمی شيبير سترين په سطحه کې زيات دی، او هغه عبارت دی په $\epsilon_1 - \epsilon_2 = (\gamma_{xy})_{\text{max}}$. اوس هغه حالت په ياد کې نيسو چېرې چې يو له اصلی سترينو په سطحه کې مخالف علامه د هغه بل اصلی سترين په سطحه کې وي، نو بيا ϵ_1 لامل د اورډوالي او ϵ_2 لامل د انقباض کيږي، انځور 10-14a وگوري. دا د موهر دري دايرې د سترين د اجزاوو تشريح د عنصر د گردش په x, y, z محورونو کوي، لکه څرنگه چې په انځور 10-14b کې ښودل شوي. دلته

$$\gamma_{\text{abs max}} = (\gamma_{xy})_{\text{in plane}} = \epsilon_1 - \epsilon_2 \quad (10-15)$$

ϵ_1 and ϵ_2 have opposite signs

انځور 10-14

مهم ټکي

(IMPORTANT POINTS)

- که په سطحه اصلی سترينو دواړه يو شان علامی ولري، بيا مطلق اعظمی شيبير سترين په وتلي سطحه واقع کيږي او ارزښت يې عبارت دی په $\epsilon_{\text{max}} = \gamma_{\text{abs max}}$. دا ارزښت له اعظمی شيبير سترين په سطحه څخه زيات دی.
- که په سطحه اصلی سترينو دواړه مخالفی علامی ولري، نو بيا مطلق اعظمی شيبير سترين مساوی دی په اعظمی شيبير سترين په سطحه $\epsilon_1 - \epsilon_2 = \gamma_{\text{abs max}}$.

9.3 مهم (اصلي) ستريسونه او په - داخلي سطحه کې اعظمی شيبير ستريس (PRINCIPAL STRESSES AND MAXIMUM IN-PLANE SHEAR STRESS)

څرنگه چې $\sigma_x, \sigma_y, \tau_{xy}$ ټول ثابت دی، له معادلو 9-1 او 9-2 داسې ليدل کيږي چې اندازه د $\sigma_x, \sigma_y, \tau_{xy}$ يوازې د هغی سطحې په زاويه θ پورې اړه لري، کوم چې ستريس ورباندی عمل کړي. د انجینري په پرکتنس کې مهمه ده چې هغه سمت و موندل شي چې نارمل ستريس ورباندی اعظمی وي، او هغه سمت چې شيبير ستريس ورباندی اعظمی وي. موږ به دا قضیې اوس وڅیړو.

په داخل - سطحه کې اصلی ستريسونه (In-Plane Principal Stresses).

د اعظمی او کوچنی نارمل ستريس ټاکلو لپاره موږ د 9-1 معادلی مشتق (differentiate) نظر زاويه θ ته نيسو او پایلی مساوی په صفر کوو. دا راکوي

$$\frac{d\sigma_x}{d\theta} = -\frac{\sigma_x - \sigma_y}{2}(2 \sin 2\theta) + 2\tau_{xy} \cos 2\theta = 0$$

دا حل کوو، او د اعظمی او کوچنی نارمل ستريس سطحی سمت د $\theta_p = \theta_p$ په لاس راکوي

$$\tan 2\theta_p = \frac{\tau_{xy}}{(\sigma_x - \sigma_y)/2} \quad (9-4)$$

د اصلی سطحو سمت

حل دوه خوايه (roots) لري، θ_{p1} او θ_{p2} . په ځانگړی توگه د $2\theta_{p1}$ او $2\theta_{p2}$ ارزښتونه له يو بل 180° فاصله لري، په دی معنی چې θ_{p1} او θ_{p2} له يو بل 90° واټن لري.

SAE MEMBERS REPORT, December, 2023

The Hydro politics of the Helmand River: An introduction to the Helmand River and Water Rights Treaties Between Afghanistan and Iran (Part – I)

By: Engineer Amanullah Mommandi

ABSTRACT

Water rights related to Afghanistan's longest river, the Helmand, has been a point of contention between Iran and Afghanistan for many years and recently hostilities have increased dramatically. This article provides context and background to the 1973 Helmand Water Rights Treaty between Afghanistan and Iran. This article opens with an overview of the geography of the Helmand River. Then a brief overview of historical agreements between Afghanistan and Iran related to the allocation of water from the Helmand River is reviewed. The emphasis of the article is to relate the responsibilities of Iran and Afghanistan related to the 1973 water rights treaty signed by Afghan Prime Minister Mohammad Musa Shafiq and Amir Abas Howeda, the Prime Minister of Iran on March 12, 1973 or Hoot 12, 1351 Hijri Shamsi. The agreement was then approved by the Wolesi Jirga of Afghanistan and the House of Representatives of Iran. Finally, the Shah of Iran, Mohamad Reza Pahlavi, and King of Afghanistan Mohammad Zahir Shah signed the agreement.

Geography of the Helmand River

The Helmand River, the longest river in Afghanistan, is about 715 miles (1,150 km) long. It begins in the Sanglakh Range of the Hindu Kush mountains in the northeastern part of Maidan Wardak Province, where it is separated from the Kabul River watershed by the Unai Pass. It flows southwestward more than 1300 km along more than half the length of Afghanistan before entering the Sistan depression and discharging into semi connected wetlands known as hamouns located inside Afghanistan and Iran.

The basin provides livelihoods—mainly through irrigation, animal husbandry, and livestock—for >8 million residents in south and southwestern Afghanistan and >1 million people in Iran's Sistan-Baluchistan province.

Iran, without consulting Afghanistan, built four Chahnimehs, artificial manmade reservoirs, with a total storage capacity of 2900 million cubic meters (MCM) of water (Figure 2). While Iran claims that the purpose of the Chahnimehs is to hold water flowing from the upper Helmand River during flash floods,



Figure 1. The Helmand River and its Tributaries

these reservoirs are used to divert the flow of Helmand River to supply drinking water for the people of Zabol and Zahedan, cities in Iran’s Sistan-Baluchistan province.

Prior to the construction of Chahnimehs, water at the end of the Helmand River flowed in a counterclockwise direction, first reaching Hamoun Puzak located almost entirely in Afghanistan and then flowing to Hamoun Saberi traversing the border of Afghanistan and Iran, then to Hamoun Helmand in Iran, and finally to the Gowd-i Zerah Depression in Afghanistan (Figure 3).

