As we move into our second century of service to America and the architecture, engineering, and construction profession, it is prudent to understand the context in which SAME was born in 1920, and the context in which we find ourselves today. This time in our history also serves to help each of us as professionals and patriots to reflect on the unlimited possibilities we have to make a real difference as an active member of SAME, and to gain an appreciation for, and understanding of, those who founded this organization.

SAME is the only society in the architecture, engineering, and construction profession that straddles military, public, private and academic realms specifically to contribute to America’s national security. A century ago, in the immediate aftermath of the Great War, SAME set out to humbly sustain military engineer force readiness by maintaining the relationships between engineering professionals in military and civil life. Now, emerging from our first 100 years of service, it is clear that the multi-disciplined nature of our membership is uniquely postured to make widespread contributions to national security objectives. As the world continues to change rapidly, the next century promises to be one of vital progress for mankind with American leadership—political, economic, and technological—at the forefront.

SAME’s role is already growing to support the broader challenges we face.

**OUR ENDURING PURPOSE**

To a large extent, SAME was an engineer officer’s professional organization for much of its first century—not necessarily active duty in all cases, but with military experience, especially early on as this Society was founded by engineers in the U.S. Army (though even then, they were not restrictive of membership, knowing that a truly joint organization was essential to any national preparedness).

In recent years, we evolved our mission beyond just a focus on the Department of Defense. Officer and enlisted; civilians and private sector practitioners; students and professors; engineers, architects, scientists, project managers, contracting officers, marketing specialists: this diversity of professionals makes up the most multi-disciplined professional society in our industry. We now find ourselves leading collaboration among all who care about America’s national security and helping to solve the infrastructure-related challenges that are being faced by public engineers at every level of government.

In fact, some have suggested taking the word “Military” out of our name. They point out that only 22 percent of 30,000 members are in uniform. But, consider this. Recent surveys of the American people indicate that the military is the most trusted institution in our country. Further, Americans recognize there is no other institution for which its members agree to give their lives to secure our nation. The “M” represents our enduring values, not just our heritage or membership.

The January-February 1920 edition of The Military Engineer established SAME’s purpose and it is worth repeating it to reflect on the values it underscores:

“This society will serve no selfish purpose. It is dedicated to patriotism and national security. Its objects are, in brief, to promote solidarity and co-operation between engineers in civil and military life, to disseminate technical knowledge bearing upon progress in the art of war and the
application of engineering science thereto, and to preserve and maintain the best standards and traditions of the profession, all in the interests of patriotism and national security.”

As we close in our second century, let us not waver from this founding purpose, which endures because it serves both our core American and professional values.

A LOOK BACK: PATRIOTISM AND THE VITAL ROLE OF ENGINEERS
SAME was born amidst the unprecedented turmoil and violence of the Great War. The stage for world war had been set during the previous 70 years: global population growth and redistribution; technological advances; industrialization-driven demands for raw materials, energy, labor and new markets; the emergence of new nations; the growth of military forces; and demands for independence from colonial rule and better living standards fueled tensions around the globe.

The tentative peace in Europe that Germany had been able to broker among the entanglement of alliances was shattered and the world was plunged into an unforeseen and protracted war of attrition in which over 8 million people perished.

The Treaty of Versailles, signed June 28, 1919, had a profound impact on Europe, the Middle East, and the world at large. It ended three powerful monarchies (Germany, Russia and Austria-Hungary); created nine new nation states in Europe; and divided the Ottoman Empire between the French and British.

The United States emerged from its pre-war isolationist policy as a new world leader. But around the globe, lingering disputes, mass unemployment, bitter ideological differences, fanatical nationalism, and the threat of communism created international tensions that were the seeds of future conflicts—conflicts in which engineers would play indispensable roles.

SAME’s role during those early years was truly built on patriotism and the recognition that not only were engineers vital on the modern battlefield and in unprecedented numbers, but the ability of the nation to bring the entire engineering profession to the fight was imperative. We were created to foster collaboration between engineers in military and civil life. Though the overriding purpose then was to ensure readiness to fight and win wars, our purpose has evolved to take on broader meaning since. The next century promises even greater opportunities for SAME’s service by bringing the power of our profession to the security of our nation.

