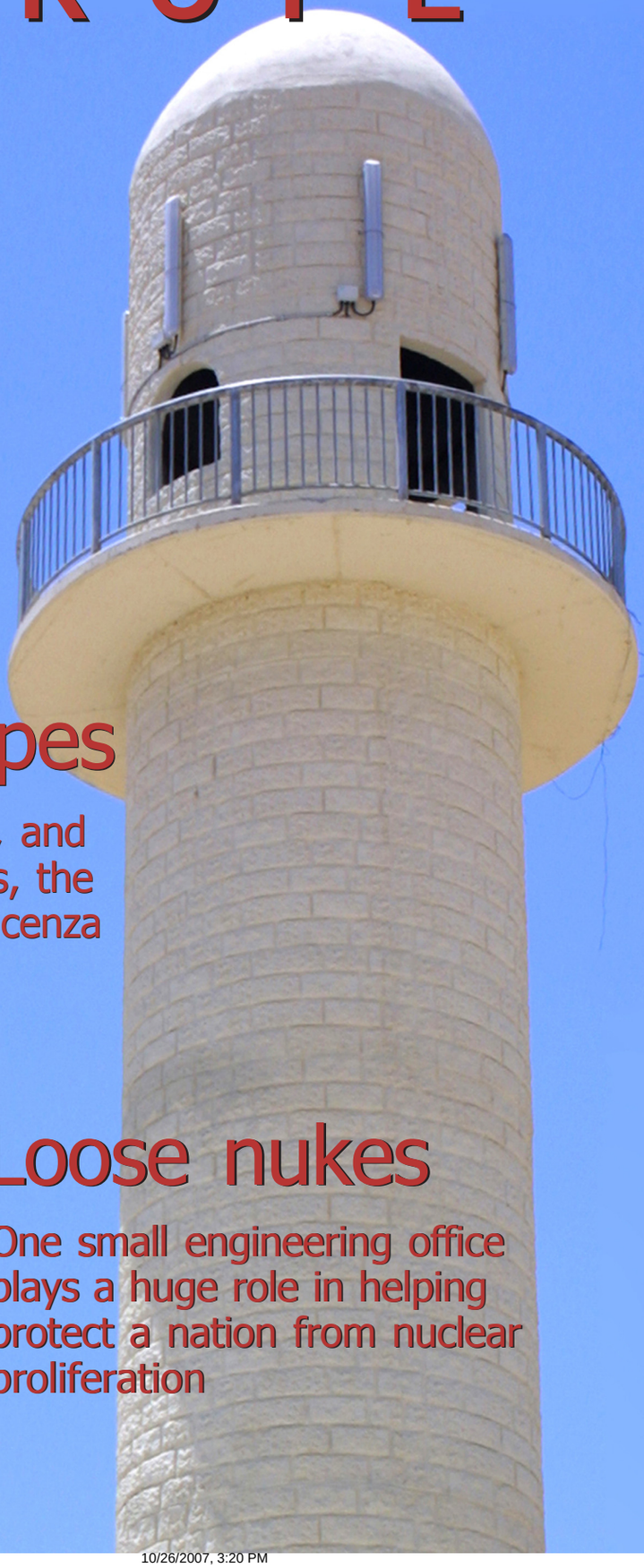
Engineering IN EUROPE



Embattled urban terrain

Mosques and infrared sensors complete new MOUT site in Israel's Negev Desert

Pipes, pipes, pipes

From replacing water, sanitary, and storm drains to repairing roads, the Corps of Engineers' team at Vicenza knows infrastructure

Loose nukes

One small engineering office plays a huge role in helping protect a nation from nuclear proliferation

US Army Corps of Engineers
Europe District
Vol. 3 Summer 2007

From the Commander

How may I serve you? Taking USACE from good to great

Lt. Gen. Robert Van Antwerp took command as the 52nd Chief of the U.S Army Corps Engineers on May 18th. Like the chiefs before him, he brings with him a wealth of knowledge, experience, and courage, having served in many command assignments around the globe.