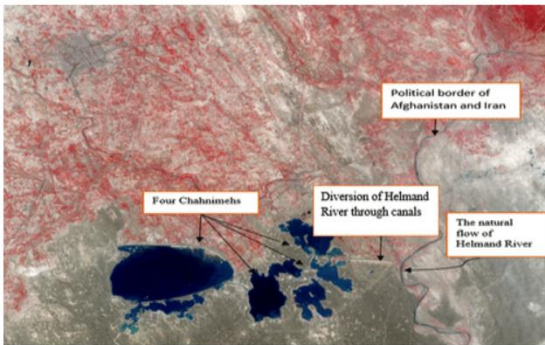


Figure 2 (above). Chahnimehs near the current Irano-Afghan border

Figure 3 (right). Flow of Helmand prior to the construction of Chahnimehs



The Helmand River meanders between Afghanistan and Iran, establishing a 27-mile border between Afghanistan and Iran before dumping into hamouns (Farsi, plural name, meaning lowland depression naturally filled with water – like a lake). These Hamouns are collectively considered the world’s seven largest wetland and were famous for recreation, fishing, migratory birds’ stopover. The marshes were excellent grassing place for cattle. In short, this area was the breadbasket of the region.

The geographic location currently identified as Seistan Province in Iran was part of Afghanistan for approximately 125 years prior to 1860’s and thus so were the hamouns. As a result, Afghanistan and Iran then did not have any disputes relating to Helmand River water rights since Helmand River emptied in hamouns located inside Afghanistan.

HISTORICAL BACKGROUND

1700s-1863: Durrani Empire

For about 125 years prior to the 1860’s the entire Sistan delta had been under Afghan control as part of the Durrani Empire. Hence, there was no water right issues related to the Helmand River with Iran. The Helmand River drained into a series of hamouns (local depressions) that all were located inside Afghanistan. Today’s Zabul Province in Iran was part of the greater Sistan of the Durrani Empire of Afghanistan.

With the decline of the Durrani dynasty in Afghanistan, Amir Dost Mohammad Khan became the Emir of Afghanistan in 1826. Prior to his death in June 1863, Amir Dost Mohammad Khan Barakzai had named his fourth son Sher Ali Khan as crown prince of Afghanistan. Sher Ali Khan had twenty-five brothers, many of whom wanted to be the next King of Afghanistan. This resulted in a civil war between Sher Ali Khan and his brothers. This in-fighting weakened the Afghan Military and Iranian forces seized this as an opportunity to attack. Iran occupied most of the Sistan region, advancing to the Nadali hills near Zaranj.

1863-1879: The Goldsmid Award

Between 1863 and 1879, significant developments occurred regarding the Sistan region, involving Afghanistan, Iran, and the British Empire. In 1868, Sher Ali Khan, after defeating his brother Mohammad Afzal Khan, re established himself as the Emir of Afghanistan. He then asserted his power in Kabul and dispatched troops to Sistan to expel Iranian forces, achieving initial success. However, this led to Iran appealing to the British for intervention.

The British in India, concerned about their interests and wishing to avoid a war between Afghanistan and Iran over Sistan, offered to mediate. On August 9, 1870, they established a commission in Paris under General Frederic Goldsmid. Goldsmid subsequently traveled to Tehran and Sistan for a thorough assessment. The Afghan delegation, led by Prime Minister Sayed Noor Mohamad Shah, went to Sistan but avoided meeting Goldsmid and the Iranian representative. Eventually, both sides convened in Tehran to present their claims over Sistan to Goldsmid.

In Tehran, on August 19, 1872, Goldsmid issued an arbitral award, emphasizing the equitable distribution of water from the Helmand River for irrigation purposes but did not specify the amount necessary. This omission later became a central issue. The British favored Persia in the border demarcation, legitimizing Iran's military occupation of Sistan as part of a strategy to use Persia as a buffer against Russian expansion. Afghanistan, unable to contest British authority, reluctantly accepted the award, though Amir Shir Ali Khan was extremely unhappy with the decision. His envoy, Sayed Noor Mohamad Shah, unsuccessfully protested in Simla against recognizing the Helmand River as the natural boundary between Afghanistan and Iran.

For many years following the Goldsmid award, local communities managed disputes over water use in the Helmand delta without central government intervention, however the issue evolved from a local to an international problem, with the establishment of an international boundary by Goldsmid in 1872, requiring both nations to manage the division of water in the delta.

1885-1896: Helmand Changes Course

The problem with setting the course of the Helmand river as the official boundary between Afghanistan and Iran, as was done by the Goldsmid Commission is that the boundary between Afghanistan and Iran underwent changes due to alterations in the course of the Helmand River, which were influenced by natural events such as floods. Notably, in 1884, a flood widened a small channel branching off westward from the main course of the Helmand River. Subsequently, in 1886, another significant flood caused the Helmand to abandon its old course near Nād 'Ali and shifted the bulk of its waters to the Pariān River, a channel further west which had previously been an artificial canal. This change in the river's course affected the established boundary line, leading to water disputes.

Additionally, in 1896, heavy floods burst through the embankment on the left bank near Šāhgol, creating a new channel known as Rud-e Pariān. This event led to cooperative efforts between Afghans and Persians to jointly build a canal across the Pariān in order to maintain the water supply in the Nād 'Ali channel.

These changes in the course of the Helmand River due to natural events such as floods played a significant role in the dynamics of the boundary and water rights between Afghanistan and Iran.

1902 – 1906: The McMahon Commission

In 1902, Iran requested British mediation to address boundary disputes in Sistan and water rights issues related to the Helmand River between Afghanistan and Iran. The British government appointed Colonel Henry McMahon as the head of the Afghan-Iranian border arbitration in the Sistan area, an effort undertaken by the Perso-Afghan Arbitration Commission. This mission, known as the McMahon Mission, saw McMahon and his team depart for Sistan in February 1903. They conducted an extensive field study, gathering social, economic, agricultural, and irrigation data, which was later published in three volumes. The field investigation in the Helmand River Delta extended from February 1903 to May 1905.

On April 10, 1905, Colonel McMahon issued his arbitral award on the Sistan water issue at Camp Kohak. He also communicated his decisions to Amir Habibullah Khan of Afghanistan for approval. In response, on May 6, 1905, Amir Habibullah Khan, the Emir of Afghanistan, wrote to the British Viceroy of India expressing his acceptance of McMahon's ruling, except for the proposal to station a British national in the field to monitor water rights.

