The *Air Force Civil Engineer* Magazine Turns Fifty!

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The year 2010 marks a milestone for Air Force Civil Engineers. Fifty years ago, the first issue of the *Air Force Civil Engineer* (*AFCE*) magazine was published and quickly became a mainstay of Civil Engineering professional development, crosstalk, and career-field pride. One of the Air Force's oldest publications of its kind, the *Air Force Civil Engineer* magazine has been an integral part of Civil Engineering's history, reflecting the changing face of the career field.

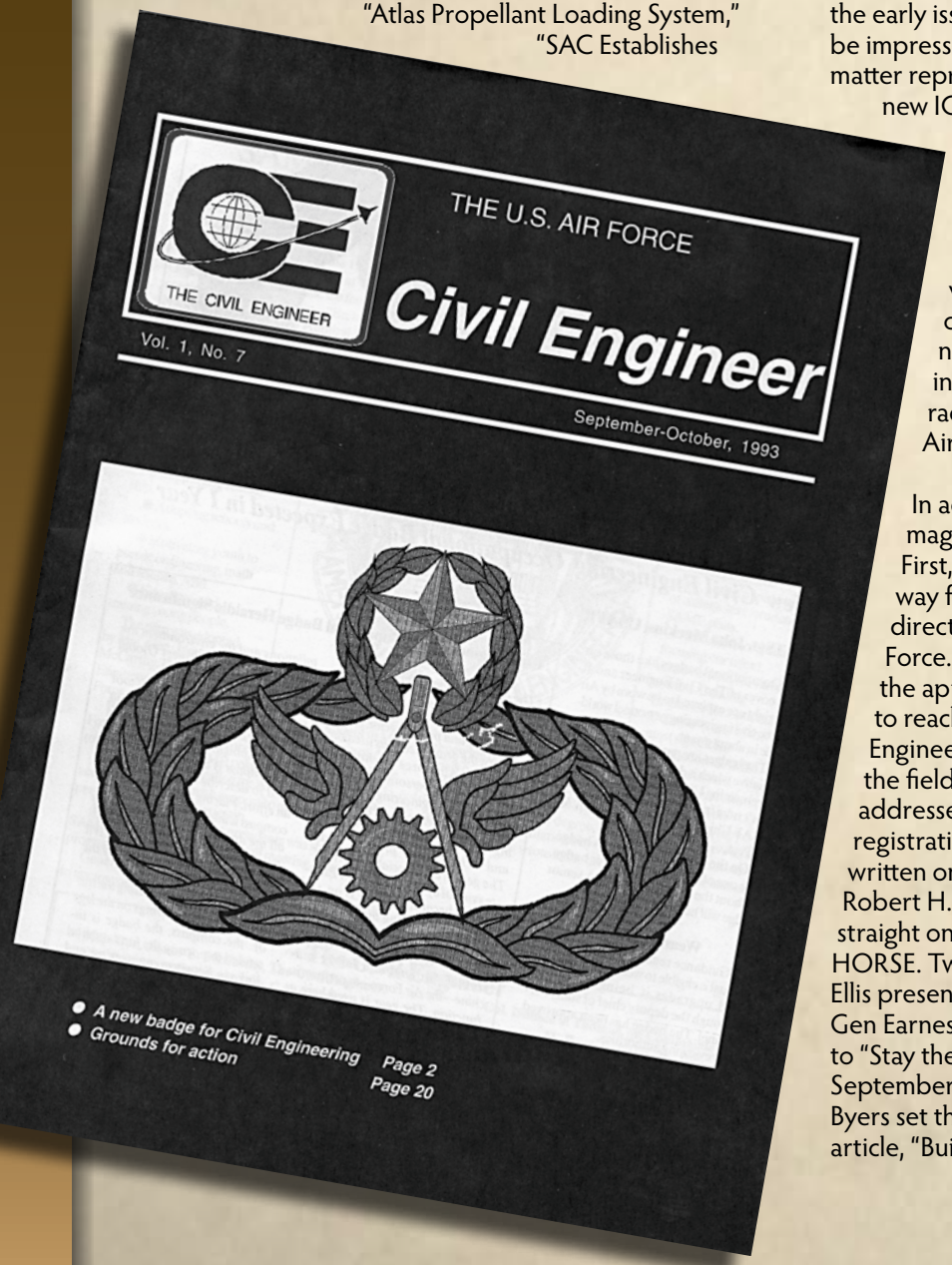
The publication has a fascinating history, with its origins closely tied to a major change in Civil Engineering and a significant push for professionalism. The person most responsible for the *AFCE* magazine is the late Maj Gen Augustus M. Minton, the director of Air Force Civil Engineering from 1957 to 1963. In the late 1950s, the people responsible for the operation and maintenance of Air Force bases were known as Installation Engineers, and had a reputation of being "handymen" rather than engineering professionals. Maj Gen Minton set out to change that mindset. In 1958, he asked the major commands "to undertake and pursue an active plan to have our eligible engineers become registered as Professional Engineers and affiliated with professional societies." Later that year, he asked Col Clarence A. "Bud" Eckert, director of the Installations Engineer School at Wright-Patterson AFB, Ohio, to brief on professionalism at the Worldwide Installations Engineer conference. A key part of his proposal was to establish a journal that would tie together the entire impetus for professionalism. Throughout 1959, Maj Gen Minton and Col Eckert worked to gain approval for the new publication, which was given in September 1959.