One element of Lt. Gen. Van Antwerp's leadership that I'd like to highlight, however, is his enthusiasm for seeking improvement.

There's been a lot of emphasis recently on embracing an attitude of service to the customer. This attitude is a trait that I see as absolutely imperative to achieving our organizational goals.

The philosophy behind the attitude is something that Lt. Gen. Van Antwerp has underscored in his discussions with USACE leaders: We must think of ourselves as working in a service organization. And not just any service organization, he asserts, but a privileged one that sets its goals on doing the right work, for valued customers, to support the warfighter.

Even his greeting to those who call on him ("How May I Serve You?") testifies to his commitment to service.

I agree that we must continue to stress the notion of service every day. We must sustain strong partnerships; refine our services, skills, and competencies to meet our customers' needs; and seek out innovative practices that enable us to be our customer's preferred problem solver. It's this attitude that Lt. Gen. Van Antwerp has exuded in his short time as leader of USACE. And it's this attitude I would like us to continue striving toward.

I also want to bring your attention to a challenge Lt. Gen. Van Antwerp has tasked us with. In early August, he stated that he believes the Corps is a "good to very good" organization, but that we must work to get ourselves to "great." This is an interesting view that should provoke thought and motivation in each of you.

The concept comes from a 2001 book, aptly titled *Good to Great*, by Jim Collins, which states that there are certain characteristics that "great" organizations have in common. Lt. Gen. Van Antwerp charges each of us to work to develop these characteristics within the Corps.

We have a very complex mission here in Europe, and do everything we can to lean on the discipline, passion, and experience that each one of you brings to the table. I want to thank you for your hard work, but also want to encourage you to embrace Lt. Gen. Van Antwerp's charge, learn more about Mr. Collins' book, and help take our organization from good to great.

I am so proud to be on this team with each of you. Army Strong – Engineer Ready!

Essayons!

Margaret W. Burcham
MARGARET W. BURCHAM
COL, EN
Commanding

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U.S. Army Corps of Engineers

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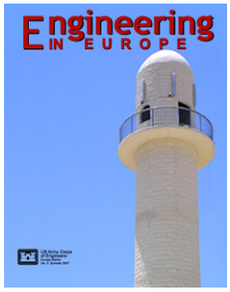

Mosques dot the skyline of the recently completed Baladia City Military Operations in Urban Terrain (MOUT) site, located in Israel's Negev Desert. The site is already in heavy use. See story on page

Cover photo by Justin Ward

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Earning the badge:

Landstuhl's new Expert Field Medical Badge litter course helps local Soldiers train for casualty evacuations

Story and photos by Justin Ward

Dressed in full battle gear and weighted down by a stretcher holding a 160-pound "casualty," 14 Army medics stand poised at the starting line. Their anticipation is easily read on their faces. Anxiety. Determination. Fear.

Standing in the dappled morning sunlight peaking through the verdant canopy of forest near Landstuhl, these Soldiers can think of nothing but the ominously impending task, completing the most grueling portion of what is considered one of the military's hardest qualification tests – the Expert Field Medical Badge.

This obstacle course is part of the battery of tests these 14 Soldiers must pass to earn the Expert Field Medical Badge, the non-combat equivalent of the Combat Medical Badge. They'll have to rely on their practiced exercises, memorization drills, and willpower to get through this formidable 1.5-mile junket, including carrying their patient over high and low walls, under barbed wire, and through a murky water basin called "The Trench."

"It comes down to warrior ethos, attention to detail, and standards," said Capt. Joel Neuenschwander, commander of Landstuhl Regional Medical Center's (LRMC's) 14-person litter team. "That's what keeps people alive on the battlefield."

The 7th Army Joint Multinational Training Command's course was constructed by the U.S. Army Corps of Engineers and contractor SKE.

