

THE SOCIETY OF AMERICAN MILITARY ENGINEERS

ARCHITECTURAL PRACTICE COMMITTEE

QUARTERLY JOURNAL

AN INTERVIEW WITH 2017 USACE ARCHITECT OF THE YEAR:

MICKELA PALLARES

INTERVIEWED BY DAVID PACKARD, R.A., PMP, FSAME

The U.S. Army Corps of Engineers recognizes the contributions of Architects, Interior Designers, and Landscape Architects annually. Mickela Pallares, R.A., LEED AP BD+C, GPCP, Sacramento District, is the 2017 recipient of the Corps' prestigious Architect of the Year. I've asked Mickela to give us a little insight into her life in USACE. The award is significant as the evaluation factors include Performance and Recognition including awards, performance ratings, positions held, and honors received in the last three years; Specific Contributions defining excellence, continuing education efforts, partnering experience, and service to the customer; Leadership in career development of others; and Professional Contributions to respective professions within and outside USACE including membership and participation in professional societies, teaching, publication writing, and guest speaking. Please enjoy Mickela's responses from the heart – David Packard



Mickela Pallares,
 USACE, Sacramento District

DP: You've been an architect with the Sacramento District since 2009. Did you choose USACE or did USACE choose you?

USACE chose me. I graduated from Cal Poly, San Luis Obispo, in June of 2009, right when the economy started to fall. When I started college, 90-something% of graduates had jobs lined up by the time they graduated. When I graduated, it was under 10%. I was one of the few lucky ones.

When the architecture career fair rolled around in February 2009, I interviewed with every company that was holding interviews, including USACE. I honestly had no idea why an engineering company would be recruiting at an architecture career fair, especially one that was somehow related to the military (I had no idea who USACE was). Like everyone else, I was interested in the firms with name recognition. But I signed up for an interview with USACE anyway. The interview was

really short – the interviewer was asking me questions about the projects in my portfolio, and my responses were limited to the amount of time it took for him to flip the page. I thought I had done terribly. But two months later, I got a call with a job offer! And given the state of the economy, I quickly accepted. Both of my parents had worked for government agencies, so I wasn't opposed to working for the Corps – it just wasn't my first

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WELCOME LETTER



Robert "Brandon" Tobias
SAME APC Army Liaison
USACE HQ

I hope this issue of the SAME APC Quarterly Journal finds you in good health and enjoying friends and family during the holiday season. The end of the year always seems to be incredibly busy, but the APC appreciates you taking a few minutes to read up on the latest SAME news and events, and we hope you'll consider contributing in the future!

With a new year and new beginnings around the corner, I want to take this opportunity to challenge each of you to consider a different perspective about architecture as more than an occupation. Recently, I sat on a discussion panel for a leadership conference and one of the subjects we explored was the direction of the profession, to include its diversification through "non-traditional" architecture. This topic carries a lot of weight with me personally, as I have spent my entire career as a public architect, which is often viewed as non-traditional. Unfortunately, I think this mindset is an example of how we create artificial barriers that limit the impact of our social influence as architects.

It's becoming more common to hear about architecture graduates taking jobs with general contractors, consultants, game designers, real estate developers, etc. Likewise, it's becoming more common to hear "traditional architects" lament the loss of talented designers that have abandoned our noble profession. However, I ask, why does it have to be "either you're with us, or you're against us?" Why do we not see this as a way for architecture to expand its influence into new arenas and further diversity the profession?

I'm currently in grad school, working towards my Master's in Organizational Leadership. One of my professors got her undergraduate degree in architecture and worked in a firm doing traditional design before getting her MBA and then a Doctorate in Leadership Studies. During our class, she specifically used architecture as a way to describe leadership philosophies and to illustrate how the built environment can influence the success of an organization.

The newly appointed Assistant Secretary of Defense for Energy, Installations and Environment also has an undergraduate degree in Architecture from Notre Dame. Why on earth would we see these amazing accomplishments as a loss for the profession rather than an amazing achievement by our peers?

So my challenge is this – as the New Year approaches and we resolve to eat better, spend less money, or have a better work-life balance, also resolve to see "non-traditional architecture" as a positive term. The design and construction industry continues to evolve, and as architects we should be doing the same. Not only by ensuring architects broaden their skill sets within the profession, but also by broadening our sphere of influence outside the profession.

Robert "Brandon" Tobias, AIA, LEED AP BD+C

US Army Corps of Engineers – Headquarters

NEXT QUARTERLY CALL

The Architectural Practice Committee will host a quarterly conference call on **Wednesday, November 29, 2017 from 12:00 – 1:00 pm Eastern.**

Please join the meeting from your computer, tablet, or smartphone at <https://global.goto-meeting.com/join/333764853>. You can also dial in using your telephone at:

UNITED STATES (TOLL FREE): 1 (877) 309-2070
UNITED STATES: +1 (312) 757-3117
ACCESS CODE: 333-764-853

The agenda for the quarterly conference call includes an update on committee focus area initiatives, open discussion, and 1 AIA LU/HSW/SD credited presentation.

The AIA credited presentation will be given by **David Insigna, AIA** on one of the public agencies' best design quality programs titled **"General Services Administration – Design Excellence and Beyond"**.

The General Services Administration's (GSA) Design Excellence program was started by Ed Feiner. The program's goal was to attract top-quality design talent to produce top-quality architecture. The program includes a streamlined two-step architect/engineer selection process and uses private-sector peers to provide feedback to the architect/engineer of record. The program stresses creativity and has produced new facilities worth billions of dollars. Learn how the program has matured over the years - its successes and areas for learning. Learn how it has influenced other federal, state and local programs. Learn about its current programs and its goals for the future.

David Insigna joined the General Services Administration, Public Buildings Service in Washington, DC in 2007, and is currently the Director for the Design Excellence Program in the Office of the Chief Architect. Prior to assuming his current position, Mr. Insigna served as the Acting Assistant Commissioner for Project Delivery. His work focuses on the planning, design and construction of federal courthouses, land ports of entries, and federal office buildings. Recent work includes over \$5 billion of projects funded



David Insigna
Director for the Design Excellence Program in the Office
of the Chief Architect, GSA

through the American Recovery and Reinvestment Act (ARRA).

Prior to joining GSA, Mr. Insigna was a Program Manager at the Administrative Office of the United States Courts. He received his Bachelor of Architecture from Virginia Tech in 1981, and is a member of the American Institute of Architects. He has over 30 years' experience in both the private and government sectors. Before becoming part of the federal workforce in 2002, he worked as a Director at Gensler in their Washington, DC and Boston offices.

Learning Objectives include:

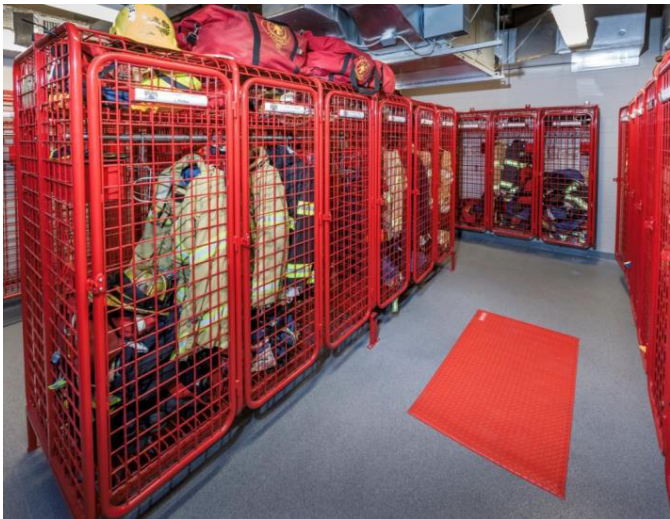
- » Learn about the history of the GSAs Design Excellence program.
- » Learn about the impact the GSA's Design Excellence program has had on the design standards and architecture of other public agencies.
- » Learn about the current programs that make-up GSA's programs.
- » Learn where GSA is going in the future.