The McMahon Commission's significant achievement was the demarcation of a border acceptable to both sides. Detailed field reports prepared by the McMahon Mission's staff officers were published in 1906. However, the arbitration did not completely resolve the issues, as the Government of Iran disclaimed McMahon's award. McMahon's arbitration determined that two-thirds of the Helmand River's water flow would be retained by Afghanistan, with one-third allowed to enter Iran. While Afghanistan accepted the border demarcation, it only reluctantly agreed to the water rights decision. The McMahon and Goldsmid recommendations for water consumption were intended for agriculture, animal husbandry, and the drinking needs of Sistan's inhabitants, explicitly stating that this water should not be diverted for recreational or industrial use in other cities.

1930-1939: Nadir Shah and Mohammad Renz Shah

During the 1930s, King Nadir Shah of Afghanistan and Mohammad Reza Shah, the Pahlavi Shahenshah of Iran, shared a cordial relationship and mutually decided to address the long-standing disputes over the water rights of the Helmand River in a fraternal manner. During this period, Ali Mohamad Khan served as the Afghan Minister of Foreign Affairs. Both countries established teams to tackle the technical aspects of the issue. These negotiations spanned nearly a decade, from 1930 to 1939, ultimately concluding with a decision that Afghanistan would allocate twenty-six cubic meters per second of Helmand River water to Iran. However, this ruling did not receive approval from the Afghan Wolosi Jirga (parliament), which deemed the agreement to be unfair.

1947-1051: The Helmand River Delta Commission

In 1947, the United States began facilitating negotiations between Iran and Afghanistan, driven by its interest in maintaining stability in the region. By February 1948, the U.S. Department of State proposed the formation of a neutral technical commission, to be appointed by Iran and Afghanistan, for studying the Helmand River issue and suggesting a resolution.

Consequently, the Helmand River Delta Commission was established, comprising three impartial experts in hydraulic and irrigation engineering, selected by Afghanistan and Iran. The members of this commission were Francisco J. Dominguez, a professor from the Universidad de Chile; Robert L. Lowry, a consulting engineer from El Paso, Texas, USA; and Christopher E. Webb, a district and water resource engineer from Vancouver, British Columbia, Canada.

The Commission officially commenced its work on September 7, 1950, and traveled to Asia, dedicating equal time to studying the situation in both Iran and Afghanistan. The commission members were warmly welcomed in Kabul and Tehran by high-ranking officials and heads of state, which aided their field studies of the Helmand River.

In February 1951, the Helmand River Delta Commission released its findings. The report notably acknowledged the contributions of H.E. Abdul Majid Khan, President of the Afghan National Bank and former Minister of National Economy, and H.E. Najib-Ullah Khan, the Afghan Ambassador to India. The commission's report, encompassing several recommendations for both countries, was presented to their respective governments. However, Iran did not accept the commission's findings.

Before 1951, water rights between Afghanistan and Iran were quantified in acre-feet. After the release of the Helmand River Delta Commission's report, both countries began assessing their claims based on the volume of water flowing through the Helmand River at Band-I-Kamal Khan. According to the commission's research, the total water allocation for Iran was determined to be 20.73 cubic meters per second. Nevertheless, Iran did not accept the commission's report, as it sought a larger share of water from the Helmand River.

1973: The Helmand River Treaty

The amicable relationship between Afghan King Mohammad Zahir Shah and Iran's Shahenshah Mohammad Reza Pahlavi paved the way for a collaborative approach to resolving the disputes over the Helmand River Water Rights. Both leaders appointed heads for their negotiation teams, with Afghanistan's team led by Mohammad Musa Shafiq, who held positions as Prime Minister and Foreign Minister.

Continued in part-II.

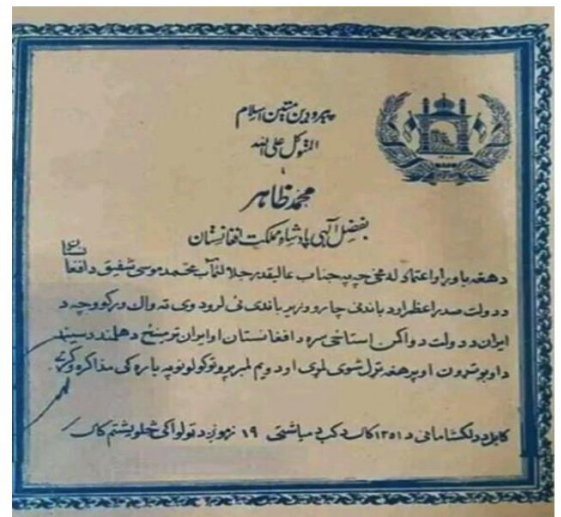


Figure 4. King Zahir Shah's degree designating Mohammad Musa Shafiq as the representative for Helmand River Water Rights Treaty

Biography of Engineer Amanullah Mommandi, M.S, P.E.

Mr. Mommandi graduated from the College of Engineering at Kabul University with a bachelor's degree in Civil Engineering in 1968. Subsequently, he joined the Afghan Army Reserve for one year and then joined Water and Soil Survey Authority in the Ministry of Agriculture and Irrigation where he served as a water resource engineer until 1973.

Mr. Mommandi pursued graduate studies in Water Resource and Hydraulics at Colorado State University located in Fort Collins, Colorado, USA where he obtained his master's degree in 1975.

Mr. Mommandi then returned to Afghanistan and started working for the Ministry of Water and Power (MPW) as General Director of Planning, General Director of Technical Monitoring, and Inspection, and finally as the President of Kunduz Khanabad Water Resource Authority.



After immigrating to the United States, Mr. Mommandi briefly worked in the private sector as a consultant before joining the Colorado Department of Transportation (CDOT). Mr. Mommandi's career at CDOT spanned over 35 years before his retirement in 2019. At CDOT, he served as the Hydraulic Program Manager and later as the Director of the Applied Research and Innovation Branch. Mr. Mommandi co-authored many publications related to water resource and transportation. The research documents can be access at the following link.

<https://www.codot.gov/programs/research>

In 2012 Mr. Mommandi presented on various water resource hydraulics and transportation applications at the Ministry of Public Works and at the College of Engineering at Kabul University. Mr. Mommandi accompanied Minister Aoudjan and others to inspect the highway from Kabul to Khenjan including the Salang Tunnel. He also Joined Mr. Aoudjan and his delegation to Inspect Eisenhower-Johnson Memorial Tunnel along I-70 west of Denver, Colorado, USA. The author facilitated the signing of Technical Memorandum between Afghanistan Minister of Public Works and CDOT.