Located on LRMC's Breitenwald Training Area, it is the newest place in Europe for Soldiers to practice and perform their studied techniques. Previously, medical personnel from the Kaiserslautern Military Community had to perform the litter, or stretcher, obstacle course at Grafenwöhr, almost 250 miles away. But as of the mid-July grand-opening ceremony, training got a little bit closer.

"Since [USAG] Kaiserslautern has the largest concentration of medical personnel in the entirety of Europe, having a fixed facility here where people can come train to standard on a litter obstacle course ... will be a combat multiplier when we send them out to go compete for that badge," Neuenschwander said. "But it's the little things – almost intangibles – that you get out of conducting training on a course such as this that makes the difference. We're talking about teamwork. We're talking about communication. We're talking about physical stamina. All of these dimensions of leadership, soldiering, and warrior ethos. This is a huge combat multiplier in all those areas."

The U.S. Army Corps of Engineers representatives included Kevin Leedy, project engineer, and Kevin Peel, project manager, who said the realization of the $63,000 project was due to good teamwork with the partners involved, including JMTC, LRMC, the U.S. Army Garrison

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Kaiserslautern's Directorate of Public Works, and the contractor, SKE. "They [LRMC] knew where they wanted to put it and the JMTC needed somebody to put it there," Peel said. "And the DPW [Kaiserslautern] with the Corps of Engineers and SKE made that happen for them."

Mario Calaunan, the land training area and range coordinator for the Kaiserslautern garrison's Personal Service Company, worked on the project from its inception and said he is proud to have been a part of such a successful team. "We're very much satisfied with the job," Calaunan said. "The Corps [of Engineers] was pretty much on call all the time. Anytime we needed something or something came up, they were right here. And they inspected daily."

Dieter Magay, of SKE, said the only problem encountered during the six-month construction effort was the trench. "It's in an area that consists of brittle rock," Magay said of the trench. "We had to do a lot of work to prevent it from collapsing. So we spread mesh wire on the rock, put concrete and cast asphalt in there, and put [in] a permanent elastic installation coat, the kind that is used in water tanks."

All three engineers said they are pleased with the facility and that the responses they've heard were very positive. "Everybody is very happy," Calunan said. "The [LRMC] sergeant major said this was the best course he's ever seen in the whole Army."

Sgt. Brian Best, a podiatry noncommissioned officer in LRMC's Company C., was one of the 14 Soldiers who ran through the course. "We thought we were going to have a mannequin, and then we have a 160-pound patient on there," said Best. "That's real life. That's the way to train. And it's more rewarding both physically and mentally to know that you carried a real person on there."

Best, who left Landstuhl in September to go downrange for a year, said the course was a good "wake-up call" for him "This course [will] let us know what it'll be like down there," said Best. "If you're not physically fit, you're not going to be able to get through this."

Neuenschwander said his team executed the course "perfectly" and hopes that it will give them confidence to conduct their mission to standard every time, whether in the hospital or on the battlefield.

Peel said this is the first time the Corps has assisted in developing a permanent litter obstacle course in Europe, but said he's honored to have been a part of it. "What a gratifying experience to be able to help these Soldiers train for real-life casualty evacuations," he said. "If the Soldiers who train on this facility are able to improve their skills enough to save one person who wouldn't have made it, it's absolutely worth it, 100 percent."

Soldiers training for the Expert Field Medical Badge, the non-combat equivalent of the Combat Medical Badge, enter "The Trench" during the first run of training on Landstuhl's new litter obstacle course site, whose design and construction was managed by the Corps of Engineers. Previously, medical personnel in the Landstuhl community had to travel to Grafenwöhr for training.

The high wall is one of several obstacles on Landstuhl's new Expert Field Medical Badge obstacle course put in by the U.S. Army Corps of Engineers and SKE. Others include the sandpit crawl under barbed wire and the uphill rough terrain march.

