TEXAS ARMY NATIONAL GUARD SECRETARY OF THE ARMY ENVIRONMENTAL AWARDS FY10 CULTURAL RESOURCES MANAGEMENT—INDIVIDUAL

SUMMARY: As the Texas Army National Guard's (TXARNG) architectural historian and cultural resources specialist, Chantal McKenzie has been integral to making the TXARNG cultural resources management (CRM) program one of the premier environmental programs in the region. Over the past year, Chantal has overseen several major projects critical to the TXARNG training mission; among other efforts, she has obtained clearances for a number of large-scale construction projects, supervised rehabilitations on three historic buildings, and initiated efforts to combine historic building preservation with sustainable, LEED-certified renovation. In every aspect of her work, McKenzie strives to incorporate historic and cultural preservation with mission sensitivity. Her successes in finding this balance allow for both uninterrupted TXARNG training and constantly improvement in the incorporation of environmental compliance and sustainability in every component of the TXARNG's operations.



Chantal McKenzie, left, works closely with both the TXARNG Cultural Resources Manager and the rest of the environmental staff to fully integrate with all areas of environmental compliance in every project. She also recently achieved her LEED Green Associate accreditation, making her the only staff member in the TXARNG facilities section with this certification.

McKenzie takes a rigorous, hands-on approach to program management that blends project oversight, interoffice coordination, cross-trained capabilities, strong communication, and an attention to cost savings. In addition to the projects mentioned above, her recent program milestones include assistance with a successful grant project to install solar panels, supervision of a historic landscape study and evaluation report, and completion of extensive permitting and clearance documentation for both historic building rehabilitations and new construction.

McKenzie's work is critical to ensuring that the TXARNG's historic districts remain functional and

available for mission training and support. Her efforts with compliance and mitigation as well as her attention to the many details of restoration and rehabilitation have made the TXARNG a leader in the state and the region for excellence in cultural resource preservation. Furthermore, her projects directly support the achieving the current needs of the modern TXARNG without sacrificing its rich cultural heritage.

In addition, McKenzie assisted a TXARNG sustainability manager this year to develop a Department of Defense-wide recruiting video produced by high school and college students interested in filmmaking. The video focused on history and sustainability and ways of bringing the interests of historic preservation together with the need for minimizing energy costs and maximizing resource sustainability.

TEXAS ARMY NATIONAL GUARD SECRETARY OF THE ARMY ENVIRONMENTAL AWARDS FY10 CULTURAL RESOURCES MANAGEMENT—INDIVIDUAL

ABSTRACT

As the Texas Army National Guard's (TXARNG) architectural historian and cultural resources specialist, Chantal McKenzie has been integral to making the TXARNG cultural resources management (CRM) program one of the premier environmental programs in the region. Over the past year, Chantal has overseen several major projects critical to the TXARNG training mission; among other efforts, she has obtained clearances for a number of large-scale construction projects, supervised rehabilitations on three historic buildings, and initiated efforts to combine historic building preservation with sustainable, LEED-certified renovation. In every aspect of her work, McKenzie strives to incorporate historic and cultural preservation with mission sensitivity. Her successes in finding this balance allow for both uninterrupted TXARNG training and constantly improvement in the incorporation of environmental compliance and sustainability in every component of the TXARNG's operations.

ACCOMPLISHMENTS

PROGRAM MANAGEMENT: McKenzie takes a rigorous, hands-on approach to program management that blends project oversight, inter-office coordination, crosstrained capabilities, strong communication, and an attention to cost savings. In addition to the projects mentioned above, her recent program milestones include assistance with a successful grant project to install solar panels, supervision of a historic landscape study and evaluation report, and completion of extensive permitting and clearance documentation for both historic building rehabilitations and new construction. Other elements of her program management include:

- McKenzie works closely with both the TXARNG Cultural Resources Manager and the rest of the environmental staff to fully integrate with all areas of environmental compliance in every project. She is also certified in incident preparedness, wildland firefighting, and historic property management, and she recently achieved her LEED Green Associate accreditation, making her the only staff member in the TXARNG facilities section with this certification. These cross-functional capabilities allow her to wear many hats and provide wide-ranging support in many areas of environmental management. She is also extensively involved in training and environmental recommendations and has taken on the Training Event Record of Environmental Consideration (TEREC) review process.
- McKenzie also works closely with construction project managers, the Facilities
 Management Office (FMO), and trainers to align mission needs with cultural
 resource compliance. She is involved in every aspect of these projects, from initial
 planning through implementation, and is actively working with the FMO to integrate
 LEED building performance improvements with historic preservation requirements,
 recognizing that this cohesion represents the future of cultural resources