LAST QUARTERLY CALL

The Architectural Practice Committee (APC), led by APC Chair Paula Loomis, and accompanied by APC Vice Chairs, hosted a quarterly conference call on Wednesday, August 30, 2017. Paula opened the call with comments and an AIA credited presentation was given by Paul R. Erickson, FAIA, Principal, Lemay Erickson Willcox Architects on emerging design philosophies for fire and rescue facilities titled “Next Steps in Implementing HOT ZONE Design”.

Mr. Erickson provided a detailed and riveting presentation on the challenges facing firefighters and those who design facilities for their use. His identification of risks centered on cancers that are the result of high exposure to carcinogens produced by fire and the hostile environment firefighters face. Today’s risks are compounded by the presence of substances that have only served to increase exposure to those carcinogens through absorption, respiration, and ingestion.

Paul shared infiltration studies which revealed areas of exposure where safety gear does not adequately protect fire and rescue personnel. Protec-



tion of the respiratory system is particularly challenging and includes not just the fireground, but fire stations, as well. Designs to mitigate exposure risks to diesel particulates and exhaust gas as well as protection from ingestion are critical to protection of employees.

Paul finished his presentation with a design case study of a facility by his firm. The full-service facility for Willingboro Fire and EMS Department

Photos courtesy of Lemay Erickson Willcox Architects

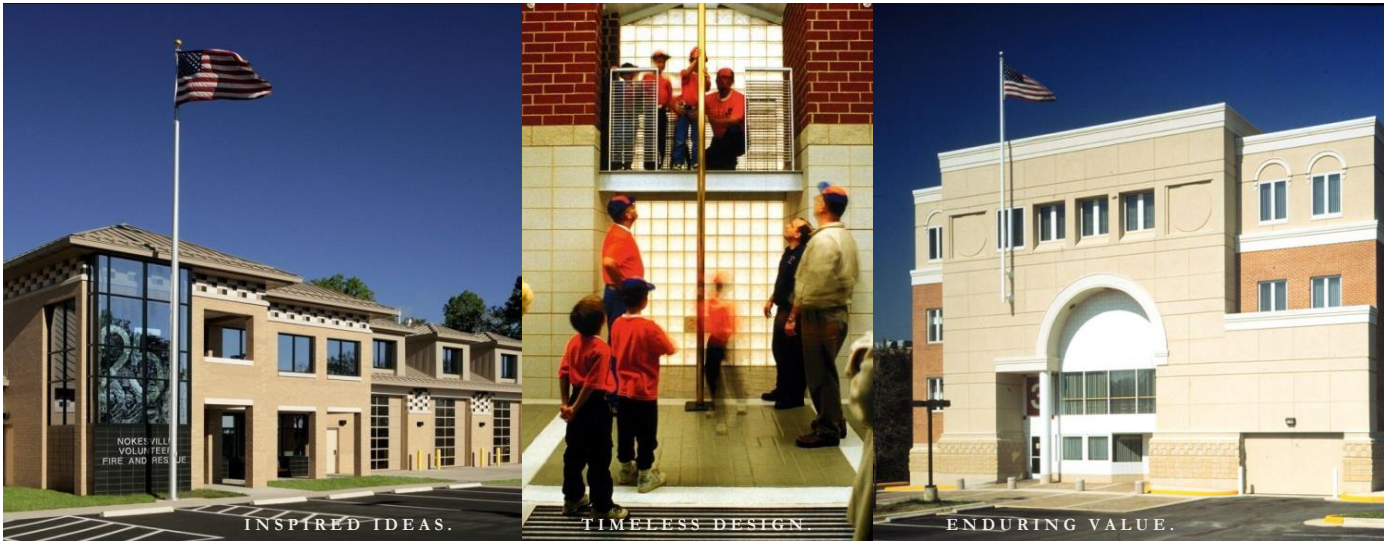


LAST QUARTERLY CALL

provides separate zones for Hot (space expose to carcinogens) and Cold (living/working spaces intended for extended occupancy) activities with a Transition Zone to allow safe movement between them. He shared Hot Zone implementation methods and informed us of unintended consequences that come about in the shared use of stations by non-firefighters. Paul closed his presentation with some suggested steps for renovation utilizing the

lessons-learned from his studies. This presentation is an extremely valuable resource for those designing similar facilities.

As in the past, slides for this presentation are available in the archives of the APC web page at <http://www.same.org/Architectural-Practice>.



UPCOMING EVENTS



SAME — IFMA
**FACILITIES
MANAGEMENT
WORKSHOP**

Feb. 7-9, 2018
San Antonio, Texas

MEMBER NEWS



Lt. Col. H. W. Hugh Darville
Deputy Commander,
U.S. Army Engineering
and Support Center, Huntsville

Congratulations to Lieutenant Colonel Hugh Darville on obtaining his architectural license this summer, as well as his new position as the deputy commander of the U.S. Army Engineering and Support Center, Huntsville.

The Huntsville Center executes more than 6,000 contracts valued at \$2.1 billion annually in engineering, construction and technical services in support of strategic national programs such the design and construction of worldwide chemical weapons demilitarization facilities, Army and Air Force installation facility repair and renewal construction, national energy savings programs, nationwide environmental and ordnance remediation programs, Army medical facilities design oversight, and overseas contingency operations.

Lt. Col. Darville joined Huntsville Center following assignments as director of the Directorate of Training and Leader Development, and director of the Department of Instruction at the U.S. Army Engineer School at Fort Leonard Wood, Missouri. In these roles, he oversaw curriculum development for Army Engineer courses, training strategies for operational Army Engineer units, and the execution of officer and warrant officer courses.

His previous assignments include commander, Syracuse Army Recruiting Battalion from July 2012 to July 2014; deputy commander, U.S. Army Corps of Engineers Baltimore District from January 2010 to June 2012, when the district’s 1,200 employees executed an annual program over \$2.4 billion, providing design, engineering, construction, environmental, contracting and real estate expertise to a variety of federal and local agencies in six states and the District of Columbia; and operations officer and executive officer for the 14th Combat Engineer Battalion, Fort Lewis, Washington, from 2007 to 2009, where he deployed from 2008 to 2009 as the battalion provided mission command to a multi-service force of 800 Army, Navy and Air Force engineers conducting full-spectrum operations across Iraq.

From 2004 to 2006, Lt. Col. Darville was the executive officer to the Director of Civil Works at Headquarters, U.S. Army Corps of Engineers, in Washington, D.C., the general officer responsible for the Corps’ \$5 billion annual Civil Works Program, and the Army’s engineering support in response to presidential declarations of emergency or disaster. He deployed to the Gulf Coast during the immediate recovery efforts following Hurricane Katrina and later served as the liaison between USACE and the City of New Orleans.

Lt. Col. Darville is a Distinguished Military Graduate of Texas A&M University where he received a Bachelor of Environmental Design, cum laude. He also holds a Master of Architecture with certificates in Historic Preservation and American Urbanism from the University of Virginia; and a Master of International and Strategic Defense Studies jointly conferred by the University of Milan and the Free International University of Social Studies (LUISS) “Guido Carli” in Rome, Italy. He is a registered architect in Louisiana and a certified construction manager. He is a member of American Institute of Architects, is past president of the Fort Leonard Wood Post of the Society of American Military Engineers, and past chair of the Baltimore Federal Executive Board.

COMMITTEE LIAISONS

The APC liaisons help coordinate architectural programs within their local SAME post as well as coordinate shared programs between SAME and local architectural organizations.