Mr. Mommandi joined the Society of Afghan Engineers (SAE) in the early nineties, chaired the SAE Colorado Chapter and served two terms as member of SAE Board of Directors and Vice President. He is currently SAE Board member.

Amanullah Mommandi, M.S., P.E.

Email: mommandia@gmail.com

Phone: (303) 217-6803

SAE MEMBERS REPORT, December, 2023

By: Sayed A. Azimi

The United Nations Programs' Challenges and Deficiencies in Afghanistan

The objective of this study is to provide a glimpse into the United Nations Organization (UN) efforts that have continued for over 70 years in Afghanistan. The study mainly focuses on the weaknesses of the UN's humanitarian and development programs and identifies specific areas that need close attention for successful outcomes in the future.

The United Nations' work in Afghanistan has been commendable in attempting to address complex challenges related to security, humanitarian needs, and development. However, various deficiencies and challenges have hampered its efforts to bring about lasting stability and prosperity in the country.

However, despite its efforts, the UN's work in the country still suffers from significant weaknesses and deficiencies. This paper explores present-day deficiencies in the UN's approach to Afghanistan, providing specific examples to illustrate these challenges. These concerns and challenges include:

- Lack of expertise in project development and implementation,
- Insufficient Knowledge of the local situation and needs, Excessive level of indirect costs,
- Corruption and mismanagement,
- Lack of use of local experts,
- Lack of sustainable development projects,
- Need to empower small business entities,
- Lack of coordination and fragmented approach, and
- Limited funding and resources.

As a result of these concerns, few, if any, of the UN projects have had a long-term impact or longevity of sound project planning. With more than 70 years of presence in the country, UN management should have ample information on its past performance and must evaluate the performance of its projects and their intended outcomes. Independent evaluators must conduct the evaluation and should include local experts and recipients of assistance in those projects.

For the UN programs to be successful not only in Afghanistan but throughout the world, there are a number of essential structural changes to be implemented. Addressing these issues requires a comprehensive and multi-faceted approach involving close collaboration with the Afghan government, regional stakeholders, and the international community.

While the road ahead remains challenging, the UN's commitment to Afghanistan's development and prosperity remains critical. By learning from past shortcomings and embracing a more coordinated and

inclusive approach, the UN can better navigate the complexities of working in Afghanistan and make a more significant impact on the lives of its people.

Information gathered for this study results from research and examination of many documents from various available sources, as well as interviews with several individuals who have been closely associated with the UN projects in the country or are knowledgeable of its efforts there. The study results are written in short and concise sections for a quick read and should lead to further investigation of each section if detailed information is needed.

For this paper's complete version, please go to the link provided below.

https://drive.google.com/file/d/1PoEUaQk_8cCft2Vv8WJHrdGrTl9FwjDw/view

This study was conducted and authored by Mr. Sayed A. Azimi, an Afghan-American living in the Washington, D.C., Metropolitan area. Mr. Azimi is the president of Technologists, Inc. (Ti), an engineering and management consulting firm. Between 2004 and 2021, Ti designed and built numerous infrastructure projects throughout Afghanistan. He has written and conducted several seminars on the subject and is the author of *Road to Prosperity; Transformational Initiatives to Create One Million Jobs*.

SAD NEWS, LOSS OF A COLEAGUE, December, 2023

Obituary, December, 2023

Dr. Bashir Ahmad Sayar, the late beloved professor of the Faculty of Engineering

Bashir Ahmad Sayar was born in Farah Province of Afghanistan, where his father Noor Mohammad Affandi was exiled for ten years by the monarchy, on March 4, 1941. At a young his age, the family moved to Kabul, Afghanistan whereby he pursued elementary school, and eventually graduating from Habibia High School. Thereafter, he was accepted into the Faculty of Engineering of Kabul University. He then, via a scholarship, attained his Masters and PhD degrees from Georgia Institute of Technology (Georgia Tech) in the United States. Through his career he worked for various international organizations, including the UN, UNDP and UNESCO. He was the author and presenter of several engineering research papers.



He served at the Faculty of Engineering as professor, Head of the Mechanical Engineering Department, Assistant Dean and Head of Center for Engineering Consulting Services and Applied Research. He also served as the Head of the University Research Center.

In 1979, two weeks before the Russian invasion of Afghanistan, he was able to leave the country and take his family to the United States. In the US he taught as a professor at various universities, including Stevens Institute of Technology and South Dakota State University. His last position was Director of the Engineering Programs at Jacksonville University from where he retired in 2013, after 27 years of service.

After retirement, he spent a lot of his time with his wife Shafiq, his three children and five grandchildren, whom he loved dearly.

He suffered from Alzheimer's for the last years of his life. In the unfortunate turn of events, this disease took his life. He passed away peacefully on December 2, 2023 in the presence of his brothers, children, and other loving relatives.

Dr. Sayar was buried on Monday December 4, 2023, at 2:15 pm at the Chapel Hills Cemetery in Jacksonville, Florida.

May Allah Almighty have mercy and may his soul rest in heavens.

George Yama Sayar (Son)
904-813-3317



Election 2023 Voting Ballot

NAME: _____

E-Mail Address: _____

In the ballot box below, there are names of thirteen (12) candidates for the “Board of Directors”, and one candidate for the “President position” of SAE. Those elected will serve their term from January 1, 2024, to December 31, 2026. The biographies of the nominees, and voting guideline are included in separate files, attached to this voting email.

Please show your choice for each office by marking a “Yes” in the appropriate box below

1. Please select **ONLY** up to nine (9) candidates from the list for the “Board of Directors” and one for the president position. Indicate your vote by placing “yes” across the name in the column “Vote”.
2. Since there is only one candidate for the post SAE President, please write Yes or No.
3. If anyone votes for more than nine (9) for the Board of directors the voting ballot will not be counted, and the Ballot will be voided.
- 4.