The Installations Engineer School was given responsibility for the professional development program and the fledgling journal. The career field had a small newsletter called "*The Beacon*," with limited distribution and scope. Col Eckert proposed eliminating *The Beacon* and replacing it with the new publication—the *Air Force Civil Engineer* magazine.

The first issue was published in February 1960 with an initial distribution

of 5,000 copies of the 32-page journal to the 100,700-person career field, which had been renamed as Civil Engineering just a few months earlier. It was introduced by a letter from Air Force Chief of Staff Gen Thomas D. White that appeared on page two. He wrote, "Air Force Civil Engineers have played a most important role in the growth of the Air Force. . . . I am confident that in the future your professional knowledge and abilities will continue the fine tradition of success already established." This sentiment was echoed in Maj Gen Minton's accompanying letter: "The purpose of the *Air Force Civil Engineer* is to provide a medium of exchange of professional ideas and information which will result in a more effective civil engineering function in the Air Force."

The cover of Volume 1, Number 1 reflected the theme of professionalism, with large "AF" letters surrounded by a dozen emblems from various professional engineering organizations. It featured articles on topics such as "Atlas Propellant Loading System," "SAC Establishes Protective Construction Branch," and "New Cost Accounting System for Civil Engineering." Of course, it also included an article on how to become professionally registered, book reviews, and even a "PE Exam Corner" that challenged the readers to solve an engineering problem similar to one found on the exam itself. The first issue also introduced the new insignia for Air Force Civil Engineering, which was used until the 1990s.



The *Air Force Civil Engineer* magazine was an immediate hit throughout the Air Force. Numerous "Letters to the Editor" from the Secretary of the Air Force down to all levels of the Air Force commented on the publication's quality and value. They also began an ongoing, professional dialogue on various topics proposed in articles, making the publication a true marketplace of ideas.

The publication was everything Maj Gen Minton had in mind — it exemplied professionalism. Reading through the early issues of the magazine, one cannot help but be impressed with the breadth and depth of subject matter represented in the articles. In the 1960s, the new ICBM program ushered in a revolutionary change in the career field. At a time when Air Force engineers were searching for increased respect and acknowledgment of their professionalism, their work on the ICBM project was a turning point in how the Air Force viewed its civil engineers; they were considered co-equal with the weapon system designers. This new-found respect — and pride — was evident in the articles that described work on Alaskan radar stations, rocket testing, and the Sundance Air Force Station nuclear power plant.