If you are interested in becoming a SAME Architectural Liaison, please contact Daphne for more information: gurrimatutepa@gmail.com

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COLLABORATION WITH AIA

BY VIRGIL CAMPANERIA, AIA, NCARB

SAME South Florida Post has stepped up and to assist AIA Florida and AIA Miami in promoting a national Safety Assessment Program or SAP. Just prior to Hurricane Irma, Harvey and Maria. AIA Florida, AIA Miami and SAME South Florida Post hosted Michael Lingerfelt FAIA. Michael has trained architects and licensed professional on how to evaluate the safety of structures after a natural or made disasters for over a decade.

Disasters create terrible consequences, forcing people out of their homes into temporary shelters and closing down communities. While productive individuals sit idle in shelters, or even move away, local building inspectors struggle to evaluate building safety in hundreds or thousands of damaged structures.

Experience in dealing with earthquakes reveals that the number of total inspections due to nonstructural damage can be more than three times the number of red-tagged and yellow-tagged buildings. Threats also exist from other natural and man-made disasters, including floods, hurricanes, and explosions. Most building departments do not have the ability to perform multitudes of such inspections in a short period of time, so a strong need exists to have a cadre of trained professionals available to assist local governments, along with a program to manage this cadre.

The California Governor's Office of Emergency Services (Cal OES) certifies the Safety Assessment Program (SAP). It provides experienced professionals who can quickly evaluate damaged structures, identifying those that are safe for occupancy to which people can return, while marking those that are unsafe or have restricted use. It accepts civil, structural, geotechnical, and architect licenses from any state, along with many ICC building inspector certifications. The program works in compliance with ICS, SEMS and NIMS, and has three trainings associated with it:

- Evaluator Training trains civil engineers, architects, and building inspectors to do field evaluations of buildings and other infrastructure for safety. This training is approved by the federal Department of Homeland Security for homeland security grant funding, and for CEUs through CA State University.
- Coordinator Training trains local government representatives on how to estimate the local needs for the Evaluators, how to request them, and how to manage them and the information they gather.
- Evaluator Train-the-Trainer certifies individuals to be official trainers for the program. There are currently nearly 200 SAP trainers distributed in several states, among them Maryland, Illinois, Colorado, and California.

SAP has been used successfully in responding to disasters, such as the Northridge, Napa, and San Simeon earthquakes in California, as well as in response to Hurricane Katrina in 2005. Cal OES SAP evaluators were sent to Louisiana and Mississippi to assist in building safety evaluation under the Emergency Management Assistance Compact (EMAC). This year after Hurricane Irene, Harvey and Maria, local officials in from the Florida Keys and Puerto Rico requested Inspectors to assist in those hard-hit area. Volunteers who attended the event just two weeks earlier were even called to help. The South Florida Post or SAME is proud of the efforts of those who attended the course and those who volunteered.



APC ACTIVITIES DURING SBC 2017

November 15-17, 2017 - Pittsburgh, PA

SAME Architectural Practice Committee (APC) Meeting, Tours and Events in conjunction with the SAME Small Business Conference (SBC) 15-17 November 2017 included:

COMMITTEE MEETING

The Architectural Practice Committee held a meeting on 15 November, welcoming approximately 20 participants. Discussion topics included general news, review of the APC Journal, and discussion of sponsoring design awards. A small committee was formed to further discuss the idea and details. Potential activities for committee sponsored activities at JETC in Kansas City were also discussed.

The APC has developed a list of additional initiatives for consideration by 2020 including the design awards program, design and production of banners to highlight the accomplishments of Military Facilities/Engineers/Architects (for various SAME events), interviews with those contributing to the Military Facilities/Engineers/Architects, and the development of a Disaster Assistance Structural Assessment Program.

WALKING TOURS AND SOCIAL OUTING

The APC offered walking tours of Pittsburgh including the David Lawrence Convention Center by Rafael Vinoly, and Grant Street featuring the Union Trust Building by Frederick Osterling and the Allegheny County Jail.

Committee members also met for dinner at the local restaurant Vallozzi's, where they encountered Steeler Hall of Fame's Franco Harris and Billy Gardell from the Molly and Mike sitcom.

FALLINGWATER TOUR

Several APC members also visited Frank Lloyd Wright's Fallingwater after the conference.



Above: Members of the Architectural Practice Committee during the committee meeting.

Below: APC social outing. Left to right: Billy Gardell (Mike & Molly), Virgil Campaneria, Franco Harris (Football Hall of Fame), Jose Matute, Daphne Gurri, JJ Tang, Yvonne Lee Simon



Building as Service: People, Politics, and Governance

The 5th Biennial Conference of the International Society for the Philosophy of Architecture, 25-28 July 2018

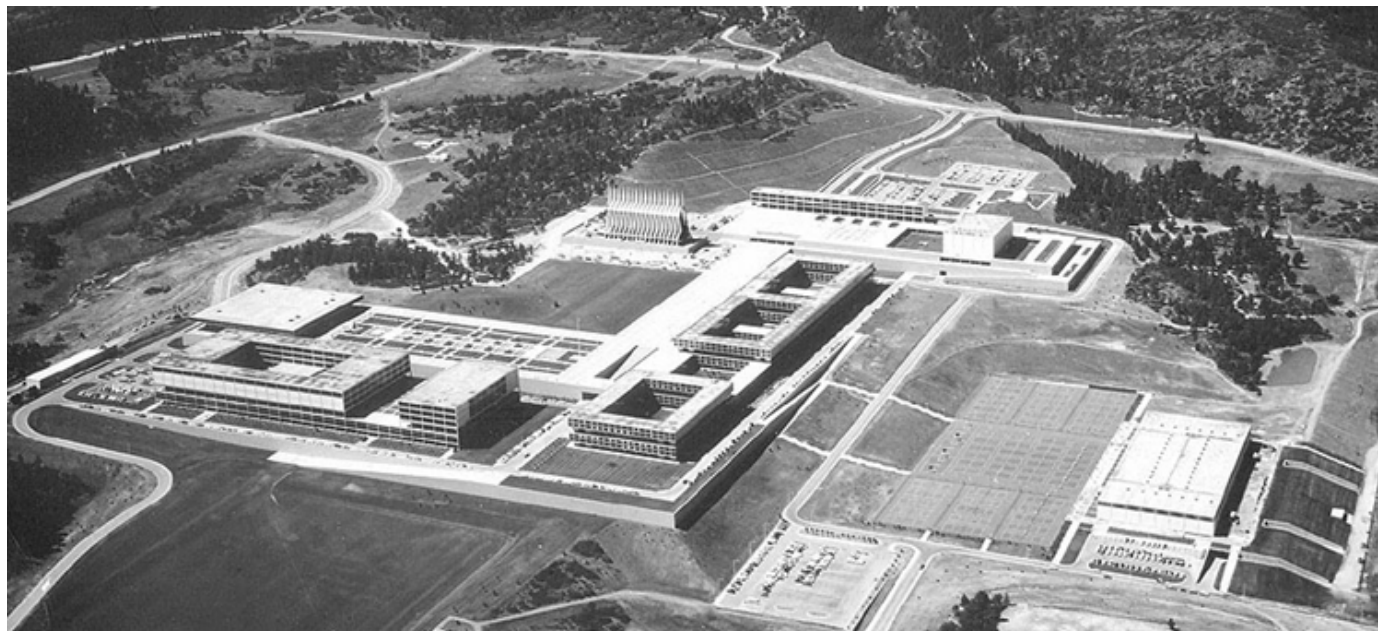
The fact that buildings are so strongly associated with various power holding empires, nation- states and other forms of civilization is widely recognized in the study of both the history of people and their buildings. From Pericles's Acropolis to Niemeyer's Brasilia, architecture has long been associated with political figures and institutions. Buildings such as the British Parliament, the Russian Kremlin, and the U.S. Capitol stand out not just as iconic architecture, but also as representative of the politics, institutions, and culture of their nations. Architecture and politics are intimately connected, yet precisely how are political concepts captured in the form and function of buildings?