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LOOSE NUKES:

PROTECTING A NATION FROM PROLIFERATION

Story and photos by Justin Ward

The 1991 breakup of the former Soviet Union brought with it the closure and abandoning of a vast network of unsecured Soviet nuclear facilities. Although a relatively small country, the former Soviet bloc nation of Georgia has found itself in the middle of one of the most massive nuclear proliferation dispersions in recent history. The most notable of these attempts, according to the *New York Times*, was one man's 1994 attempt to smuggle $20 million of "bomb-grade" highly enriched uranium through its borders.

Although significant U.S. government efforts and a receptive Georgian host have vastly diminished the danger, the threat still remains.

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For many, the mountainous country of Georgia remains a mystery. Shrouded by decades of Soviet rule and corruption, this Transcaucasian nation for years had been off the radar of Western politics and economics.

But since the Rose Revolution of November 2003, the country has worked hard to overcome its ignoble past, trading many of the dark clouds that once kept this country in obscurity for aid packages and trade deals.

Part of the assistance in this country of 4.5 million people has come from the U.S. Army Corps of Engineers, Europe District, which has set up a small office in the capital of Tbilisi to provide engineering assistance to Department of State- and Department of Defense-funded efforts.

For the majority of the past four years, the leader of this office has been Charles Samuel, a native of the Caribbean island of Antigua who said of his time in this nation that he's never learned more, quicker.

"I can't even put into words how much living and working here has enriched my life," said Samuel. "The Georgians are special people – friendly, and always eager to show their warm hospitality. Sure, there've been challenges, but the magnitude – and not to mention the variety – of what our small office has been able to accomplish in the past four years is a testament to the effectiveness of the partnership between this country and the U.S. government."

During a routine facility inspection, Charles Samuel, right, speaks with the construction representative at the recently completed radar station in Chakvi, Georgia. The radar station is one of three Georgian Coast Guard projects managed by the U.S. Army Corps of Engineers and the GBSLE team.

Since 2003, Samuel has overseen the completion of several important border crossing sites and radar stations under the title of the Georgia Border Security and Law Enforcement (GBSLE) assistance program, established in 1998 to support Georgia's sovereignty and territorial integrity.

The efforts at one recently completed GBSLE site on the Georgian-Azerbaijan border made headlines this summer when Georgian customs officers working there discovered a truck attempting to transport across the border a piece of scrap metal emitting the dangerous radioactive signature for the elements plutonium and beryllium, which can be used in the making of nuclear bombs.

Thanks to the U.S. government-funded GBSLE program, the trafficking attempt was foiled.

A District-managed radar site in Chakvi, Georgia, constructed to help the Georgian Coast Guard detect seagoing vessels in the Black Sea littorals, was handed over to the customer in July 2007.

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"I'm very proud to have been a part of the team working to secure the borders here and protect this country, and the international community as well, from illicit trafficking like this," said Samuel after the event.

The success goes to GBSLE program, Samuel said, which hired the U.S. Army Corps of Engineers to manage the renovation of this site and facilitate the installation of the Department of Energy-provided radiation detectors, which ultimately identified the dangerous substances.

"Events like this verify the importance of our mission," said Samuel.

"I can't even put into words how much living and working here has enriched my life."

-Charles Samuel, project engineer chief, Georgia project office

Nuclear smuggling attempts used to be more common in this area of the world but have significantly declined in number due in no small part to the U.S.-financed security precautions, said Samuel.

In 2003, a muddy village on the Armenian border saw one of these attempts. Border police at Sadakhlo, which for years had been neutral ground for the illicit trading of gasoline, tea, and other goods, arrested a man carrying a tea box with about seven ounces of highly enriched uranium from the Russian nuclear complex of Novosibirsk.

Two years later, Georgian authorities near the Russian border staged a sting to arrest a man caught attempting to sell uranium to an undercover officer.

Thanks to the hard work of Samuel, the GBSLE program, and the Department of Energy's Second Line of Defense program however, a new $2 million border crossing station at Sadakhlo, complete with the modern nuclear detection equipment that aids in suppressing proliferation, will be handed over to the Georgian government this fall. Additionally, Samuel and the GBSLE team are currently working on a new border crossing station on the Russian border, not far from where the sting was conducted.

