

# TME

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# REMARKS

## from the President

### Let's Say Yes to Making a Difference

First and foremost, I want to thank everyone for entrusting me the opportunity to lead this great Society. From Virlon Suits, my boss at Chanhute AFB back in 1983 who took me to my first SAME meeting at the Illini Post, to *you*, our members, who have given me your vote of confidence—thank you. My personal goal as President is to use everything I have learned from so many people to help SAME move forward toward our next century of service. We have created a strong momentum to build upon and I am truly honored to have this chance of a lifetime.

I especially want to thank Tony Leketa, Gary Engle, John Mogge and Bob Wolff for their friendship and partnership over these last few years as we transitioned the leadership model of the Society and built a national leadership team. That transition is now complete. We are moving forward!

To all of those who dedicated so much time and engagement as President of SAME while serving as an Engineering Chief of one of our uniformed services, my heartfelt admiration and deepest thanks. Our Society thrived for 92 years under your selfless leadership. Our challenge today is to establish the same record for another century of service. To our present day Engineering Chiefs, thanks for your support in the face of present-day challenges. I appreciated the dialogue at the recent Uniformed Services Advisory Group meeting where we agreed to focus more deliberately on specific topics and challenges that the services and other federal partners need support in solving. From contracting to credentialing to energy assurance and much more, SAME's role remains integrating every aspect of the A/E/C industry and this profession to help solve these challenges and enhance our national security.

Lastly, I want to thank our industry and professional partners for your loyalty and support. We all recognize the unique role of SAME in the service of our nation and our profession—to have your support in good times and bad speaks volumes about your dedication. We have some Sustaining Member companies that have supported this organization for decades. That is incredible dedication and we thank you.

### BUILDING ON OUR MOMENTUM

As we go forward, I would ask everyone to get involved as we conduct a deliberate review of the SAME *Strategic Plan* for the next five years (2015-2020). We began our review with a bottom-up (Post level) assessment of Focus Areas back in February at the Post Leaders Workshop. At the recent Board of Direction meeting in Houston, we launched a concerted effort to assess every aspect of our plan over the next four months. The board is heavily engaged and the effort is being coordinated by SAME HQ. This is exciting effort. Everyone's input is welcome!

As we reviewed our Focus Areas back in February, it was clear to me we have some great momentum going on STEM and Support to Veterans. These are important to the mission of this organization and to our country. We will continue them as Focus Areas. We decided, however, that a focus on Inclusion would be a natural step to take beyond last year's emphasis on Relevance. In order to build a truly cohesive *Strategic Plan* and make these three Focus Areas a reality—STEM Outreach, Support to Veterans, and Inclusion—let me offer three simple guidelines that I believe will make anything we set out to do possible:

- **SAY YES.** We are all busy; it is easy to say no, but by saying YES, we reap untold rewards.
- **INVITE OTHERS.** We can change someone's life by example—and often unknowingly—by inviting them to come along.
- **HAVE FUN.** It is hard work, but always make it FUN!

I will adhere to these guidelines and ask that each of you to do the same as we have fun working together to make a difference.



# Facilities, Infrastructure and Theater Security Cooperation Planning

The service delivery model established by U.S. Special Operations Command South over the last decade offers an adoptable approach for other commands providing similar services in their areas of responsibility.

By Lt. Col. Kyle M. Merolla, P.E., USA, and Col. William F. Lyons Jr., P.E., AICP, ENV SP, M.SAME, USAR

More than a decade of war has provided ample time for combatant commanders and sub-unified commands to test various service delivery models for expeditionary facilities and infrastructure development. Much of the focus has been on the U.S. Central Command area of responsibility, given the immense needs for facilities and infrastructure in Afghanistan and Iraq.

However, much work has been performed at a smaller scale in U.S. Southern Command over this same period to support theater security cooperation initiatives in Central and South America.

The service delivery model pioneered by U.S. Special Operations Command South (SOCSOUTH) over the last decade can help other commands provide similar services in their areas of responsibility.

## A PERSISTENT PRESENCE

For SOCSOUTH, theater security cooperation plans have included a robust persistent presence component. This aspect of the plan is based on routine rotations of special operations forces to host nations to engage in various military-to-military training and cooperation activities.