Certainly utility plays a strong role here. We know that buildings serve the establishment and maintenance of a governing body. But in serving that function, do they also necessarily contribute to maintaining a particular ideological belief system? If we acknowledge that buildings hold both deterministic effect and autonomous disassociation, how do architects and politicians act? To what extent should architects design public structures intended to capture the social and political ethos of the people? Do architects have an obligation to address the socio- political in their work, or is this kind of moral obligation misplaced? Is it rather that the work of architects is already tacitly, inextricably part of the political process? And to what end? Is the 'autonomous turn' in architecture of the 1980s well and truly dead?

Beyond considerations of functionality, how do rulers utilize building to achieve their political goals and ideals? Is building fundamental to realizing ideological goals or a mere part of the process? One might also worry that we read too much into the social and political power of architects and buildings. While power routinely uses architecture to further its agenda, how reliably can we read buildings as instances of specific intentions? Architecture can be a highly political art form, but what can be said about the relationship between political intentions and aesthetic merit? Are there styles or typologies particularly conducive to establishing and maintaining power? Is the association of contemporary democracy with classical Greek and Roman architecture appropriate or warranted? And is the style's reverence intrinsic or learned? Could the Romanesque not equally as well serve the same purpose?

Assuming that buildings are already intrinsically enmeshed within the governing body's authority, can a single building work against that same authority? Can a building undermine a regime more readily than it can legitimize it? Some may argue that the Berlin Wall marked the end of the Communist rule over Eastern Germany, but how much weight can we ascribe to a building's maintenance of a governing body? Does time sanitize architecture that came into existence in the service of repugnant regimes?

United States Air Force Academy, Colorado Springs



How effective, for instance, are efforts to rebuild Iraq? Do contractors design buildings that are consistent with the social and political climate of the people? Can the people interpret these buildings independently of their feelings about the builders? Could it be that the very act of building in Iraq may be taken as an offense by some in the Iraqi nation-state? Although not all instances of international exchange are as contentious as this one, can architecture be incompatible with particular political concepts or systems?

Finally, what of the relation between architecture, power and capital? Does the globalization of capital and in its wake, of architecture, render architecture's connection to any individual state obsolete? Or to put it another way, is everything becoming an expression of the values of global capital?

The intent of this interdisciplinary conference is to gather philosophers, architects, urban planners, and critics to consider these questions regarding building's service to political ideologies, governing authorities, and socio-political contexts.

The event will be held in one of the most iconic and representative projects of the International Style of 20th century modern public architecture: Walter Netsch Jr's United States

Air Force Academy—a premier education facility—in Colorado Springs, Colorado. The conference itself will be held in the latest addition to the Academy: the new Polaris Hall—a 45 million dollar addition designed by SOM that remains true to Netsch's original vision. The stunning new addition breathes new life into a pristinely preserved Modernist campus, a detailed analysis of which is featured here in the Journal of the American Institute of Architects.

In addition to the conference, presenters and participants will have the rare opportunity to tour the Academy, including the well-known Academy Chapel with its four distinct worship spaces.

Full consideration will be given to all proposals (500-700 words) received by 15 January 2018; acceptances announced no later than 12 February 2018. Send your proposal as an attachment prepared for blind review to isparchitecture@gmail.com.

A selection of papers will be published in a special issue of Architecture Philosophy, edited by Dr. Mark Jensen and Dr. Carolyn Fahey.

ARCHITECT'S SKETCH CORNER



Sketch the Duomo from the roof top terrace of my hotel on a recent trip to Italy.

- Chris Nastasia, AIA, Jacobs

TURNING SILVER INTO PLATINUM: EXCEEDING SUSTAINABLE GOALS

BY STEPHEN VAN DE KIEFT, P.E., CEM AND CODY HOFF, P.E., JACOBS



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What started out as a path to Silver, turned out to be an opportunity for Platinum certification for a new Aviation Support Battalion (ASB) Hangar at Fort Carson in Colorado. By 2012, the plans for the new ASB Hangar were well underway. The United States Army was looking to build a new Silver LEED certified ASB Hangar. As the design process moved forward, it was evident that Silver could be easily obtained, and additional credits were within reach for a Gold certified facility. As the project was completed in 2015, the Platinum rating was in reach achieved without additional funding.

On the surface, one would think that complex, and normally cost prohibitive systems, would be required for a Leadership in Energy and Environment Design (LEED) Platinum certification. However, due to a strategy built around cost effective, simple and predictable, energy efficiency measures, a Platinum certification was achieved.

Project Description and Goals:

As part of the relocation of the 4th Infantry Division to Fort Carson, CO, a Combat Aviation Brigade (CAB) was established at Butts Army Airfield (BAAF) on Fort Carson. Several new hangar facilities were required to support the brigade, including an Aviation Support

Battalion (ASB) Hangar. The facility functions similarly to a very active private sector maintenance hangar, office, and warehouse type facility.

This 136,377 square foot aircraft maintenance facility includes administrative/operations space, maintenance and repair shops, parts and tool storage, over 86,500 square feet of aircraft maintenance bays, 58,000 square yards of airfield pavement, and two exterior rotary wing wash racks. The facility houses up to 14 rotary wing aircraft and supports the maintenance activities of 328 soldiers.

In 2002, Fort Carson adopted long-term goals for achieving a sustainable installation by 2027. In April 2011, the Assistant Secretary of the Army (Installations, Energy, & Environment) identified Fort Carson as a net zero pilot installation for energy, water, and waste, which accelerated the sustainability deadline to 2020. In support of Fort Carson's goal of becoming a Net Zero Energy (NZE) Installation by 2020, the development of BAAF required that all facilities be net zero ready through maximizing the use of energy efficient equipment, constructing highly insulated building envelopes, optimizing building orientation while promoting continuous commissioning and energy monitoring during operation. The BAAF development sustainability goal was that all new construction

achieves a minimum Silver Certification level under Leadership in Energy and Environment Design (LEED) for New Construction 2009 (v3.0). Fort Carson powers its vision with the obligation to ensure the Soldiers of today and Soldiers of the future have the land, water, and air resources they need to train; a healthy environment in which to live; and the support of local communities and the American people.

These goals of NZE Usage and LEED Silver were requirements placed in the ASB Hangar Design Build (DB) Request for Proposal (RFP). Soon after the release of the RFP in January 2012 by USACE Omaha District, the DB Team consisting of Hensel Phelps and Jacobs conducted a series of integrated planning sessions to develop a strategy to achieve the energy efficiency and sustainability goals identified in the DB RFP. The strategy focused on maximizing the use of enhanced energy conservation measure (ECM) features that add value and maximize the building's energy savings for the project within the budget, and included a guaranteed energy savings over ASHRAE 90.1-2007 baseline facility (as required by the RFP and calculated in accordance with Appendix G of the standard) of 51% without renewable energy systems with an additional 49% savings through the use of renewable systems. Key to this strategy was to implement proven, cost ef-

fective, efficient energy measures. This provided three main benefits: (1) The construction cost would remain competitive; (2) The systems would yield predictable results; and (3) The systems, being simple, could be maintained effectively to ensure efficient operation for years to come.

The project was awarded to the Hensel Phelps-Jacobs DB Team in August 2012 at a value of \$44,800,000, significantly below the identified construction cost limitation (CCL) of \$55,000,000. When completed and accepted in October 2014, the final contract value was \$54,531,000. The project cost growth was primarily due to a change in design criteria at the 90% Design stage and coordination with a separate utility infrastructure contract. No additional funds were added for High Performance Sustainable Building (HPSB) features or to achieve LEED Platinum, which was awarded in December 2015.

Building on the strategy presented in the accepted DB RFP proposal, the DB Team focused on ensuring the identified ECM and sustainable features were maintained throughout the design and construction of the projects. Examples of ECM features incorporated are discussed on the following page. These measures included simple, cost effective, and proven technology.

