



1964  
TO  
2014

FIFTY YEARS of

Fifty years ago, Air Force civil engineering became a full partner in providing direct combat support for the Air Force. In a 12-month period between 1964 and 1965, both the Prime BEEF and RED HORSE programs were established, significantly changing civil engineering by giving engineers a wartime/contingency mission.

Prime BEEF was established in October 1964. This special section of CE Magazine honors Prime BEEF Airmen, and a future issue will do the same for RED HORSE.

Since their first deployments in 1965, Prime BEEF members have carried on the tradition of excellence set by their predecessors and have been a part of every major conflict or contingency. Join us in celebrating their achievements.

# PRIME BEEF Strikes Gold

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This year the Air Force celebrates the 50th anniversary of Prime BEEF—1964 to 2014.

It was a different world in 1964: The Beatles first appeared on the Ed Sullivan Show; the first Ford Mustang was produced; Dr. Martin Luther King, Jr. was awarded the Nobel Peace Prize; and children everywhere were trying to pronounce Mary Poppins' "supercalifragilisticexpialidocious." For Air Force civil engineers, 1964 marked the birthday of Prime BEEF and a historic turning point for civil engineers' ability to support the Air Force's wartime mission.

## Setting the Stage

The story of Prime BEEF's origins actually goes back to World War II. During that conflict, the Army Air Forces was supported by specially organized, trained and equipped Aviation Engineers. These units served around the world building and repairing air bases outside the continental United States. Numbering about 117,000, they performed some amazing feats in providing basing from Alaska to Australia, Guam to Germany, and Italy to India. When the Air Force was created as a separate service in 1947, its leaders proposed moving the Aviation Engineers to the new service. However, it was decided that the Army would retain control and support the Air Force during wartime. By 1956, everyone agreed that arrangement was not working, and the Air Force was left without a reliable wartime basing capability.

In 1957, Department of Defense Directive 1315.6 gave the Air Force responsibility for developing and maintaining a capability for the emergency repair of bomb-damaged air bases, but they had to do it with existing manpower resources. While Air Force leaders were determining how best to develop this capability, a series of international crises erupted that demonstrated the continued problems

the Air Force faced in deploying and bedding down its units.

In 1958, President Dwight D. Eisenhower ordered forces to the area in and around Lebanon to quell unrest in that country. Things did not go smoothly and engineers within the U.S. Air Forces in Europe command began developing a new mobile team concept to support future deployments. They did not have long to wait.

In 1961, the Soviet Union began constructing a wall separating East and West Berlin. America responded with a



Col. William T. Meredith, the driving force behind the Prime BEEF program. (U.S. Air Force photo)



significant deployment of aircraft and people to Europe to prepare for the incoming units, and USAFE called upon its new Civil Engineer Mobile Teams. Brig. Gen. Oran O. Price was USAFE's deputy chief of staff for Civil Engineering, and monitored the teams' progress and lessons learned.

During the 1962 Cuban Missile Crisis, Air Force units deployed to southern Florida and Tactical Air Command assembled a team of in-house personnel and equipment to open Opalocka Naval Air Station near Miami. It was described as a "pick-up" game with little advanced planning. This experience was viewed up close by Civil Engineering leaders such as then Brig. Gen. Robert H. Curtin and Lt. Col. William T. Meredith on the Air Staff, who recognized that something had to be done.

## Creating the Concept

In December 1963, Curtin established the Civil Engineering Manpower Study Group to "determine the distribution, alignment, reliability, credibility, and skills required in the Civil Engineering Manpower resource to perform essential Civil Engineer functions in support of the Air Force mission." Also involved in the group was Price, who had moved from USAFE to the Air Staff in 1963 to serve as deputy director.

In addition to the readiness issues, Curtin was concerned about a movement in Congress to contract or civilianize the nearly 50,000 military positions in Civil Engineering squadrons. He wanted to make sure that those Airmen had a wartime mission. Thus, the study group conducted what could be described as the first "Blue-Suit Review" of the career field. The study group combined the issues into one question: "Is the present Civil Engineer Force properly aligned and is the distribution of this resource adequate to perform the essential real property facility functions in support of the Air Force mission today and tomorrow?"