In addition to promoting professionalism, the magazine has also served three other purposes. First, the magazine has been the most effective way for Civil Engineering leaders to communicate directly with their colleagues throughout the Air Force. Because of the wide-spread distribution and the appealing format, the magazine has a potential to reach a large readership. Since the first issue, Civil Engineering leaders have written personal messages to the field on chosen topics. Maj Gen Minton's first letter addressed the topic of — you guessed it — professional registration and continuing education. Others have written on equally important topics. In 1966, Maj Gen Robert H. Curtin used his column to set the record straight on the difference between Prime BEEF and RED HORSE. Twenty years later, Maj Gen George E. "Jud" Ellis presented his famous "Nine Commandments." Maj Gen Earnest O. Robbins, II, encouraged civil engineers to "Stay the Course" following the catastrophic events of September 11, 2001. More recently, Maj Gen Timothy A. Byers set the tone for his tenure as The Civil Engineer in his article, "Build to Last … Lead the Change."

The General Minton Award

As part of the drive for excellence and professionalism, the Air Force Association began sponsoring a "Best Author Award" for contributors to the *Air Force Civil Engineer* magazine. Mr. A. H. Zonars won the first award in 1960 for his article "Sonic Boom," which addressed base civil engineers' responsibilities when citizens claimed damages resulting from sonic booms. The next year, Col Samuel Young won the award for the article, "NORAD COC—Our Modern Malta," which covered the design and construction of the NORAD facility in Cheyenne Mountain, Colo. In 1974, Maj Gen M.R. Reilly, Director of Civil Engineering, approved renaming the award in honor of Maj Gen Augustus M. Minton. The 2009 General A. M. Minton Award winner was 1Lt Christopher Smith for his article, "Facilities Engineering on the Front Line."

Second, cross-talk among engineers has also been an important byproduct of the *Air Force Civil Engineer* magazine. Authoring an article in the magazine has always been the best method to quickly get a new idea or innovation out to the career field. Thousands of copies go to every active duty, Reserve, and Guard civil engineer unit in the Air Force. Copies are also sent to engineers at Air War College, joint commands, or other non-traditional assignments; these engineers comment that the magazine is the best way they have to keep in contact with events, changes, and trends in the career field. Many senior officers can point to an article they wrote for the magazine as an important part of their career progression and professional development: Found in the pages of the magazines are articles written by Capt Jud Ellis, Capt Joseph A. "Bud" Ahearn, Maj James E. McCarthy, and Capt L. Dean Fox.

Finally, the magazine has served as a source of esprit de corps and pride for engineers. Readers were able to vicariously experience building Tuy Hoa AB in Vietnam, constructing facilities in South Korea in 1968 in response to the seizure of the USS Pueblo, managing the Israeli Air Base program in the 1980s, and providing humanitarian support to thousands of Kurds during Operation Provide Comfort. They have shared in the pride of promotions and awards earned by their colleagues. Sadly, they have also shared in the grief experienced by family and friends of fellow engineers killed in the line of action.

The magazine is a point-in-time snapshot of the career field for five decades. Just viewing the covers is a walk through the history of Civil Engineering, the Air Force, the U.S. military, and sometimes even the world. A 1961 cover depicted a Titan ICBM site under construction; a 1962 cover included a photograph of the newly constructed Berlin Wall; an issue from 1966 showed a Prime BEEF team laying aluminum matting at Tan Son Nhut AB, Vietnam. A 1975 magazine was dedicated to the "Energy Crisis and the Air Force," while a subsequent issue answered the question, "Why Engineering and Services?" In the 1980s, an issue heralded that "E&S Enters the Computer Age," while another cover highlighted "Survivability," reflecting the move to construct hardened aircraft shelters. The 1990s were ushered in with covers on the Gulf War, Air Expeditionary Force, and RED HORSE in Somalia. More recently, Iraq and Afghanistan have dominated the covers.

During the past 50 years, the *Air Force Civil Engineer* magazine has featured groundbreaking articles that made history and changed the face of the career field. Here are just a few examples.