Aerial view of Butts Army Airfield, Ft. Carson, Colorado with several new facilities including the ASB hangar (right, mid-ground) and related solar PV array (right background).



Energy Conservation Features

- » **Hangar Door Leakage Reduction:** Hangar door leakage can be a substantial source of energy use during the heating season; this project utilized sliding insulated doors that use double seals to reduce air leakage and therefore heating energy.
- » **Improved Building Envelope:** Increased Roof and Wall Insulation: Insulation performance (R-50 and R-43, Respectively) exceeded ASHRAE 90.1-2007 requirements.
- » **Improved Glazing Performance:** The maximum glazing U-value is 0.27 and solar heat gain coefficient is 0.27. For additional improvements, translucent panels with U-value of 0.20 and solar heat gain coefficient of 0.10 were installed in the hangar bay. These values comply with ASHRAE 189.1-2009.
- » **Building Air Barrier:** Building air leakage was reduced from the building-type standard of 0.4 cfm/ft² to 0.15 cfm/ft² through an enhanced air barrier.
- » **LED and High Pressure Sodium Exterior Lights:** LEDs and high pressure sodium fixtures were used to further reduce lighting energy use with an 80% reduction being achieved for exterior lighting.
- » **LED Lighting in the Hangar Bays:** Lighting power density was reduced substantially from the typical values associated with high-bay applications; achieving 0.5 W/ft² on average.
- » **LED Lighting in the Admin/Workshop Areas:** LED lighting further reduced energy use beyond the traditional lighting fixture type of T8 fluorescents; these areas were reduced from an aggregate of 1.1 W/ft² to 0.7 W/ft² as a result.
- » **Automated Lighting Controls and Day Lighting:** Advanced building lighting automation was employed to reduce energy use from lighting systems; spaces with appropriate glazing will have daylight dimming capacity, occupancy sensors were used throughout the building and manual controls were provided to further reduce energy use. Continuous dimming was provided for the LED lights in the hangar space in order to reduce energy use during periods with adequate ambient lighting conditions.
- » **Variable Speed Air Compressor:** One of two air compressors was fitted with a variable frequency drive in order to reduce energy consumption during part-load.
- » **In-slab Radiant Heating System:** A hydronic radiant heating system was employed to distribute heat through the floor slab; this system saves energy by using mean radiant effects and avoiding stratification.
- » **Energy Recovery Ventilation:** All major ventilation units were provided with energy recovery in order to re-capture energy typically lost in exhaust airstreams; this feature significantly reduced energy use at extreme ambient conditions.
- » **Low-Flow Plumbing Fixtures:** Plumbing fixtures were selected to provide substantial water savings over industry standard plumbing fixtures. Water savings directly translates into domestic hot water heating energy savings.
- » **Building Automation System:** A building automation system was incorporated into the design to provide operators with centralized control, diagnostics, and system verification abilities.
- » **Transpired Solar Collectors:** Transpired solar collectors were employed to pre-heat ventilation air for the hangar spaces while in heating mode; this feature was expected to save about 222,800 kWh/yr.
- » **Solar Photovoltaics (PV):** The remaining projected energy use was covered by the installation of PV. The DB team identified the potential to provide enough PV to make the 13th CAB, ASB Hangar NetZero with respect to energy through the use of ground mounted systems. This feature is expected to save approximately 2,130,000 kWh/yr.

Because of the Net Zero requirement and the energy reduction that would need to be achieved to obtain that requirement, 33 of 35 EA Credits were anticipated. This provided a substantial platform to obtain the initial LEED Silver credits. Overall, 61 LEED points were anticipated with potential for additional credits to be considered as the project moved forward. These points passed the project's silver requirement, Gold was in reach, and Platinum was on the horizon.

Results:

The project met the Army's standards for ASB hangar design and meets or exceeds the Fort Carson's goals for energy, water, and construction waste reduction with a facility type not normally associated with sustainable design. Using the LEED strategy categories, the ASB Hangar's results demonstrate a comprehensive approach to ecologically sustainable, low-impact, and fiscally responsible development. The project achieved all the anticipated energy and atmosphere credits attempted and an overall total 81 credits towards the LEED Platinum.

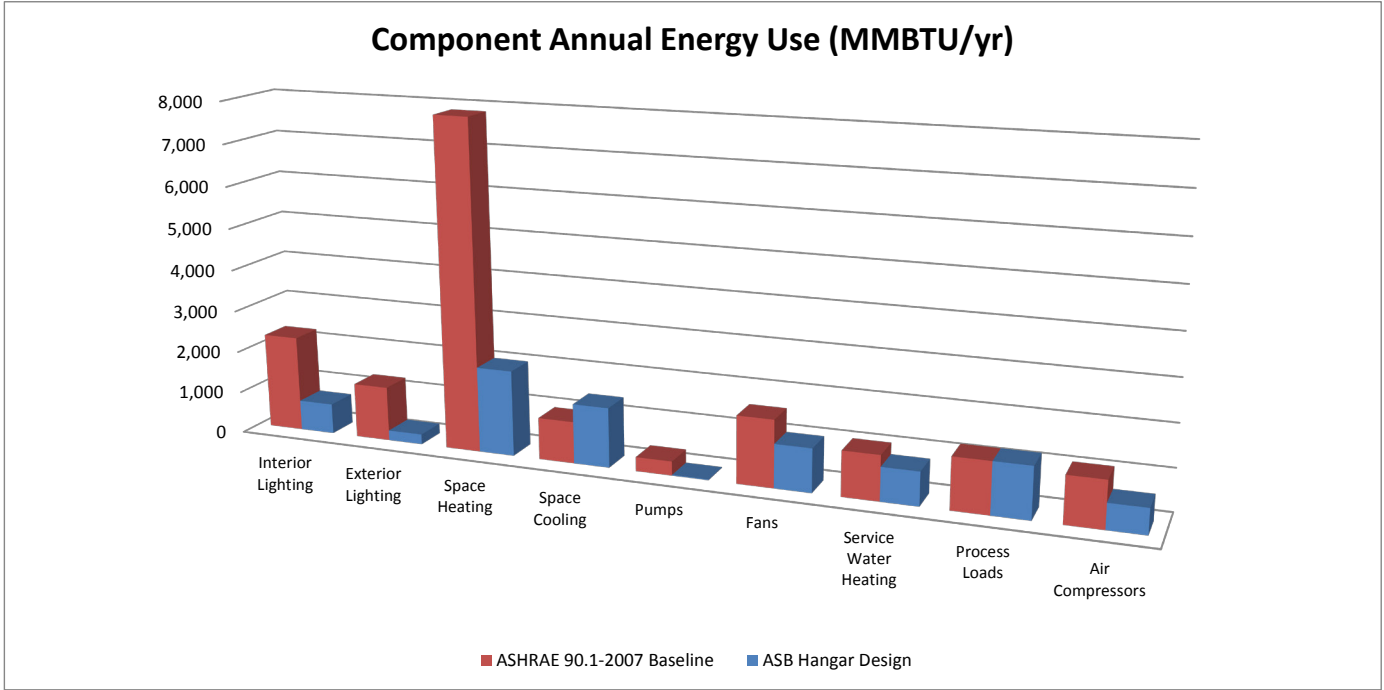
The project incorporated the reuse of an existing developed site, was part of a master planned campus addition that combined residential, professional and all of the traditional community services into a compact walkable area decreasing the need for privately owned vehicles. Additionally, designs for parking provided preferential spaces for

Top: Mechanical room hot water systems serving hangar. Heating loads were reduced drastically with the low leakage building envelope, enhanced weather seal, and heat recovery systems.

Bottom: Electronics shop with high efficiency, high bay lighting; highly reflective finishes to improve lighting; and insulated translucent panels for daylighting.

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low-emission and car pool vehicles. The site and building materials were selected to be of a high reflectivity to reflect solar radiation back into the sky and decrease the urban heat island effect.