Members of Prime BEEF Team X cut lumber for the construction of barracks at Nha Trang AB, Vietnam. (U.S. Air Force photo)

The study group, working with Personnel representatives, spent months doing a thorough quantitative and qualitative review of virtually every military position in Civil Engineering. The study group analyzed and evaluated the requirements and resources at each base to identify the number of people and the right skill mix to meet various contingency missions. It was a lengthy and detailed process to go base-by-base and skill-by-skill to determine the correct skill mix.

Meredith, who eventually retired from the Air Force as a brigadier general, was the chairman of the study group and the driving force behind the effort. He was well-versed on the issues because he had written his 1961 Air War College paper on a related topic: "What Are the Quantitative and Qualitative Professional Civil Engineer Requirements of the USAF Through 1970." He and his team sat for days poring over manning documents to work the quantitative details of the program.

As part of the qualitative phase, the study group also did a top-to-bottom review of the entire career structure to ensure civil engineers would have the necessary skills to fulfill their new roles under Prime BEEF. As the group examined the enlisted career fields, they noted that several specialties were "dead-end" career fields with little possibility of rising above the 5-level. The members revised the career structure to establish four basic career areas and 21 career ladders that would all lead to 9-level superintendent positions. Much of the study group's final report was a description of the duties, responsibilities and qualifications of each Air Force specialty within Civil Engineering. Military personnel were directed to focus on improving their skills needed for direct combat support.



Members of Prime BEEF Team XII construct revetment for F-4C aircraft at Da Nang AB, Vietnam. (U.S. Air Force photo)



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Based on Price's guidance, the study group adopted the mobile team concept from USAFE. They proposed four types of mobile teams: BEEF-R, Recovery Team; BEEF-C, Contingency Team; BEEF-F, Flyaway Team; and BEEF-M, Missile Team.

## First Prime BEEF Teams

The Recovery Team was formed from military personnel stationed at each CONUS and overseas base. Recovery Teams ensured base maintenance and operations during, and immediately following, an attack, major emergency or natural disaster. Recovery teams implemented the base disaster recovery plan and provided essential services. Recovery teams, working in two shifts, were responsible for maintaining base operations for up to 36 hours.

Mobility combat support was provided by the other three teams. The Contingency Team was created to handle unanticipated exigencies and special wartime air operations to support Air Force missions worldwide. Contingency Teams were not assigned to specific air units. Flyaway Teams were attached to flying units, typically TAC or Military Air Transport Service and were responsible for supporting those units. Members of the Contingency and Flyaway teams deployed rapidly. As a result, the teams maintained ready kits that included tools, suitable clothing and personal records. The Missile Team was created to offer support to the missile maintenance organization, particularly in projects exceeding daily missile upkeep. The Missile Team also provided depot level support for real property.

This new program needed a name. Meredith recalled that story, "I said to General Price, 'We've got to come up with a name for this thing.' He said, 'I've been thinking about it.' And he's the man who named Prime BEEF. He said, 'Prime BEEF.' I said, 'Tell me what it stands for.' He said, 'Prime, meaning the first force, prima. And BEEF — base engineer emergency force.' And that's where it stuck."

To adequately prepare the entire Civil Engineering military force with this new concept, a new training program was developed that included revised job training standards and revamped training courses at all technical training centers.

Meredith also had to travel throughout the Air Force to "sell" the concept. He and then Col. Jeanne Holm (the first woman appointed as brigadier general in the Air Force) teamed up to explain this new program to the Air Force and Congress. The recommendations in "Project Prime BEEF" were accepted and implemented in October 1964. Over the next few months, the Air Staff's Prime BEEF team visited each major command to assist in the program's implementation, which was projected to take approximately four years. However, world events forced an expedited schedule.

## Proving the Prime BEEF Concept

In spring of 1965, the Dominican Republic was experiencing political unrest and President Lyndon Johnson sent 20,000 U.S. troops to intervene in the civil strife. Included in that group was the first-ever Prime BEEF team to deploy. On May 1, 1965, a nine-person team from Myrtle Beach, S.C., traveled to Santo Domingo to establish an



A Prime BEEF Airman, second from right, and several Seabees discuss plans to repair the bomb-damaged runway at an Iraqi airfield during Operation PROVIDE COMFORT, 1991. (U.S. Air Force photo)



A Prime BEEF engineer stencils an early rendition of the Prime BEEF Bull on the side of a photo lab constructed by his team. (U.S. Air Force photo)

expeditionary camp for the airlift fleet. The team was augmented with an additional 25 personnel a few weeks later. Three additional Prime BEEF teams on 60-day rotations supported the mission until February 1966.