- management and installation sustainability. Through her proactive coordination, McKenzie is helping to change the TXARNG institutional structure to fully incorporate cultural resource management into all its best practices and operations.
- McKenzie is currently assisting with the five-year revision of the TXARNG's ICRMP. She also contributes to the plan's annual updates.
- Cultural resources compliance is a major consideration for the TXARNG. The fact that the historic TXARNG headquarters at Camp Mabry is designated a state archeological landmark (SAL), requires rigorous permitting and documentation procedures with the Texas Historical Commission (SHPO) for every project that could impact historic sites or structures; these requirements go above and beyond standard Section 106 compliance, and the SHPO has the final say for project approval. At a minimum, every project involving historic building exteriors requires at least consultation, and usually the full permitting process is mandated. The permitting process allows a 30-day review cycle by the state SHPO reviewer after a permit application is submitted, and if there are any problems, the application must be resubmitted; the turnaround time for this aspect of compliance has the potential to cause major project delays. McKenzie regularly coordinates with the SHPO to ensure that all permitting and documentation procedures are followed to the letter in order to avoid costly delays or permit denials.
- McKenzie's compliance consultation represents an indirect cost savings, in terms of time and resources, but she is also committed to leveraging budget resources and seeking out new funding sources. McKenzie proposed an alternate site for installation of a solar panel project to ensure that there would be no delay in historic coordination as this was a stimulus grant project that required rapid execution. She identified an appropriate site for installation and obtained the necessary cultural resources clearances. The grant was approved and the solar panels are under construction in an area that does not negatively impact the historic district. This year she also worked with contractors who developed a feasibility study for a historic building to determine the most cost-effective option between demolition, rehabilitation, and rehabilitation with new construction. Her research and oversight provided good guidance for the contractors to prepare a balanced document that demonstrated pursuing rehabilitation would not only serve historic preservation, but also ultimately save the TXARNG money over the other options.

TECHNICAL MERIT: Over the past year, McKenzie has overseen large-scale rehabilitation projects of historic buildings and associated archaeological resources as well as cultural resource surveys and evaluations.

Historic Buildings and Structures: In addition to completing the rigorous compliance processes detailed above, McKenzie has assisted with oversight on the rehabilitation of Buildings 10, 11, and 14, all historic buildings in the historic district at the TXARNG's Austin headquarters. In total, the district includes 45 contributing elements that are deemed historically significant. She has been central to the selection of the projects architects, the design phase, review of construction documents, and oversight of day-to-day progress. Her participation as part of the project management team resulted in historically sensitive rehabilitation in conjunction with dramatic modernization of building features and systems.

Buildings 10 and 11: Buildings 10 and 11 were barracks built in 1918 to house men being trained as auto mechanics for the WWI war effort; the buildings later became administration space. Though they have undergone significant change over the past 90 years, they remain contributing elements to the historic district and required special consideration as they were modernized.

- The buildings are being rehabilitated to support modern needs for human resources, state medical records, and G6 Army offices. The interiors are being completely renovated to accomplish both mission needs and expose historic elements like pine floors and beadboard ceilings that had been previously covered. Dropped ceilings have been removed and covered columns re-exposed.
- All windows are being reconditioned and resealed and original openings, like windows that were converted to doors, are being restored. The exterior masonry is also being repointed or repaired.
- Two later additions, one constructed between the two buildings and one on the north end of Building 11 have been removed. There is an ongoing restoration of an original Works Progress Administration walkway arcade and courtyard area connecting the two buildings. The removal of the addition revealed original brickwork that is also undergoing repair and restoration to bring the building exteriors fully back to their original appearance.
- Brickwork repair is being completed using a historic mortar mix to ensure matching between original and repaired sections.
- The entire construction team for the rehabilitation, from the architects to the masons, was selected for their experience with historic buildings, thereby minimizing the risk of improper repairs or inadvertent damage to historic features.
- An efficient HVAC system is being installed that will automatically control different regions of the buildings, turning temperatures up or down according to section occupancy as determined by sensors that detect body heat.
- The renovation also features installation of glass transoms in offices that are historically accurate and allow for more natural light, minimizing the need for electric lights. Elevators are also being installed to accommodate people with disabilities.
- To protect the buildings from future damage, an original design flaw that allowed water to pool around the buildings' bases is also being corrected through a stormwater management plan.