VOTE FOR THE

CANDIDATE

FOR PRESIDENT

Mr. Jalal Masumi _____

NOMINEE FOR THE BOARD OF DIRECTORS

	NAME OF The CANDIDATE	VOTE
1	Hashem Baluch	
2	Mr. Amanullah Mommandi	
3	Mr. Ghulam Mujtaba	
4	Ghulam Mohammad Feda	
5	Mr. Hadi Rakin	

6	Matiullah Kamran	
7	Mr. Manan Khalid	
8	Ehsan Abdullah	
9	Mr. Sharif Hossainy	
10	Mr. Mohammad Fazil Mohmand	
11	Mr. Yar Mohammad Mohabbat	
12	Mr. Zabi Zaca	

Your vote will remain confidential. The deadline for the receipt of your voting ballot by the Election Committee is **11:59 PM EST on Friday September 15, 2023**. Return your completed ballot by email to: Atiq Panjshiri, Chairman Election Committee, at Atiqpanjshiri@yahoo.com

please CC members of the Election committee at the following addresses:

Fayeq Fasihi, at ffasihi@saniecg.com
Nazeer Babacarkhial, at engineernaz@aol.com
Qaseem Naimi, at mqnaimi@comcast.com
and Saleh Keshawarz, at keshawarz@hartford.edu

(Any ballot not sent to all five election committee members will not be counted).

Tuesday October 3, 2023

Dear SAE Members,

On behalf of the Society of Afghan Engineers (SAE) Election Committee 2023, I express my sincere gratitude for your time participating in the 2023 SAE election.

The Election Committee counted the votes at their meeting on Tuesday September 26, 2023, verified and confirmed all the votes received by the deadline of Friday September 15, 2023. A total of twelve (12) eligible members were nominated for the nine (9) positions to the Board of Directors of which two (2) candidates dropped out, and there was one (1) member candidate to the post of SAE president.

Now, we are pleased to announce the election results as provided in the chart below. Based on the number of votes casted, the top first nine (9) vote recipients are verified, confirmed, and certified as the "Directors Elect" for the next three years term beginning January 1, 2024.

For the post of SAE President, section 4.1 of the SAE by-laws 2022 states " ... after the selection of the Chairperson, the Board of Directors appoints the new president by selecting a candidate from the list of the candidates previously prepared by the Election Committee". The Election Committee has prepared Mr. Sayed Jalal Masumi candidacy for the post of SAE president and forwarding to the new Board for consideration.

The Election Committee would like to congratulate the candidates who have been successfully elected to the positions of Board of Directors and wish them much success in achieving many great things for SAE in the three years.

The Committee would also like to take this opportunity to express its appreciation to all candidates for their participation in this year's election and their willingness to serve the Society.

The Election Committee 2023 members are all grateful to the SAE colleagues for their trust in them to serve on the Election Committee and overseeing the 2023 SAE election process. The Election Committee has made sure to deliver a transparent and smooth election process for all our SAE colleagues.

Thank you again for your time, participation, and support of the election process.

Sincerely,
Atiq Panjshiri, Chairman
SEA Election Committee 2023

**SOCIETY OF AFGHAN ENGINEERS
SAE ELECTION 2023**

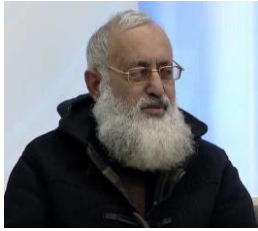
Candidates		Vote Counts, Election Committee 2023					Final Collective Vote Counts
Last Name	First Name	<i>Saleh M. Keshawarz</i>	<i>Qaseem M. Naimi</i>	<i>Abdul N. Babacarkhial</i>	<i>Fayeq Fasihi</i>	<i>Atiq Panjshiri</i>	
Mujtaba	Ghulam	27	27	27	27	27	27
Khalid	Abdul Manan	26	26	26	26	26	26
Rakin	Abdul Hadi	25	25	25	25	25	25
Baluch	Hashem M.	25	24	24	24	24	24
Mommandi	Amanullah	24	24	24	24	24	24
Hossainy	Said Sharif	23	23	23	23	23	23
Feda	Ghulam M.	22	22	22	22	22	22
Zaca	Zabiullah	21	22	22	22	22	22
Mohabat	Yar Mohammad	15	15	15	15	15	15
Abdullah	Ehsan	13	13	13	13	13	13

Candidate (s) for the Post of SAE President

Sayed Jalal Masumi

**SOCIETY OF AFGHAN ENGINEERS
"DIRECTOS ELECT."**

DIRECTORS ELECT 2024-2026	
Last Name	First Name
Mujtaba	Ghulam
Khalid	Abdul Manan
Rakin	Abdul Hadi
Baluch	Hashem M.
Mommandi	Amanullah
Hossainy	Said Sharif
Feda	Ghulam M.
Zaca	Zabiullah
Mohabat	Yar Mohammad



PhD Architect Hashmatullah Atamr
Lecturer of engineering faculty of Salam
University and member of directorate of design
Of construction affairs

Part.2/2

2- The long corridor of the Ashoqan Tomb

This corridor has been constructed in rectangular form, and both sides has decorated with wooden arches in which shows the hand art of Afghans.

The upper section of both side walls are designed with wooden screen net, and this wooden screen has multi-function job, it works as air flow and exhaust as well as for the purpose of lighting inside the corridor. And also the corridor ceiling is covered with very simple and flat wood cladding which is painted with brownish color.

The corridor ends up with a small room on the front and then from their small room is connected with the main room which the Tomb of Ashoqan.



The long corridor of Ashoqan Tomb



Entrance gate to the small room before entering the Tomb of Ashoqan

3- A small room with an old architectures

It is made of mud break, clay and sitting areas are constructed on both sides of the small room gate and the purpose of these sitting areas are for waiting, and resting. The surface all around the gate is decorated with beautiful ancient arches and decorative flowers.



A picture of sitting area, next to the gate of the small room before entering the Tomb of Ashoqan



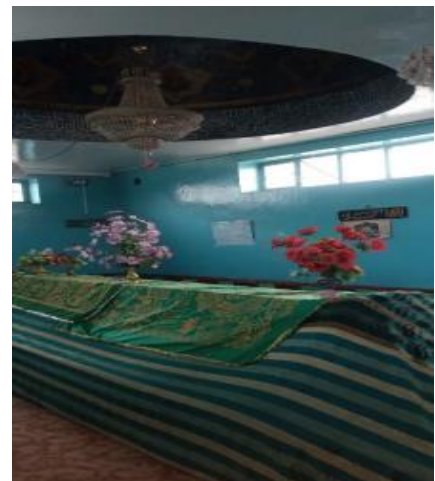
A picture of the public entrance door leaf to the Tomb of Ashoqan

4- Tomb of Ashoqan

The building of this tomb seems to be new and it has a dome roof cover, the walls are constructed out of brick, plaster and blue oil paint, and these walls are loadbearing walls. The grave of Ashoqan is decorated with color marble of country and has enough space all around for pray and visitors. Walls has short windows at the upper part for ventilation of weather and lights.