Local native plant species were used in the landscape design to decrease the need for constant irrigation and still provide beautiful greenery to the site. With efficient landscape design and the careful selection of low flow water fixtures, the facility decreased its potable water usage by 96.4% for landscaping and 39.4% for plumbing fixtures, calculated from a US EPA baseline. That results in a calculated savings of 2.8 million gallons of water per year.

The construction materials were carefully selected to be sourced from local fabricators, those with a high recycled content were given preference, and those such as the wood used on the project were sourced from vendors that had a verifiable record of environmental stewardship. Furthermore, material selection was influenced by the chemical components within them, so that products with low amounts of Volatile Organic Compounds were given preference to those with a higher quantity, in order to decrease the indoor air pollution of the building occupants. By selecting sustainable materials, the contractor was able to also coordinate quantities and recycling procedures, so that they were able to divert 89.6% of the construction

waste from the local landfill.

However the most substantial achievement was that of the energy efficiency and resulting net zero facility design. The implementation of ECM strategies and technologies resulted in a calculated 119.7% reduction in energy cost (105% energy usage reduction). The energy use reduction is comprised of a 56% reduction in energy usage without renewable systems included with an additional 49% reduction by the renewable energy systems. The energy usage intensity of the baseline facility was calculated to be 127.3 kBtu/sf with the designed and constructed facility EUI estimated to be 52.4 kBtu/sf (without renewable energy systems). Facility measurement and verification (LEED EA Credit 5) is ongoing at this time. Based on initial readings, it appears the facility is performing as designed and constructed.

The resulting NZE facility is a major step in support of Fort Carson's 2020 goals and in the ability to provide NZE HPSBs in accordance with the Executive Order 13514 2030 NZE goal and the directive for the Federal Government to lead by example.

The facility design achieved the Army's first USGBC LEED 2009 (v3.0) Platinum certification for a hangar, produced less waste, generated less pollution, uses less water and puts energy back into the grid.

Going Forward:

Fort Carson has a sustainability legacy of over 56 LEED-certified projects including over 82 certified buildings with over half of them at the Gold. This facility is a testament of that sustainability commitment since it was pursued on a hangar; a facility type not typically suitable for net zero design. The most remarkable aspect is that this project's success, the energy/water/waste reduction goals, was achieved through the use of basic and fundamental strategies which could be more easily replicated on other facilities. The fundamental concept of intense electrical and mechanical energy efficiency, along with building envelope performance, and furthermore supplemented by renewable energy is a recipe that can be applied to any new construction. The project development team has been and will continue to incorporate the lessons learned from this project at similar facilities at installations located around the world.

The facility is in full compliance with the Army's standard for this facility type, it is constructed of standard materials, utilizes commercially available mechanical and electrical systems, employs well established and proven energy conservation measures, and uses common low-flow water fixtures. The building systems also use well developed mechanical control schemes and the project development team utilized well established work-flow procedures to maximize efficiency and establishing a high rate of achieving LEED credits. Projects at this location have also had a very high success rate for exceeding the government's water and waste reduction requirements. Complying with Army directives, utilizing current energy and light modeling systems, and incorporating life-cycle cost analysis, the team was able to construct a realistically functional and sustainable facility. Attaining LEED v3.0 Platinum certification, this industrial type facility positively reflects a continued Fort Carson legacy for excellence in sustainability and energy reduction and is an example for others to follow.

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A PERSPECTIVE ON THE CONTRIBUTIONS OF PUBLIC ARCHITECTS AND ENGINEERS TO THE PROFESSION THROUGH THE EYES OF PAULA J. LOOMIS, PHD, FAIA, FSAME, DISTINGUISHED URBANH MEDALIST

BY LISA J. KURUVILLA, PMP, PCC, CMC, CEC

As the Society of American Military Engineers (SAME) Small Business Conference was closing a successful event on November 17, 2017, Dr. Paula Loomis, Executive Director of the U.S. Coast Guard (CG) Shore Infrastructure Logistics Center in Norfolk, Virginia, shared her thoughts and passion “for providing good facilities, places and bases for our troops” as well as the important contributions of the SAME Architectural Practice Committee (APC), the American Institute of Architects (AIA) and the AIA’ Public Architects’ (PA) Knowledge Committee (KC) that share Paula’s passion.

Paula has the distinction of being the only woman to receive SAME’s Urbahn medal. She also served two years on the AIA Strategic Planning Committee, three years on the AIA College of Fellows Selection Jury, the AIA Resilience Committee, Federal Acquisition Task Group (FATG), the AIA and SAME National Boards, AIA Strategic Council and currently is Chair of SAME’s Architectural Practice Committee (APC).

We spoke about the changes during her 35 years in an industry that has so positively impacted the warfighter, our communities and the profession. “From the military perspective, the 1970s bases still had temporary wooden buildings from WWII and Quonset huts that may have been efficient in terms of square footage used per person, but, definitely were not awe-inspiring. During the 1980s the services (chief among them General Creech with the Air Force and Tactical Air Command (TAC)) began demanding better facilities—better in quality, appearance and longer-lasting with less maintenance.” The belief was that “better facilities would instill a sense of pride, improve productivity and morale.” She also noted that the safe-haven and community that the base environment provides brings comfort to the warfighter in theatre knowing that their families are protected back home. As the Base Architect at Langley AFB, the home of TAC, with General Creech’s successor, General Russ—Paula was instrumental in creating new standards that transformed the base and later the command as

the Air Combat Command (ACC) Command Architect. Paula noted “GSA during the 1980s and 1990s, under the direction of Ed Feiner, FAIA, instituted a Design Excellence program. Ed’s point was that for the same amount of money the Federal government was spending on drab buildings, it could have wonderful buildings that would inspire trust in the government, productivity in workers, and pride in citizens. I looked up to Ed, met with him and instituted many of his concepts into the ACC program. I was not the only one following his lead.”

In the 1990’s “AIA’s Committee on the Environment was one of the founding organizations of the US Green Building Council (USGBC) providing the Leadership in Energy and Environmental Design (LEED) program that impacted industry standards in the US and across the world.” Another founding member, the former Army Assistant Secretary Kathryn Hammock, pushed the sustainability/energy agenda in the military. “While architects had been interested in sustainable buildings/concepts prior to USGBC, it was the first organization to set up a system of rating buildings for sustainability,” creating competition for ratings and raising public awareness. That, in turn, “spurred Congress and the Administration to enact laws and executive orders to incorporate sustainable measures into public buildings.” Another AIA Fellow, Ed Mazria, founded the 2030 Challenge (adopted by the United Nations) which promotes carbon neutrality by 2030. Ed shows that the U.S. has gained many millions of square feet of additional space in the last decade, yet continues to use the same amount of energy that it did a decade ago.” All due to our industry’s sustainability efforts.

SAME also has a very active Sustainability and Energy Committee who, with the APC, offer sustainability and energy courses/webinars/JETC offerings. SAME also has several members who were involved developing UFC 1-200-02, High Performance Sustainable Building Requirements, the High Performance Sustainable Building Guiding Principles and a new UFC for Sustainable Master Planning.

Paula notes, we are now in a more technical architecture era with three-dimensional BIM drawings and

increased advances in materials and techniques. “One can no longer use just what they learned in college to propel them across a career. Masters degrees are almost a requirement. State accreditation boards and AIA now require continuing education.” As one of the first AIA members elected to the AIA’s Board Knowledge Community, which oversees AIA’s 26 KCs, Paula noted that perhaps our next challenge will be “that some new buildings exhibit a great amount of technical expertise, but not much design. Perhaps as a profession we have come up a spiral. We make technical progress, but we’re continually moving between multiple variables on ‘what is good design.’ With the CG, Paula is “pushing design teams to concentrate on the right balance between design, sustainability, energy, maintainability and life-cycle costs. It’s a hard balance to reach and a hard balance to envision.”