Building 14: Building 14 is adjacent to Buildings 10 and 11. Its current rehabilitation involves the reconstruction of an original porch that was removed years ago and conversion of a parking lot back to its original green space. Further interior rehabilitation is also anticipated, and McKenzie is helping coordinate a maintenance and treatment plan for that effort now.

Building 24: As part of a previous demolition project mitigation, the TXARNG was instructed to maintain Building 24 as a contributing element of the historic district. When rehabilitation design planning began, however, there was concern that the building was too deteriorated to make rehabilitation worthwhile, and demolition was proposed as an alternative. McKenzie worked with the SHPO to determine the best steps for action. As a result, a feasibility study for the structure was completed that demonstrated rehabilitation would be more cost-efficient than either demolition or temporary construction, as well as culturally beneficial. The project is moving forward with the

feasibility study and McKenzie's recommendations from a professional perspective to be utilized in decision making by command group.

Galveston Armory: McKenzie was called on to avert a potential public relations crisis this year at the historic Galveston Armory after it was damaged in a hurricane. One tenant in the armory was the local humane society, which resisted leaving the armory despite the damage, and the local media was closely following the story. McKenzie traveled immediately to do an evaluation of the building's historic status and what would be required for repair. Her next-day briefing to the FMO allowed the TXARNG to support its restoration effort for the site and negotiate a resolution with the humane society without detrimental media coverage.

Other Historic Buildings: McKenzie also manages historic structures on other TXARNG training sites, including Camp Mabry, where all buildings 50 years of age or older have been surveyed and evaluated. At Camp Swift in Bastrop, Texas, she supervises the preservation of a historic wine cellar and dam, among other features, and is managing the repair of an historic gate at Camp Maxey in Paris, Texas that may have been built by Native American masons. McKenzie also assisted with a recent large Phase 1 rehabilitation of the historic Texas Military Forces Museum at Camp Mabry, which provided the facility with better climate controlled systems for its archives, among other improvements.

Landscape Evaluation: Though most cultural resources programs consider the preservation of historic buildings, many overlook historic landscape features. To best restore and improve TXARNG historic districts, a landscape evaluation and historic landscape study was completed that considers the spatial organization, vegetation, and viewshed of historic areas. McKenzie reviewed the contractor's work and ensured the final product met the needs of TXARNG. This effort was partially initiated to support a correlative natural resource vegetation plan; until the historic landscape was considered, an appropriate vegetation plan could not be implemented. Working with the natural resources program manager, McKenzie reviewed the survey and report. The historic character described in the landscape report can now be used as a guide for future construction or rehabilitation and natural resource initiatives, all of which helps to ensure that the historic district remains protected and functional for the TXARNG mission.

Archeological Resources and Curation: McKenzie is primarily an architectural historian, but she does assist the TXARNG Cultural Resource Manager as well, particularly with preserving historic cemeteries at Camp Swift and Camp Maxey. She has also obtained basic level wildfire firefighter certification in case her skills are needed in helping protect archaeological sites within prescribed burn or training burn areas.

In the process of rehabilitating Buildings 10 and 11, several artifacts have been uncovered and removed. The items uncovered in that project were of fairly minor significance; they will likely be kept on display in public spaces of the restored buildings or used in public outreach events or exhibits in the Texas Military Forces Museum. She has also shared a number of old photos, plans, and documents (many of which were collected in surveys or through permitting processes) with the Museum, which now has climate controlled space and an archivist on staff.

ORIENTATION TO MISSION: As described above, McKenzie's work is critical to ensuring that the TXARNG's historic districts remain functional and available for mission training and support. Her efforts with compliance and mitigation as well as her attention to the many details of restoration and rehabilitation have made the TXARNG a leader in the state and the region for excellence in cultural resource preservation. Furthermore, her projects directly support the achieving the current needs of the modern TXARNG without sacrificing its rich cultural heritage.