An interior picture of the Ashoqan Grave



An interior ceiling picture of the Ashoqan Tomb

Tomb of Arifan

This Ziarat is located on the left after entering the small corridor and it has a separate entrance gate. This Tomb has large interior space which is separated in to two parts, the grave and

the space around of grave for pray and visitors, the grave part is located in the middle. There is a wooden partition all around the grave, it is made wooden structure with skirting and decoration of the Kabuli grill, for ventilation and light.

To the west of the grave half circle shape windows are located, and the Tomb itself has two wooden door at the south side for which is main entry and the second for emergency exit toward the kitchen when it is necessary.

After entering to the tomb on the left side of the wall engraved marble stone and we can read a poem describing Ashoqan and Arifan (as) was composed.

The tomb ceiling has wooden beams rectangular form, than wooden planks, but roof is completely smooth from the outside and materials are mud plaster only, roof has slope to the courtyard and has enough wooden gutter, The staircase for the second floor of the Mosque can be used for the roof of tomb if needed, but the unnecessary excursion is not allowed.



A picture of the entrance door of Arifan's tomb



A picture of Arifan's tomb



A picture of the marble sign inside of Arifan's tomb



An interior image of the grave of Arifan

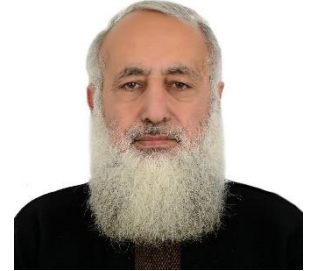


An Exterior image of the Arifan grave

Ashoqan and Arifan has simple power system for all buildings, water well, and water reservoir for ablution area and waste water ditch for rain which is connected to street ditch of canalization. This ziarat need be renovated and use similar material with wood decoration and all the paint color should to be the same to show one complex from the inside and outside.

SELECTED ARTICLES, December, 2023

Brief biography of: HASHMATULLAH ATMAR



Hashmatullah Atmar son of Shamsulhaq Atmar was born in Bulan village, Qarghae Distract of Laghman province, Afghanistan.

Mr. Atmar completed his bachelor and Master degrees at the school of architecture, Azerbaijan Civil Engineering Institute in 1982 to 1988. He completed his studies in Architecture field and gained PHD degree from the same university from 2005 to 2007.

Started work with PAMA (Central Planning Project Institute) as a head of education and health department and he also taught at the Engineering Faculty at Kabul University (part time) for 10 years.

From 2001 started work with Zone of Maximum Design (ZMD) Turkish design and Construction Company as a project manager in Kabul.

Mr. Atmar is currently working as Controller of architectural projects for Directorate of Design of Construction Affairs as well as lecturer of engineering faculty at Salam University.

Furthermore he is author of 38 volume books, in which 28 of these volume books are about architecture (especially Afghan architecture), the remaining 8 are architecture with Islam religion and the last 2 are novels in Pashto and Dari languages.

Contact number: +93799376998

Email address: atmar_hashmatullah@yahoo.com

MEMBERS COMMENTS and FEEDBACK, December, 2023

COMMENTS AND SUGGESTIONS:

The Editorial Board of the SAE eNewsletter welcomes comments and suggestions from the respected Society members and readers of the Newsletter. Your comments and responses will be included for information of all readers of the SAE eNewsletter.

Emails:

Sharif Hossainy <sharifhossainy@hotmail.com>

Mon, Oct 2 at 7:22 PM

Dear Azadzoi sahib. Asallam-o- Alaikom,

I acknowledge receiving your email, regarding the quarterly and detailed report issue eNewsletter, October 2023.

Thank you and Editorial subcommittee, Ustad Mohtaram Eng. Manan Khalid's and Ustad Mohtaram Dr. Hassani's. for all your responsibilities and kind efforts and volunteering.

Best Regards

Dr. Said Sharif HOSSAINY

E-mail: sharifhossainy@hotmail.com

Tel: + 604 477 1232

iPhone + (778) 840 8280 (WhatsApp)

We sincerely thank you Dr. Sahib Hossainy for your contribution in the publication of the SAE eNewsletter. Your articles on architecture were well received by our readers in Afghanistan and in abroad.

Yours, Najim Azadzoi

Baha, Zarjon <bahaz@purdue.edu>

Mon, Oct 2 at 5:02 PM

Thank you Azadzoi sahib for the detailed report and the quarterly newsletter with all your other responsibilities.

Best wishes always.

Zarjon

Muhtaram Dr. Sahib Baha: We are so fortunate to have you among us and always benefit from your guidance and leadership.

Yours, Najim Azadzoi

fazel ahmed <afghanfazel37@hotmail.com>

Tue, Oct 3 at 10:26 AM

Thank you dear respected brother Azada Saib.
God bless you

*Thank you, Brother Fazel Ahmad. We are so delighted to have you as a member of the Society of Afghan Engineers.
Yours, Najim Azadzoi*

Mehdi Sabet <msabet52@gmail.com>

Wed, Oct 4 at 7:23 AM

Najim jaan,

Thank you for the dedicated work and time of your presidency at SAE, brought semblance of care and order. And thank you for the newsletter. Sorry about my late note. We have been busy moving back to NY from Dubai. It has been a challenging process after living in the UAE for almost 30 years. My new number is 914 427 9608.

Kind regards

Mehdi Sabet, aia, NCARB
Associate professor of Architecture & Interior Design
<http://msabet.weebly.com/>

*Thank you, Mehdi Jaan, your participation and contribution to the Society and in particularly to the Division of Architecture and Urban Planning has been tremendous and we all benefited from your experience and knowledge. Your contribution to the Bamiyan Housing project was immense.
Yours, Najim Azadzoi*

Hashmatullah Atmar <atmar_hashmatullah@yahoo.com>

Wed, Oct 4 at 5:10 AM

Thank you Dear Azadzoi Sahib!
This number (eNewsletter) is excellent but difference than rest of other numbers
Best regards
Hashmatullah Atmar
Architect, lecturer and writer

*Thank you, Atmar Sahib. We appreciate your comments and feedback.
Yours, Najim Azadzoi*

hwardak@comcast.net <hwardak@comcast.net>

Fri, Oct 13 at 11:22 AM

Dear All,

I am sad to read Donyajan resignation news. It is particularly not a good news for the SAE, where an energetic, enthusiastic and dedicated member of the organization resigns from the leadership circle. I benefited from her wonderful work for the organizing and making the SAE website functional and available for use. The good news hidden in the resignation news is , that she will remain a member of the Society.