Generally, these engagements were planned around a U.S. Army Special Operations Detachment Alpha, a team from a Naval Special Warfare Group, or



Theater security cooperation plans for U.S. Special Operations Command South have included a robust persistent presence component. This aspect of the plan is based on routine rotations of Special Operations Forces to host nations to engage in various military-to-military training and cooperation activities. Above, a meeting area on a Special Operations Forces sub-installation in Poptun, Guatemala. PHOTOS COURTESY SOCSOUTH

a civil affairs team. On some occasions, planning centered on a theater-wide skills competition, in which case the projects were planned within the auspices of Exercise Related Construction. Typically, the proposed basing plan is predicated on housing the team on a host nation military installation, in a building owned by the host nation, or in a new building purpose built for Special Operations Forces personnel. The intent is for the team to live and train with its host nation counterpart.

In SOCSOUTH's model, facilities planning for the deployment of a special warfare team begins with development of a Pre-Deployment Site Survey (PDSS). As the staff and the team begin to plan a PDSS, the command engineer identifies the personnel resources necessary to accompany the survey to investigate the housing facilities

proposed for occupation. In addition, the command engineer representative will evaluate the training facilities necessary to support the team's rotation. This includes firing ranges, live fire shoot houses, rappel towers, boat ramps and docks.

## ASSESSMENT AND MITIGATION

The primary purpose of having a representative of the command engineer's office attend the site visit is to conduct a complete evaluation of the facilities in order to determine the suitability of the proposed housing and operations building from a life safety and health perspective.

The evaluation starts with a Threat and Vulnerability Assessment based on the design criteria development process specified in UFC 4-020-01, *DOD Security Engineering Facilities Planning Manual*.



During Exercise Fused Response 2012, U.S. Forces designed a training range at Camp Stephenson, Guyana.

Inputs for the evaluation include a review of threats from foreign intelligence, terrorism and crime as well as natural threats such as vector borne illnesses, flooding, seismic conditions and extreme weather.

Once the threats have been identified, the physical condition of the building is assessed. Deficiencies in the condition of the building that would affect the health and safety of the team are identified and mitigation plans are developed to manage the risks posed by the deficiencies.

Typical mitigation measures include the installation of window screens to prevent vector borne disease; upgrades to electrical systems to prevent hazards due to inadequate grounding and overloaded circuits; repairs to domestic water and wastewater systems; and the installation of fencing and other Anti-Terrorism/Force Protection measures. Often these improvements are contracted based on a bill of materials. Sometimes, more detailed construction contract documents are required. The intent is to make impactful changes before the team occupies the house.

### STAFFING LEVELS AND TROOP LABOR

Staffing is substantially less at SOCSOUTH than it is at other theater special operations commands, due to the

lower profile nature of the theater. The command engineer section is rarely larger than three personnel. The demands on the staff's time include military construction projects and sustainment, restoration and maintenance projects, on top of the requirements for expeditionary facilities. This situation often renders the command engineer's office unable to send a representative on the PDSS. When this happens, the command engineer works through the Mobile District of the U.S. Army Corps of Engineers (USACE) to negotiate the services of an architect-engineer firm to provide the facility engineering services necessary for the PDSS.

Once the PDSS is complete, the architect-engineer firm prepares a statement of work, rough-order-of-magnitude cost estimates, and conceptual mitigation plans to be further developed and implemented before the team deploys. If possible, a simple bill of materials is developed and the improvements are implemented quickly.

When the mitigation measures are sufficiently complex that additional design is required, the command engineer works with USACE to further develop the mitigation plans through the architect-engineer firm. Typically, a set of design-build criterion drawings and specifications is

developed for a multiple award task order contract. On rare occasions, full design-bid-build plans are developed, as might be required when new construction is the recommended course of action.

On some occasions, it is advantageous for the command to use troop labor to construct projects using the bill of materials. Troop labor includes host nation forces as well as U.S. Forces, typically Seabees from the Navy Reserve. Troop labor is typically more cost effective and has the added benefit of building capacity with the host nation forces and improving readiness for our reserve forces.