Prime BEEF Introduced

The November 1964 issue introduced the Prime Base Engineer Emergency Force program and changed how engineers respond to contingencies and natural disasters. Authored by Lt Col William T. Meredith, who had been intimately involved in the Civil Engineering, Manpower, and Organization Study Group to evaluate how engineers respond to emergencies, the article explained how and why the program was developed. Readers throughout the Air Force learned about the four different types of Prime BEEF teams and how the military career structure had been completely revised.

RED HORSE

In 1966, the Air Force learned about a second important contingency capability for civil engineers. "Project RED HORSE" described the activation, training, and deployment of two new squadrons: the 554th and 555th Civil Engineering Squadrons (Heavy Repair). It clarified the new units' mission and how they complemented, not replaced, Prime BEEF teams. Air Force Civil Engineers now had two new symbols — a bull and horse — to represent their new contingency capability.

Engineering and Services

In 1975, the Civil Engineering and Services functions combined and an article explained this change to the two career fields. Mr. Gary Vest and Mr. Lester Henriksen explained that the consolidation was designed to "provide, through a single manager, improved customer services and the livability at Air Force Bases…. Underlying the concept is the strong belief that Air Force national defense responsibilities can be better achieved by improving the

residential and community environment of air bases." This article is indicative of the importance of the family under the all-volunteer force established in 1973.

Renewed Emphasis on Readiness

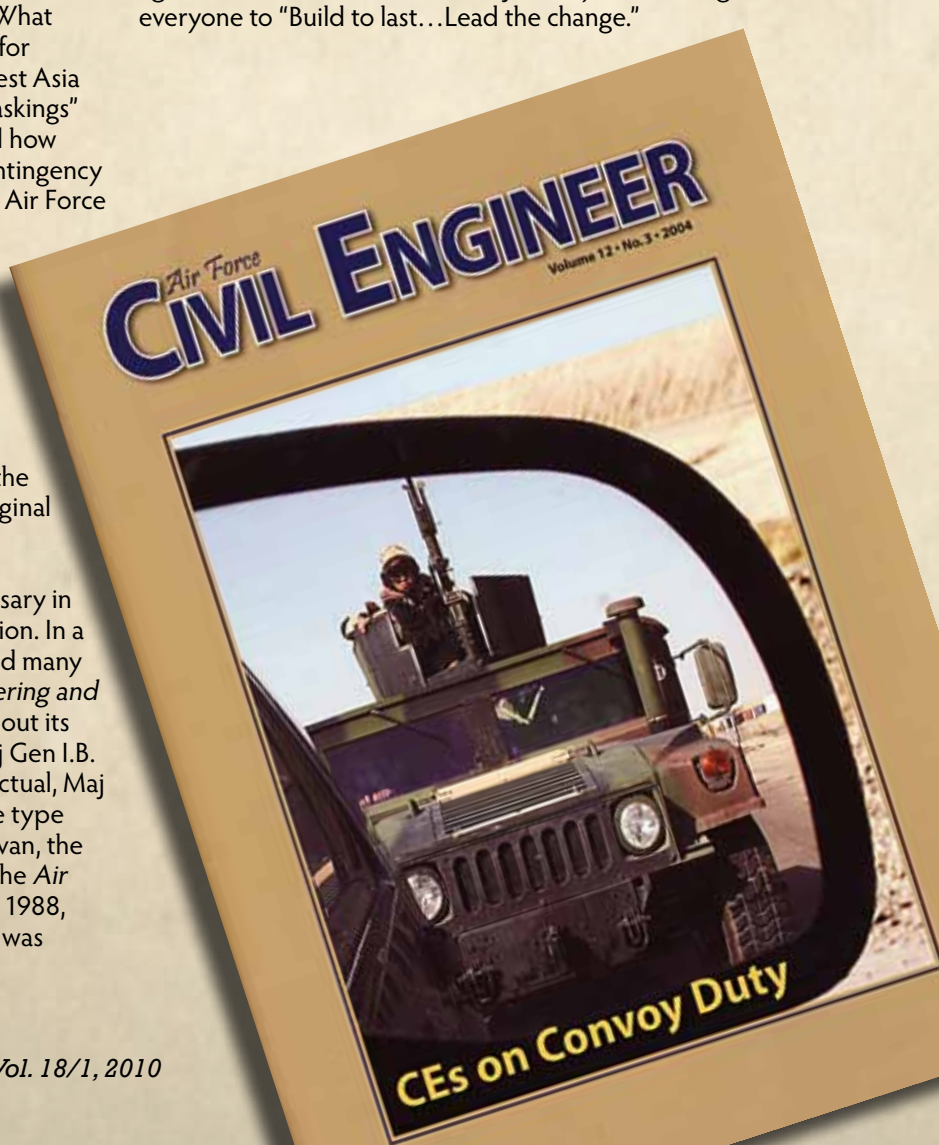
In an article from 1985, Col Harry W. Glaze challenged civil engineers to reject the "Keep Off the Grass" mentality that had developed through years of focus on customer service and quality of life; instead, readiness should once again be their number one mission. This article summarized what he described as a Readiness Renaissance within Engineering and Services led by Maj Gen Clifton D. "Duke" Wright and his deputy and later successor, Maj Gen Ellis. Wrote Col Glaze, "If there is one thing you take from this article, let it be this: Readiness is not a piece of our business; it is our business! I challenge you to step on the grass!" The aphorism, "Keep off the grass," is still used by engineers to challenge the status quo.