Good luck Donyajan with your busy daily schedule , and thank you for your wonderful work for the Society.

Regards

Hafizullah Wardak

Ustad Muhtaram Wardak Sahib; I agree with you that having Donya Jaan Amiri resigned from her post as the Chairperson of Membership committee is a big loss. As you said, she will remain an active member of the Society. We also understand her commitment to her own professional and family life.

Yours,

Najim Azadzoi



Engineering Job opportunities With Planate

The following positions are available at Planate Management Group

Planate Management Group (PMG) is a Service-Disabled Veteran-Owned Small Business (SDVOSB) headquartered in Alexandria, Virginia, and Orlando, Florida USA with technical support centers in South East Asia and East Africa, that provide program management and facilities engineering services worldwide. Planate is a small business provider of planning, design, infrastructure management, technical consulting, engineering, and construction management services in support of the US Department of Defense (DOD) and its Service (Army, Air Force, Navy, Marine Corps) missions, along with other US federal agencies, all over the world.

Hello. Here is the list of our active requirements:

[Design Manager \(Albuquerque, NM\)](#)

[Medical Equipment Planner \(Palo Alto, CA\)](#)

[Industrial Hygienist \(Palo Alto, CA\)](#)

[Fire Protection Engineer \(Hybrid\)](#)

[Facility Planner \(Guam\)](#)

[Scheduler \(Guam\)](#)

[Administrative Analyst \(Grand Canyon, AZ\)](#)

[Engineer II \(Grand Canyon, AZ\)](#)

[Engineer I \(Grand Canyon, AZ\)](#)

[Scheduler \(Grand Canyon, AZ\)](#)

[Civil Engineer with Secret Clearance \(Ashgabat, Turkmenistan\)](#)

[Project Controls Engineer with Secret Clearance \(Ashgabat, Turkmenistan\)](#)

[Fire Protection Engineer \(Okinawa, Japan\)](#)

[Structural Engineer \(Okinawa, Japan\)](#)

Email questions and applications to recruitment@planate.com.

Why Planate?

Planate Management Group (PMG) is a Service-Disabled Veteran-Owned Small Business (SDVOSB) headquartered in Alexandria, Virginia, and Orlando, Florida USA with technical support centers in South East Asia and East Africa, that provide program management and facilities engineering services worldwide. Planate is a small business provider of planning, design, infrastructure management, technical consulting, engineering, and construction management services in support of the US Department of Defense (DOD) and its Service (Army, Air Force, Navy, Marine Corps) missions, along with other US federal agencies, all over the world.

We are an Affirmative Action and Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, or protected veteran status and will not be discriminated against on the basis of disability.

Joining the Planate team opens you to an experience working for a Global company where you are among a team that is considered a premier trusted partner for planning, design, engineering, asset management, and professional service solutions anytime, anywhere. We Take Care of Our Own; Personally, and Professionally, Up and Down The Line.

Visit our career site <https://planate.com/careers/> to know more about our other openings.

We'd love for you to be a part of our Global workforce, helping us serve as an effective and integrated partner to advance every client's mission!

Thank you!

Very Respectfully,

Marise (Mapet) D. Santos, CRSP

Recruitment Manager

Planate Management Group, LLC

1800 Diagonal Road, Suite 600

Alexandria, VA 22314

Tel: +1 (407) 674-5454

www.planate.com

A Service-Disabled Veteran-Owned Small Business (SDVOSB)

Please visit our career site <https://planate.com/careers/> to view other job requirements.

For inquiries, you may email recruitment@planate.com.

Please do not hesitate to reach out for clarifications or questions.

Thank you!

Very Respectfully,

Thank you!

THE 2024 SAE MEMBERSHIP RENEWAL

Dear Members of the Society:

The Management of the Society of Afghan Engineers (SAE) would like to remind all members that 2023 membership renewal and Annual fee of \$100 are due. Your membership fee collectively would enable us to pay for some basic needed services of the Society such as Website security monitoring, updating, and maintenance. Also, your membership fee would provide SAE's management, the financial means to organize and host events and seminars on relevant technical topics. The membership renewal application is attached to the Newsletter and also can be downloaded from our website at www.afghanengineers.org

Please visit the SAE Face book when you get the opportunity. We appreciate your kind attention to the membership due request.

<https://www.facebook.com/groups/275329343923115>

Sincerely,

Najim M. Azadzo, AIA, Outgoing SAE President

SAE eNewsletter Regional Representatives

The positions of the SAE eNewsletter Regional Representatives are open. Please let us know if you are interested to volunteer for one of these positions or if you want to nominate other qualified members to serve in these positions. The representatives will inform the newsletter Editorial Board of any technical news in their regions and contact authors for their contributions in the activities of newsletter. For additional information please send an email to SAE eNewsletter Editorial Board: A. Wahed Hassani, Email: awhassani@gmail.com; and A. Manan Khalid, E-Mail: manank10@gmail.com;

The attached form includes application for the new members and membership renewal. The application forms may be viewed at SAE website. The members are requested to take a few minutes of their time to inform the Society by sending their updated contact information.

The completed application/renewal forms may be mailed to:

THE SOCIETY OF AFGHAN ENGINEERS
P.O. Box 151584, Alexandria, VA 22315, USA.

Thanks to those who have updated their membership renewal and have paid their annual membership fees.

Thanks for their generosity.

Thanks to members who have updated their membership renewal and have paid their annual membership fees. Thanks for their generosity.