"The GBSLE program [is] really important for the government of Georgia, especially for institution building," said Chris Nelson, chief of party for the GBSLE program. "Thankfully, the government here is very receptive [to it]; they're very grateful."

In addition to the handover of the Sadakhlo site, Samuel and the U.S. Customs and Border Protection's GBSLE team, are working diligently to execute several other important projects for the government of Georgia, including two radar stations on the coast, one other border point of entry, a grass airfield in the snowcapped northern part of the country, and seven remote border crossing stations on the Azerbaijan border.

"Each one of our projects is a little different," said Samuel, "which makes it a challenge sometimes. But we know these projects all make a difference in securing the borders for the government of Georgia, and that's what motivates us."

One of the more difficult projects for Samuel and his team are the remote border crossings, which replace previous tent facilities with hard-roofed facilities. These isolated crossings are challenging,

At this recently completed border port of entry, called "Red Bridge," on the Georgia-Azerbaijan border, a routine inspection this summer discovered a man attempting to smuggle into Georgia a dangerous mixture of plutonium and beryllium, which can be used in the making of nuclear bombs. The attempt was foiled thanks to the efforts of the U.S. Army Corps of Engineers and the GBSLE program.

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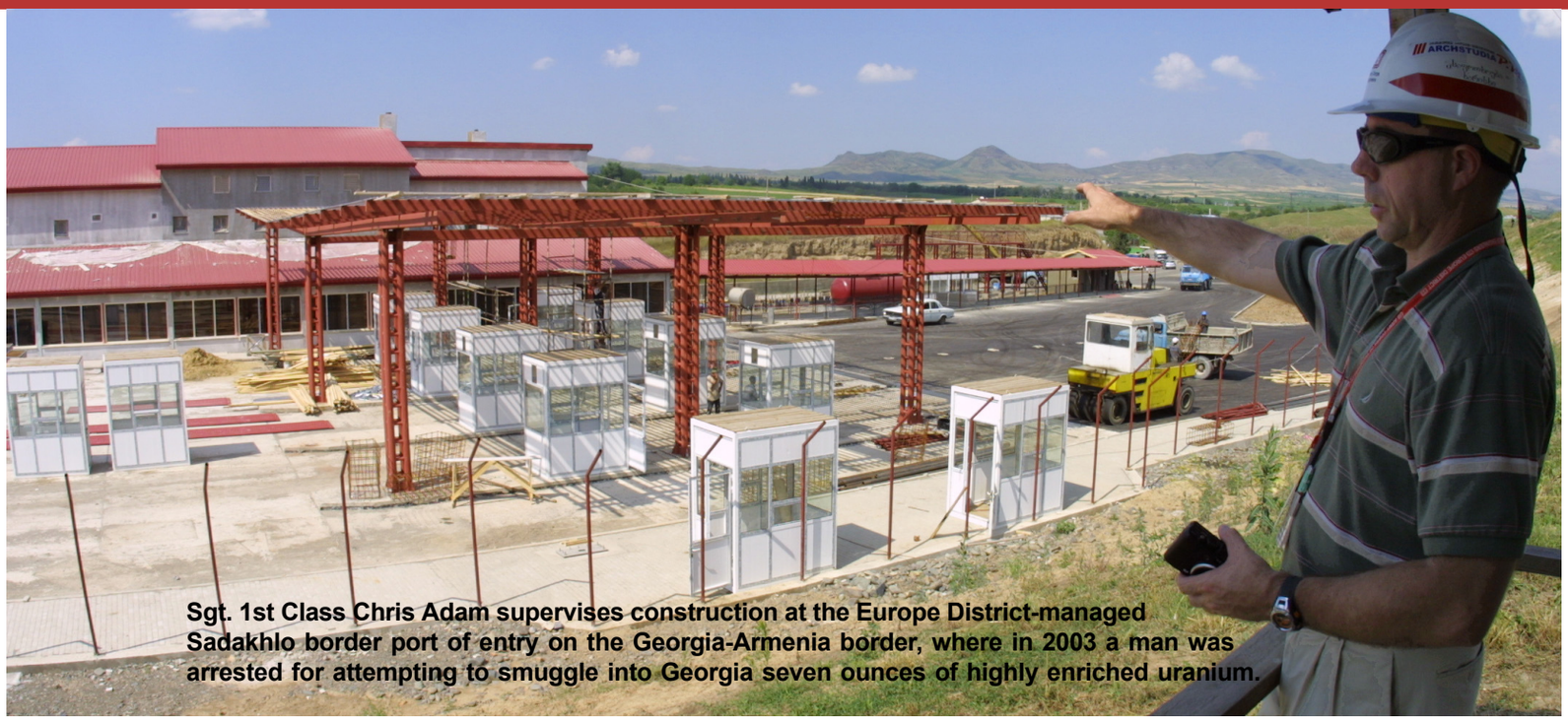