This model for expeditionary project development and construction has been exceptionally helpful for Exercise Related Construction. The scope of these projects often includes a wide range of construction elements with complex details. Using an architect-engineer firm to develop a bill of materials for construction by host nation troop labor allows for expert design assistance with the additional benefits of capacity building.

### A MODEL TO FOLLOW

Theater security cooperation planning for SOCSOUTH has required new models for the design and construction of facilities and infrastructure in a timely manner.

The utilization of staff augmentation for design and construction has played a key role in the delivery of these essential services throughout the area of responsibility. Architect-engineer firms and contractors have provided the foundation for a very successful program, while the use of host nation and reserve component troop labor has played a critical capacity building role.

The teamwork of the entire spectrum of uniformed, civilian and host nation personnel has allowed SOCSOUTH to succeed in its expeditionary facilities mission during the long war. And the model provides an adoptable approach for providing similar services in the area of responsibility of every theater special operations command.

TIME

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# Putting Safety First

Best management practices in conducting Type II Independent External Peer Reviews are available that can help the U.S. Army Corps of Engineers optimize project delivery while still ensuring the safety of the community comes first.

By Heidi Wilbarger, PG, PMP, M.S.A.M.E.

After Hurricane Katrina's devastation of New Orleans, the U.S. Army Corps of Engineers (USACE) enhanced an already extensive review strategy. The process, as outlined in a series of engineering circulars (most recently Engineering Circular 1165-2-214), is a comprehensive, life-cycle review strategy for Civil Works projects that includes guidance for implementing Sections 2034 and 2035 of the *Water Resource Development Act of 2007*.

The approach provides a seamless process for project reviews—from initial planning through design and construction, then operation, maintenance, repair, replacement and rehabilitation.

Independent External Peer Reviews (IEPRs) are an integral component of the process. IEPRs are required on all projects considered to involve a "significant risk" to human life if they should fail. IEPRs are high-level, strategic reviews that are conducted by independent experts.

There are two types of IEPRs: Type I and Type II. The main difference is that Type I reviews are conducted on decision documents, whereas Type IIs are conducted on implementation documents.

Having conducted Type II IEPRs at 17 sites across the country, KSWA has extensive insight into how to prioritize the safety of the community while also optimizing value for project owner. There are numerous best management practices that fulfill the intent of USACE guidance



Fuse gates under construction in the auxiliary spillway of Canton Dam, Okla. PHOTOS BY HEIDI WILBARGER

while providing the agency with the best return on taxpayer investment.

For starters, given that all projects are not created equal, a full-scale Type II IEPR is not always appropriate for each project.

## TIMING IS EVERYTHING

USACE should give consideration to when an IEPR will be most beneficial. The earlier in the project design-procurement-build cycle that district personnel receive IEPR feedback, the more valuable that review will be.

There are several questions that should be asked in order to optimize the review. If a construction review is planned, at what point does it make the most sense for the particular experts involved to review the project? Is it most effective for structural and geotechnical engineers to review at the exact same point in construction? Or, should reviews be staggered so that different experts are reviewing the construction phase at more optimum points?

Appropriate timing also can apply to contracting for the review itself. Careful planning can mean cost savings.

At Canton Dam in northwest Oklahoma, a complex safety project required an IEPR of two different phases of design and multiple construction phases. The work involved

a fuse-gated spillway and excavation of a large soil plug. Overall, USACE Tulsa District required four expert reviewers. But, instead of having all four expert reviewers reviewing each phase, the district planned out which phases should be reviewed by which disciplines. And, it planned for five phases of review in one task order.

Early planning of all phases of review and negotiating all phases as one task order means that USACE does not have to repeat a costly negotiation process multiple times.

## STATEMENT OF WORK

Included in the engineering circular guidance is a general statement of work that many USACE districts adopt verbatim, regardless of size or technical complexity of a project. It is broad and involves numerous elements. These include a work plan; IEPR team assembly; preparation of the critical items list; orientation briefing; bi-weekly updates; design review; construction review(s); operation, maintenance, repair, replacement and rehabilitation reviews; interim reports after each review; and a final report at conclusion of IEPR process.

If a project only entails raising the height of a levee, including all of these elements is going to cause sticker shock. Cost is proportional to statement of work. A