We also spoke about the impact on architectural practice of the federal government using Design Build (DB) contracts more frequently. “I believe that the government has not figured out how to take advantage of DB as a tool in the way the private sector has.” It is important for the government to “look at all the delivery method alternatives and select the best alternative for the project. We should educate our technical engineers/architects and contracting personnel on the alternatives, so they can make an informed choice.” Researching different contracting alternative methods (especially those in Europe) and other government organizations seems to be a passion for Paula. The lessons we learn with every advance give us “a feel for what works and doesn’t work in different situations.” For example, “the new net-zero Police Station in Cincinnati where LEED Platinum was achieved for the cost of LEED Gold through a DB process that down-selected potential DB teams based on qualifications and then selected the final team through an initial design process with a stipend. Using that method, the city got to ‘own’ all the ideas from the second process and use them in the final project.”

Paula noted how professionals have advanced and adopted programs to address disaster recovery, resilience, and community development. Following significant disasters, there are often insufficient Local Building Code Inspectors to evaluate whether structures are habitable to get facilities re-occupied quickly. The State of California started a Structural Assessment Program (SAP) that used registered qualified professionals to assist with facility assessments following a major disaster when needed and ensured that Good Samaritan laws would hold-harmless professionals that volunteer. Using supplemental assessors (either paid or volunteer) to help with facility assessments can get expedite results and



Brandon Tobias Photography

have occupants back in their homes and work spaces. “For about ten years, AIA chapters have been helping to set-up similar programs in 25 other states. The chapters contact the state to see if the state Emergency Management office has interest in using supplemental assessors. They assist the state by finding locations for training, recruiting and keeping a current list of the volunteers. AIA National has established a staffed Resilience Office to run the program day-to-day (assisting states, directing volunteers, etc.) and a Resilience Committee to oversee the program. Both entities are involved in helping set new codes/standards and were instrumental in writing the AIA Resilience Handbook.” Both the office and committee also help AIA offer Hurriplan Resilience Training to help local communities conduct better Master Planning, so their communities can better survive disasters. More recently, SAME’s Resilience Committee formed and is busy seeing how they fit in the Resilience portfolio.

Looking ahead, Paula noted that the biggest challenges AEC professionals will face in this era of disruptive change (geopolitically, economically, technology)—will involve “solving the resilience, sustainability, energy, sea-level rise, and neutral carbon problems. I believe we can develop/re-learn technologies to live carbon neutral with a light footprint on the earth and still live comfortably. We need to develop societal ways to implement those technologies. Even though the technical challenges will be great, the societal challenges will be greater.”

APC

MICKELA PALLARES INTERVIEW, CONTINUED

choice. Luckily for me, the Corps fits my personality and design aesthetic. So I'm glad they chose me!

My first day on the job, I found out that the interviewer was actually my boss. He later told me that he didn't bother with a second interview because he was impressed that my thesis project had a mechanical room and an outdoor smoking area. It wasn't until a couple years later that I realized how important outdoor smoking areas are on military bases.

DP: What influenced/informed your career choice? Who are your architecture heroes? Where is the magic?

I think I had a slightly different introduction to architecture than most. When I was in elementary school, my dad worked for the City of San Jose Redevelopment Agency, and was part of the PR team for what was then called the San Jose Arena (now the SAP Center, home of the San Jose Sharks, aka The Shark Tank). For Bring Your Daughter to Work Day, we got to tour the area while it was still under construction. We also learned about some of the community revitalization projects they were working on, including the new light rail mass transit system. I didn't realize it at the time, but that's really what got me interested in the built environment. When I was in middle school, my dad did PR for a developer friend of his who was building 4 brand new custom homes in one of the older neighborhoods in San Jose. So I got to spend time at that job site, learning about some of the politics that surround new developments. And when I was in high school, my parents completely gutted and remodeled our home...while we were still living in it. Not the coolest thing when you're in the 11th grade. But that part of me that loved the tour of the Shark Tank loved seeing a house being built from the ground up. I watched as they poured new concrete footings, saw the placement of the ridge beam, and was mesmerized by the plaster guy. But I never thought of architecture as a career until my dad suggested it. He saw how interested I was in all these construction projects, even though I was determined to be a marine biologist at that point. After learning more about what architecture is, I decided it was something I was interested in - interested enough to apply to Cal Poly's architecture program. And that was a big decision because Cal Poly requires you to declare a major when you apply.

Because of this, I didn't have architecture heroes until I got to college. The two that really influenced me were Mexican architect Ricardo Legorreta and Guatemalan

architect Teddy Cruz. Legorreta's use of traditional Mexican architectural style and bright colors was so unlike anything I had known growing up in San Jose. But as I started to research his work more, I discovered he actually designed two museums in San Jose! The idea that architecture can be simple yet bold has stuck with me since. Cruz, a professor of Public Culture and Urbanism at UC San Diego, takes a research-based approach to urban development and intervention along the San Diego-Tijuana border. One of my favorite projects of his looks at how the residents of the slums of Tijuana have constructed (mostly with discarded building materials from San Diego) and organized their communities. Cruz then designed permanent, safe, and low-cost housing that was still familiar and usable for the residents and the community they developed. Architect David Baker does similar low income and SRO housing projects throughout the Bay Area, with an emphasis on design that doesn't stand out as low-income housing. All of these architects played a huge role in the development of my senior thesis project, along with one non-architect: my mom.

Through my high school and college years, my mom worked for the City of San Jose Housing Department. She worked in a couple different capacities with the Housing Department, but always helping low income and homeless residents of the city: rehabilitation grants, homeless housing placement assistance, and foreclosure prevention, to name a few. All these influences led me to my thesis project: a transitional housing development for homeless and emancipated youth of Santa Clara County, located in the heart of downtown San Jose. It wasn't a fancy building, like the projects of others in my thesis studio, but it was functional and clean. And it had a mechanical room and smoking area.

For me, this is what architecture is about – this is the magic: buildings that help the people that use them. They don't necessarily need to love the way it looks, though a nice looking building never hurt, but if they appreciate the space you've made for them and want to use it, then I call that a success.

DP: What has been your favorite project to date?

Since I've been with the Corps, I have two favorite projects, but for different reasons. The first was the renovation of a WWII era medic station for the Navy into a modern fire station for the Army. The building was never designed for a dozen of fire firefighters to live in it, and it was in such bad shape that there were water

infiltration and mold issues. Instead of bunkrooms, the company all slept in what used to be the sick bay, and had hung bedsheets from the ceiling between their beds to get a little bit of privacy. And they were still using an old Gamewell alarm receiver...the kind with ticker tape that prints out telling them where the emergency is located. There were so many regulatory, budgetary, and programmatic issues that plagued that project from the get go, but after about 5 or 6 versions of the project, it was finally awarded. At the groundbreaking, the firefighters asked me to sign the rendering of their new home (which included individual bunkrooms and larger showers) because they wanted to get it framed and hung up in the new day room. Just hearing the sincere appreciation and gratitude in their voices made all those 3 years and 5 versions worth all the work – and rework.

My other favorite project was actually a reach-back project out of Kansas City District. I was responsible for the design of a barracks for female pilots who were joining the Afghan Air Force as part of the Afghan Gender Integration Program. I thought it was so great that I was able to design something for a group of ground-breaking women. What made it more interesting was that I had to account for Muslim practices and traditions in the design. I spent a lot of time talking with a coworker who is Muslim trying to understand practices I've never experienced myself. I love to travel and experience new cultures, and even though I didn't get to travel as part of this project, I was still able to learn about a culture and a religion entirely unfamiliar to me. And I got to talk to a coworker about religion at work and not get in trouble for it!

But both of these projects go back to what I said before: buildings should help people, and that's the architecture I love.

DP: Have you worked in the private sector? If so, how would you compare work in the private sector to working for a public agency?