A LOOK FORWARD: COLLABORATION, POSTS AND MEMBER DIVERSITY
We have three unending strengths that define our uniqueness: leading collaboration, building trust through our Posts, and the diversity of our membership. Collaboration is essential today to solve any infrastructure-related challenge facing our nation’s security both in war and peace. And from the very beginning, we recognized the power of building relationships at the local level; Posts remain a core SAME strength.

There are several forces that drive the need for SAME’s leadership. Foremost, the nature of conflicts in which our nation finds itself today demands the ability to project and sustain power from home bases on short notice. Implied in that is the requirement to project power in multiple directions simultaneously. The mission readiness of military installations necessitates not only uninterrupted operational ability, but a close relationship with local civilian communities to ensure this worldwide capability. The same logic applies to outposts and joint bases that exist in over 100 countries around the world where our military is forward deployed. Further, the need for civilian engineers and contractors on the battlefield has only grown over the last century, underscoring the increased need to bring the private sector perspective to the table.

The unpredictable nature of domestic and international threats today—from conventional to terrorist—dramatically reduces political and military decision-cycles. There is no time to mobilize the industrial base or our citizenry. We face threats...
daily: from cyberattacks on energy and banking systems, to terrorist bombings in crowded venues, to military actions across the entire spectrum of warfare. These uncertainties also redefine the nature and training of our military forces and the support they require.

Across the profession, our growing body of knowledge and the unprecedented power of computing technology have given rise to several other challenges that call for collaboration. Overspecialization has fragmented traditional disciplines in some cases to the point of inaction. Externally, challenges by the information technology sector to professional licensure and certification threaten to replace traditional engineering judgment with “big box” solutions to meet owners’ needs. These issues affect the readiness of our forces and the power projection platforms from which they deploy. So, even the very nature of our profession is under attack.

In the next century, we face many other pressures that will require collaboration: aging infrastructure; competition for resources; population growth; climate change and other human and natural impacts on the environment; the need for more sustainable engineering solutions and new materials; the shortage of skilled construction artisans and the demise of shop class and vocational technical schools; requirements for smarter lifecycle management of physical assets; political division and mistrust; globalization of businesses; and the impact on financial resources to support public infrastructure, especially water systems and navigation. All of these challenges, and many more connected to them, impact national security.

SAME’s second enduring strength is our Posts. In 2015, we adopted an overarching goal when we developed the 2020 SAME Strategic Plan by establishing that we are “One Society of vibrant Posts that are relevant locally while contributing to a common national direction.” Really, it was a re-affirmation of our beginnings. The essence of local Posts is building trusting relationships upon which collaborative solutions are built. A passage from the July–August 1920 TME says it best: “Posts will furnish the medium for personal contact and association between our members, without which our Society cannot be a virile, living organization.”

We have all experienced the need to call upon a friend or family member. And when the occasion arises to do so, we generally call upon the person we trust most to reliably and willingly help. So it is with our Posts; they remain our foundation for building trust.

In the decades since 1920, SAME has become a richly diverse organization of individual members and Sustaining Members. Our individual members represent every discipline within engineering and many fields from outside the profession. Our individual members often keep their memberships for life. Most members will attest to the fact that it is a diversity of interests that fuels SAME’s ability to help solve all types of challenges: whether technical, organizational, even personal. They
will also tell you that it is diversity that makes SAME a fulfilling and fun organization to belong to. Our Sustaining Members offer essential expertise that our military and public engineers need to accomplish their mission, in both peace and war. To all our Sustaining Members, you truly make SAME the unique organization that it is. Your active participation at the local, regional, and national levels builds the relationships for which we have become known. As a result, SAME provides the most ethical platform for collaboration between industry and all levels of government. The value and lasting impact then, is that SAME has all of the right ingredients and strengths to lead collaboration and solve the challenges of our time.

We all may come from different backgrounds and have different roles on this collective team, but what unites us is that we all care about the same values: the strength of our national security and the health of our profession.