Battlefield Airmen

In 2004, Lt Col Jeffery Vinger's article, "Airmen-Soldiers in Iraq," described a revolutionary change for engineers. In Iraq, his unit, the 732nd Expeditionary Civil Engineer Squadron, had been working "outside the wire" and embedded with Army units providing their expertise as engineers, craftsmen, surveyors, and firefighters. What he described in this article soon became a reality for thousands of engineers who deployed to Southwest Asia under "In Lieu Of" or later "Joint Expeditionary Taskings" for the next several years. Lt Col Vinger described how history had changed from the Army providing contingency support to the Air Force in the Korean War to the Air Force returning the favor to its sister service in Iraq.

The magazine has experienced a number of name changes over the years, reflecting similar changes in the Air Force and Civil Engineering. Over the years it has been known as the *Air Force Civil Engineer* magazine, the *Air Force Civil Engineer Journal*, the *Engineering and Services Quarterly*, the *Engineering and Services Update*, the *CE Update*, and *The CE*; in 2001 it regained its original title, *Air Force Civil Engineer* magazine.

While the magazine is celebrating its 50th anniversary in 2010, it has not been an easy ride for the publication. In a 1986 cost-cutting exercise, the Air Force eliminated many of its recurring publications, including the *Engineering and Services Quarterly*, which left the career field without its own publication. Supported and prodded by Maj Gen I.B. Holley, a renowned Air Force historian and intellectual, Maj Gen Ahearn made it a priority to reestablish some type of publication for civil engineering. Mr. Perry Sullivan, the *Quarterly*'s editor, began editing and publishing the *Air Force Engineering and Services Update* in August 1988, a photocopied, desktop publication. The *Update* was produced until 1992, gradually improving in appearance and quality of articles. In 1992, it regained the name, *Air Force Civil Engineer*, and began being published in more of a magazine-style format. In 1995, the first color edition was printed, intended as a one-time feature to cover the Readiness Challenge competition. But, the response was so overwhelming that all issues since then have been printed in color.

The Air Force Institute of Technology was home to the editorial office for the magazine until 1979, when it moved to the new Air Force Engineering and Services Center (now AFCESA) at Tyndall AFB, Fla., where it continues today. The office's location enables the staff to stay in day-to-day contact with personnel working major issues for the career field.

Mark Twain has been quoted as saying, "History does not repeat itself, but it does rhyme." This may be one of those times as this magazine reaches its half-century mark. Much about the Air Force and Civil Engineering has changed since 1960. However, pursuing professionalism, stressing technical proficiency, offering unflagging dedication to the Air Force mission, and taking pride in a job well done never go out of fashion. These were found in the pages of the first issue of the *Air Force Civil Engineer* magazine 50 years ago and are still embodied in Maj Gen Byers' challenge for everyone to "Build to last…Lead the change."