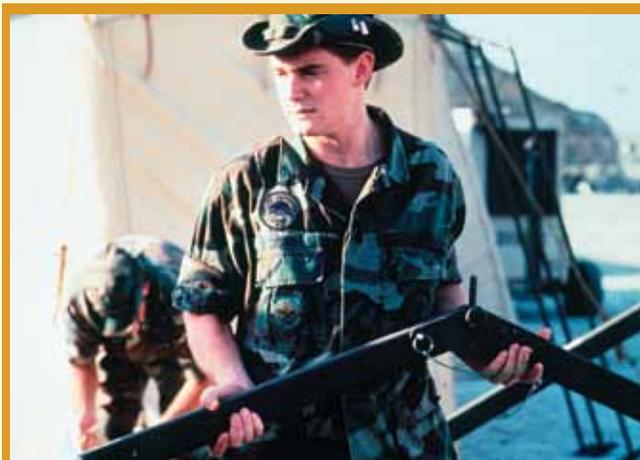
At the same time, the American military presence in Vietnam was growing and bases were becoming overcrowded. On May 16, 1965, an explosion at the congested Bien Hoa Air Base in Vietnam killed and injured more than 100 Airmen and damaged dozens of aircraft sitting unprotected on an open ramp. The call went out for additional engineers to construct aircraft revetments at the bases. In August, three Prime BEEF teams from multiple commands quickly assembled for a 120-day deployment to Vietnam. The engineers constructed 12,000 linear feet of the new ARMCO revetment at Bien Hoa, Da Nang and Tan Son Nhut Air Bases to protect the vulnerable aircraft. The high quality and quantity of their work led Air Force leaders in Southeast Asia to request additional Prime BEEF teams to assist the over-tasked base civil engineers who were there on one-year tours. Between August 1965 and July 1966, a total of 25 Prime BEEF teams deployed to Southeast Asia to perform a variety of engineering work from designing water distribution systems to building maintenance facilities or barracks nicknamed "hootches."

By 1966, the Prime BEEF program was well established in the Air Force because of the thorough and farsighted plan set out by the Civil Engineering Manpower Study Group and the success of the early teams.

Along with wartime deployments, Prime BEEF teams also responded to natural disasters. In September 1965, Hurricane Betsy struck south Florida, causing major damage to Homestead AFB. Roofs on 150 facilities were destroyed, airfield lighting was damaged, overhead power distribution systems were downed and liquid fuel lines and pump stations were damaged. Within 36 hours, 91 Prime BEEF carpenter, electrical, liquid fuel, sheet metal and airfield lighting technicians were on site to assist base civil engineers. Power was completely restored in two days and roofless buildings were secured within three days. In August 1967, 152 Prime BEEF personnel from 23 bases responded to severe flooding in the Fairbanks, Alaska area, including Eielson AFB. These are just two early examples of the natural disaster recovery role Prime BEEF teams have fulfilled.

Over the past 50 years, Prime BEEF Airmen have been part of every major contingency, including Vietnam, Korea, Operation DESERT STORM, Operation PROVIDE COMFORT, Bosnia, Kosovo, Operation ENDURING FREEDOM, and Operation IRAQI FREEDOM. Each one is a separate story in and of itself, many of which have been told in previous history articles in this publication and are included in the new book, *Leading the Way: The History of Air Force Civil Engineers*, which will be distributed in November.

From an idea incubated in Europe and shaped around a Pentagon conference table to a mature worldwide contingency capability, Prime BEEF has become an iconic symbol of Air Force Civil Engineering's dedication to the mission, and synonymous with engineering excellence.



A Prime BEEF engineer helps construct a TEMPER Tent at a Gulf War site in 1990. Dozens of Prime BEEF teams deployed in support of Operation DESERT SHIELD. (U.S. Air Force photo)