I did for a brief co-op in college, so I don't have a lot that I can compare. It was a small firm of about 10 people in San Francisco. I was grateful to be in a small firm because I was able to see what each person did. Each architect was able to truly own their project, and wasn't stuck doing bathroom details for a decade, something all of my college classmates accepted as our fate if we were hired by a big firm. But in the end I realized a private firm wasn't for me, big or small. I nearly dropped out of the architecture program after that experience. But I was a year away from graduating at that point, so I decided to at least finish my degree and then decide what to do from there. Then the Corps



Images courtesy of Mickela Pallares
Top: Tidal Facility
Middle: Lake Isabella Work Center
Bottom: UAS Gray Eagle Facility

just kind of fell into my lap and ended up fitting me and what I was looking for.

So many architecture grads think that by becoming a public architect you’ve sold your soul, that you’ll be designing plain boring boxes until you die. But that hasn’t been my experience at all. The projects I worked on in SF were custom homes and a new church in Nob Hill, one of the wealthier neighborhood in the city. They were elegant designs, but just not my style. The projects I’ve worked on in my time with the Corps have been anything but plain boring boxes. Fire stations, UAV hangars & training facilities, air traffic control tower, police dispatch center, and a paint booth big enough to fit a Global Hawk. They may not be fancy or elegant, but they’re definitely not boring either. I’ve even been involved in a few horizontal projects: full depth road repairs along a tidal zone in the Bay Area, a prefabricated floating dock for a fire response boat, and a couple aircraft taxiway & runway repair jobs. These are all projects I never could have imagined I would be involved in, and probably would not have been exposed to if I worked for a private firm.

DP: What was your licensing journey like? [note: I changed this question because a license is required as part of the qualification criteria for the Architect of the Year Award]

I actually got my license earlier this year (finally!), and everything leading up to it was kind of crazy. Not to say getting you license is supposed to be easy, but the timing of things along the way just made it the most cumbersome process ever. I established my NCARB record within a couple weeks of starting work, but I kept getting thrown curveballs. A couple months before I was finished my IDP, NCARB changed the breakdown of required hours. So that added about 6 months of additional time to complete my IDP. I’ve never been a good test taker, so just getting into a rhythm of studying and then deciphering how to take the AREs took a while. I had to retake 2 exams before I really felt comfortable with the test format. And then NCARB decided to redo their online system and placed a 6-month blackout on their site. So that added 6 months of just waiting (and some studying). At that point I felt like I was never going to finish. Once I finally passed that 7th exam, I rushed to get all of my paperwork into the California Architects Board (CAB) so I could take the California Supplemental Exam (CSE) no later than February 2017... because they were completely changing the test in March 2017... with a blackout on exams the last 2 weeks of February. I took the CSE in early January, and when

the proctor told me I passed, I just laughed. I couldn’t believe I was done! After all the delays and retakes and rote memorization, I had passed the CSE in one try. I went home, filled out the application for my initial license, wrote a check, and drove over the to the CAB office to pay in person (probably the most convenient part about living in the state capital). California bases license fees on your birth month. Since I was born in February, I would have to pay the prorated fee for the initial license in January, and then immediately turn around and have to pay the full renewal fee before the end of February plus complete 5 hours of CEUs. At that point, after all the previous delays, I just wanted my license! I asked for a receipt, and then went home to start on those CEUs. When I started the licensing process, I had set a goal of “licensed by 30” for myself, and I met that, despite everything that had thrown at me. Finally getting that little piece of paper in the mail was like when my college diploma finally arrived in the mail, only with 100-times the relief.

[For those not familiar with the CSE, here’s a very condensed explanation. In almost every other state, once you pass the 7 AREs you can be recognized as an architect. Not so in California. There’s a whole other 8-hour exam that covers everything and anything that could possibly impact a building project in the state of California, including the myriad of California building codes, environmental laws, and regulatory agencies (state, regional, and local). Working for the federal government, I’ve never had to deal with any of these things. I learned all of that in about 3 months. That’s why my reaction to passing the CSE was just to laugh.]

DP: Professional organizations like SAME and AIA provide tangible benefits to architects? Do you participate and what are your favorite benefits?

I’m a member of SAME and SHPE, but not AIA. I used to be heavily involved in the Sacramento Professional SHPE chapter, including holding a couple different officer positions, but had to back away in the last couple of years to focus on my license and my family. I’ve only been a member of the SAME Sacramento Post for a couple years now, and still trying to figure out the best way to be involved that would benefit the post and my own goals. In general, I think these sorts of professional organizations can provide great benefits to architects in private practice, but not so much for public architects. The whole networking element is super beneficial if you’re trying to get new business or find new hires. But as a public architect, it doesn’t help me, and gets into some ethically dicey territory. So my involvement has been more focused on mentoring and community service.

For example, a couple years ago, I was a mentor to two Sac State students through SHPE. Both of my mentees were women interested in architecture, architectural engineering, and construction management. Both were questioning what the right path was for them, or if they should just pursue the default civil engineering like all of their friends. Over the course of the year, I was able to share my collegiate & professional experiences and they were able to ask questions about the industry. By the end of the school year they had both made decisions on where they wanted to go and were happy with their decisions. I still keep in contact with one of them. It was such a personally rewarding experience, and the sort of non-tangible benefits that I believe are even more valuable than the tangible ones.

Through SHPE and USACE, I’ve been able to give presentations on the field of architecture to local middle schools, high schools, and universities. There always seems to be that one student who is actually interested in architecture, and if I can help them decide on pursuing architecture, then that is way more rewarding to me. The SAME Sacramento Post also does these sort of outreach presentations, but my schedule just hasn’t been able to work with theirs. One day!

DP: As an architect in 2017, do you have a career road-map?

Yes and no. I have an idea of where I’d like to see myself within Sacramento District, but I’m also open to possibilities outside the District. And even outside the Corps. It really just depends on what makes the most sense for me and my family as the opportunities arise. I probably have like 3 or 4 different roadmaps, depending on which turns I decide to take.

Earlier this year I actually moved from the role of senior design architect to the role of senior military technical lead. I’m still working with the same military designers as I was before, but just not doing design. I help them navigate project requirements and do a lot of the administrative type work so they can focus on doing design (something I wish I had when I was doing design!). I also interface with the project manager, contracting, the customer, and other stakeholders a lot more in order to resolve some of those technical issues the designers may have. Besides juggling the “big picture” of the building, I have to understand the “big picture” of the project as a whole, and get a lot more involved in funding, contracting, and good old fashion bureaucratic issues. It’s totally different than design, but I’ve enjoyed the challenge so far. With that said, who knows what this experience will do to my roadmap.

DP: What does this award mean to you?

It’s a huge honor. Growing up, my parents always taught me and my siblings that no matter what you set out to do, give it your best. From college to now, that’s how I’ve approached every project. But to be recognized for what I do every day is just so humbling. I don’t seek out validation or recognition for what I do – I do it because that’s what needs to be done and because I enjoy doing it. To have been nominated by my supervisor and have that nomination supported by my Commander tells me that I’m doing something right.

I see it as a huge milestone for the Corps as well. When I got the call from HQUSACE, I was told that I was only the third woman to have won the award. That just blew my mind. Three women in 25 years. Granted, the award was not given out all 25 of those years, but still. That just tells me we need more women not only in the Corps, but also in the profession! My sorority got word of the award and they featured me on their social media, and I hope that provides some encouragement to other women interested in pursuing architecture!

DP: What does Mickela Pallares do for fun, outside the Corps?

If you asked me this last year, I would have told you traveling, sampling all of the great West Coast beers, and indulging in all the delicious food that the Farm to Fork Capital has to offer. I also really enjoy volunteering with my church (the second oldest Catholic church still standing in Sacramento) as a tour docent. I haven’t really been able to do any of that this year as my husband and I are expecting our first child in December. So this year, my “for fun” has been making sure our house is ready for a baby.



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