**TO 2020 AND BEYOND**

The Run to 2020 and Beyond is a three-year journey, having started in May 2018, peaking with our Centennial Kick-Off Celebration at the 2020 JETC in Washington, D.C. (May 27–29, 2020), and culminating after a year-long series of Post celebrations at the 2021 JETC in Portland, Ore. (May 19–21, 2021). The next three years will provide tremendous avenues to become an active participant in the important work of this Society as we set the course for our next century of service. Now is the time to find your place in the unique and critical role that SAME fulfills.

In closing, the selfless willingness to serve our nation and our profession 100 years ago echoes in the sentiments of today’s young Americans. In the last nearly 20 years of war, thousands have given their lives and thousands more crippled for life.

When asked why they were choosing to serve during a time of war, most simply said: “My country needs me now.”

Our country and our profession need us now—SAME is answering their call.

---

**STRICT DIRECTION TOWARDS OUR CENTENNIAL**

Since the adoption of the 2020 SAME Strategic Plan in 2015, we have embarked on leading collaboration to help resolve tough challenges. The most exciting result of our impact is the evolution of our strategic direction, with five lines of effort materializing that demonstrate SAME’s suitability to continue to lead efforts to address the infrastructure-related challenges facing America. Their importance will surely be influential in the development of the 2025 SAME Strategic Plan, which the National Board of Direction has just recently begun.

**Enhancing Industry-Government Engagement.** This line of effort is the bedrock upon which SAME was formed. Our Industry-Government Engagement Program has produced tangible results at the national and Post levels. Notably, our efforts to bring the engineering services together with partners such as the Lean Construction Institute, Associated General Contractors of America, Construction Management Association of America, and Design-Build Institute of America, alongside several Sustaining Member firms, has produced a model that is already proving itself to be of benefit to our military and public engineers. As one example, our Credentialing Committee has led an effort the last few years that contributed to the military services’ work to transform their construction trade-related training curricula to mirror the skills required for private sector certification. The Military ENGAGEMENT PROGRAM that will commence in May 2019. Our Camps Program, Committees & Councils, and board positions nationally and locally are just a few of the many leadership development opportunities that exist in SAME.

**Developing Leaders for the Nation.** Developing leaders who can lead collaboration on the basis of trust will be key in our next century. The SAME Foundation, started in 2016, established its compelling purpose to be “fostering engineering leadership for the nation.” In a relatively short time, it has supported many leadership development efforts and of special note, has underwritten the development of a national Leadership Development Program that will commence in May 2019. Our Camps Program, Committees and Councils, and board positions nationally and locally are just a few of the leadership development opportunities that exist in SAME.

**Producing STEM Professionals for the Nation.** The worldwide shortage of STEM professionals is a serious issue, with demands only exacerbated by our aging infrastructure at the same time other nations are investing heavily in theirs. Another challenge is to ensure that we break the cyclic nature of our capacity. It was not that long ago when in the late 1980s many potential STEM professionals turned away because of the shortage of related jobs. We need to maintain the pipeline, not just fill it in the short term.

**Preparing Veterans for the A/E/C Industry.** The last 20 years of war have produced a generation of warriors who, like their counterparts during the major conflicts before, deserve our support. As one example, our Credentialing Committee has led an effort the last few years that contributed to the military services’ work to transform their construction trade-related training curricula to mirror the skills required for private sector certification. We are now expanding that effort to support military and civilian members who are not engineers.

**Strengthening the Resilience of our Communities.** The challenges of the 21st Century require new thinking: innovative materials and techniques; bold leadership; better lifecycle management; and a keen ability to plan for and operate in an environment of uncertainty, such as consideration of emerging trends like mega regions. The population surge of the industrial age led to the growth of cities. How will we cope with the exponential growth of the world’s population (which has doubled in just the last 70 years) against a backdrop of greater natural disaster events? These challenges will directly impact national security for decades to come and can only be solved collaboratively.

---

Brig. Gen. Joseph Schroedel, P.E., FSAME, USA (Ret.), is Executive Director, SAME; jschroedel@same.org.

---