THE SOCIETY OF AFGHAN ENGINEERS ORGANIZATION

SAE E-Executive Committee Members:

Appointed President: Jalal Masumi; **Outgoing President:** Najim Azadzoi; **Outgoing Vice President:** Hamayon Ibrahim

Treasurer: TBA, **Secretary:** TBA **Manager:** TBA

Note: TBA is (to be announced/appointed)

TBC is (to be confirmed)

SAE Board of Directors-Officers: Chairman: A. Manan Khalid, M.S., P.E., LEED AP , **Vice-Chairman:** TBA; **Executive Director:** TBA

Members SAE Board of Directors: Sharif Hossainy, Manan Khalid, Amanullah Mommandi, Hadi Rakin, Zabi Zaca, Ghulam Mujtaba, Hashim Baluch, Yar Mohabat, and Ghulam Fedaa

SAE Past Presidents: Atiq Panjshiri, Ghulam Mujtaba, Abdul Hadi Rakin, M. Quasem Kadir, Abdul Hadi Rakin, Mohammed Hashim Rayek, Ahmad Wali Shairzay, Sohaila Sanie Shekib, and Malik Mortaza

SAE Chairpersons of Committees/Subcommittees:

- SAE eNewsletter Subcommittee, TBA
- SAE eNewsletter, TBA
- Capacity Building and Academic Development Subcommittee. TBA
- Chairperson of the Architecture and City Planning Subcommittees: TBA
- SAE/AGA Liaison Subcommittee. TBA
- SAE Student Subcommittee. TBA
- SAE Corporation Committee. TBA
- SAE Membership Committee, TBA
- Water Resource Subcommittee, TBA

SAE Local Chapter Coordinators: A. Hamid Layan – Kabul, Afghanistan; M. Qaseem Naimi – Toronto, Canada; Najim Azadzoi – Massachusetts, Mohammad Najib Poya - Northern California; TBA - Southern California; A. Manan Khalid – New York and New Jersey, Amanullah Mommandi – Colorado; Atiq Panjshiri – Virginia and Washington DC

Note: All Local Chapter Coordinators to be confirmed by the new administration.

SAE eNewsletter Subcommittee: Subcommittee Acting Chairman: TBA

Members: A. Waheed Hassani, Ph.D.,P.E. ; A. Manan Khalid, M.S., P.E., LEED AP; Abdul Hamid Layan (TBC).

SAE eNewsletter Editorial Board: Editor –In –Chief: (TBA)

Editorial Board Members: A. Waheed Hassani, Ph.D.,P.E. ; **and** A. Manan Khalid, M.S., P.E., LEED AP.

SAE eNewsletter Regional Representatives: Abdul Hamid Layan -Kabul: (TBC)

Subscribe/Unsubscribe: The subscription to the SAE eNewsletter is free. If you are not receiving the SAE eNewsletter directly and would like to subscribe, please send a note to SAE with the subject “Subscribe: SAE eNewsletter”. To unsubscribe, send a note with the subject “Unsubscribe: SAE eNewsletter”.

Disclaimer: The author, reporter, or agency of each publication, project, news, and products is included in this newsletter. Additional contact information of the authors and their agencies are available with the Editorial Board of the newsletter and may be provided upon request. The Editorial Board of the Society of Afghan Engineers, Executive Committee, Board of Directors, or any of its members are not liable for the accuracy or contents of the information. The reports and information are included as provided by the authors and agencies without any changes in the substance of the documents. The information about the agency products or services is not the SAE endorsement.

**THE SOCIETY OF AFGHAN ENGINEERS
MEMBERSHIP APPLICATION**

Full Name: _____

Address: _____

Phone: Home: _____ Office: _____

Email: _____

Degree Level: _____ Field of Expertise: _____ Years of Experience: _____

The active members of the Society of Afghan Engineers (SAE): Please mark (X) the appropriate box related to your address and other contact information.

- Yes, the above is a change in address or contact information.
- No, the above address is the same as recorded on the SAE's current membership list

Please mark (X) the appropriate box if you are submitting this application to join as a new member.

- A Regular member: I have at least four (4) years of architectural or engineering education.
- Associate member: I have at least two (2) years of architectural or engineering education

The SAE is a 501(c) (3) non-profit organization.

Amount of Annual 2023 Membership: \$100.00

Donation: _____

Total: _____

Suggestion and comments: _____

Please send your check or money order payable to the Society of Afghan Engineers.

THE SOCIETY OF AFGHAN ENGINEERS
P.O. Box 151584, Alexandria, VA 22315, USA.

SAE Bank Account Information:
Account Name: **Society of Afghan Engineers**
Bank Name: **Truist**
Routing # **051404260**
Account # **0005139262982**
Bank Address:
7915 HENESKA LOOP
ALEXANDRIA, VA 22315-0000

MEMBERSHIP APPLICATION
(SAE Members Living in Afghanistan)

Full Name: _____

Address: _____

Occupation: _____

Place of Work: _____

Phone: Work: _____ WhatsApp: _____

Email: _____

Degree Level: _____ Field of Expertise: _____ Years of Experience: _____

The active members of the Society of Afghan Engineers (SAE): Please mark (X) the appropriate box related to your address and other contact information.

Yes, the above is a change in address or contact information.

No, the above address is the same as recorded on the SAE's current membership list

Please mark (X) the appropriate box if you are submitting this application to join as a new member.

A Regular member: I have at least four (4) years of architectural or engineering education.

Associate member: I have at least two (2) years of architectural or engineering education

The SAE is a 501(c) (3) non-profit organization.

Annual Membership: SAE Members Living inside Afghanistan are exempt of annual membership (**FREE Membership**).

Suggestion and comments:

THE SOCIETY OF AFGHAN ENGINEERS

P.O. Box 151584, Alexandria, VA 22315, USA.

Website: www.afghanengineers.org

SAE Alternative Mailing Address (Optional)

The SAE president, Najim Azadzoi, and the Afghan Academy President Mr. Hassan Shirdle, met in Virginia on January 7, 2021, to discuss the possibility of future activities between the two non-profit organizations. As part of mutual relationships, the Afghan Academy provides an office for SAE and sharing the mail address.

As of June 1, 2021, the Society of Afghan Engineers has a physical address. The new SAE address is:

**The Society of Afghan Engineers
c/o 6265 Franconia Road**

Alexandria, VA 22310

USA

MEMBERSHIP NEWS

SAE is pleased to announce that many professional engineers and architects in the United States, Canada and Afghanistan have shown their interests becoming SAE team members since January 2021. SAE has received most of new members' membership applications and fees as required by the SAE bylaw. We welcome everybody and looking forward working together in future projects by providing professional services to Afghan Government and agencies. We publish new members' names and their short biography in each SAE quarterly eNewsletter as provided the information.

We welcome our newest high qualify members and look forward to their contribution to the purpose and mission of the Society of Afghan Engineers as set forth in the bylaw of the society.