In addition, McKenzie assisted a TXARNG sustainability manager this year to develop a Department of Defense-wide recruiting video produced by high school and college students interested in filmmaking. The video focused on history and sustainability and ways of bringing the interests of historic preservation together with the need for minimizing energy costs and maximizing resource sustainability. Now she is working on an internal training video for the TXARNG that explains the processes for historic building management and approaches to extending building lifecycles as part of larger sustainable practices. The video will enhance understanding of how historical preservation is part of good stewardship and stress the combination of preservation with LEED certification as the future of the field. McKenzie's video is slated to be the first module of a new series of environmental training videos for the TXARNG.

TRANSFERABILITY: In addition to her role in creating the DoD recruiting video, McKenzie is also part of a DoD task force for creating interior design guides for historic properties. The goal is to create army-wide—guidelines for treating, surveying, and rehabilitating historic interiors and provide a template or tool for all cultural resources programs to assist them through the associated legal processes. Guard units in other states have also begun to call on McKenzie's expertise. She has assisted the New Jersey Army National Guard on a cultural project with advice on handling conflicting communications with cultural resources regulators and the Indiana Army National Guard on a project restoring historic garage doors and flood protection. Her goal in this support is to help other state Guards find ways to achieve their goals even if they don't have a historic architect on staff.

Within the TXARNG, McKenzie has also made significant progress in ensuring program continuity. As previously mentioned, she has been reviewing TERECs to constantly improve upon environmental training practices. She has also contributed to the TXARNG environmental records system, which allows for project tracking, review, and facilitation. She manages GIS records for cultural resources and maintains an MSAccess database of all architectural and archaeological sites, documentation, and GIS maps, easily searchable and available for any current or new staff seeking information. In this way, she has helped to guarantee that the success of her program and practices will be consistent regardless of any future staffing changes.

COMMUNITY INTERACTION: McKenzie is committed to community outreach and education. Her efforts in this area range from Native American consultation to university partnerships to participation in environmental events for area schoolchildren.

Native American Consultation: McKenzie supports tribal consultation; though most tribes are not especially interested in the TXARNG's historic buildings, McKenzie does work with them on the historical aspects of Native Americans within the TXARNG. She assisted with an exhibit featuring the contributions and history of the Native American codetalkers of WWI. As part of a Legacy grant proposal submitted this year, McKenzie is also working to develop a training video for TXARNG contractors that would teach them about best practices in working on buildings, training sites, and construction projects with a sensitivity and awareness of the needs to Native American cultural resource protection and preservation.

University Partnerships: McKenzie supported an architectural graduate student intern from the University of Texas at Austin, providing a mentoring opportunity for three months. The university partnership is mutually beneficial, providing the TXARNG with needed research and the intern with hands-on experience. This fall, McKenzie will be conducting a tour of Camp Mabry for the historic preservation graduate students at the University of Texas at Austin. McKenzie will also be working with a professor at the university to develop case study projects for students involving an historic totem pole and two historic buildings. Students will consider rehabilitation options, alternatives, and courses of action on how to handle cultural artifacts like totem poles, which according to cultural norms are supposed to disintegrate, but are often considered too valuable to lose. The historic buildings will serve as opportunities to perform historic preservation assessments and to document best practices to preserve these buildings.

Community Outreach and Education: McKenzie takes part in many public awareness and outreach events. She managed an annual weekend-long event for University of Texas alumni involving presentations and lectures on the cultural resources of the TXARNG. She has also conducted numerous visits and lectures for local Austin groups, historical societies, fraternities, and more to share the history of the Texas Military Forces and its role in the greater Austin community. She frequently provides tours, especially during Archaeology Month, for visitors and groups from the Rotary Club of Austin, the University of Texas Exchange Club, the Sigma Chi alumni group, and many more. As previously mentioned, she also participated in the project for high school and college students interested in video and film production.

At Camp Mabry, where a closed post has impacted the community's understanding and awareness of the TXARNG, McKenzie takes part in the American Heroes celebration, an annual weekend-long event for the community that honors the soldiers and first responders in the TXARNG in order to foster community positivity and support. She has also assisted with cultural resources activities within the TXARNG at the Camp Swift Octoberfest event. McKenzie's dedication to outreach at these and other events have helped to establish the TXARNG as a champion of Texas heritage for countless families around the state.