Sgt. 1st Class Chris Adam supervises construction at the Europe District-managed Sadakhlo border port of entry on the Georgia-Armenia border, where in 2003 a man was arrested for attempting to smuggle into Georgia seven ounces of highly enriched uranium.

Samuel said, because of their inaccessibility and the burden of finding and working with local contractors.

"This would be a nightmare without the Army Corps of Engineers to take care of all the fine points of construction," said Glen Schroeder, the senior land border advisor for the U.S. Customs and Border Protection, a branch of the U.S. Department of Homeland Security. "They're absolutely essential and an outstanding partner in this effort."

Samuel's engineering background had allowed him to work on some other significant projects in the past, but he admitted that he had no idea what he was getting into when he accepted the job in Georgia.

"I came here completely fresh and just willing to work," said Samuel. "I can say now that after being here and being associated with this office for the past four years that I've grown a lot professionally and personally. … Georgia is a great country with great people and I'm glad I've gotten this experience."

Although a long way from home, Samuel has managed to make a name for himself at the U.S. Embassy in Tbilisi – his office location – forming strong relationships with representatives from the GBSLE program.

"Charles is a great guy," said Schroeder. "He represents the Corps to the highest levels. You couldn't ask for a better representative [or] a better person to work with on our projects."

With the help of the GBSLE program, officials posit, border security in this Transcaucasus nation will eventually parallel Western levels, including more police presence and more agency transparency.

"This country has a key position in this part of the world," said Schroeder. "So for them to have secure borders and track the entries and exits of persons going in and out of the country … is essential to any free country."

Located on the Black Sea coast, the Anaklia radar station in northwestern Georgia, will be the second of three radar stations to be handed over to the Georgian Coast Guard.

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PIPES, PIPES, PIPES

The 2020 master plan is in place. The designs are done. Now it's time for the Corps' team at Vicenza to lay the groundwork for one of the biggest military construction programs in Europe.

Story and photos by Justin Ward

Although a dozen years away, 2020 is close for the engineers and planners at the U.S. Army Garrison, Vicenza. By that year, say the folks in the garrison's Plans, Analysis, and Integration office (PAIO), the U.S. Army post in Northern Italy will be the model for all other Installation Management Command (IMCOM) Europe garrisons, providing the best maintained facilities, the highest quality services, the safest environment, and the most efficient organizations.

Vicenza's ambitious long range plan includes about $190 million of new military construction (MILCON) projects, renovation, and right-sizing, with the ultimate outcome being an attractive and energy efficient "campus," with plenty of parking and plenty of green space.

Fundamental to that outcome, say planners at this enduring installation, is the work of the U.S. Army Corps of Engineers, Europe District.

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"What we need the Corps for is to help us repair our old facilities – [both] buildings and infrastructure – to bridge the years before the MILCON kicks in," said David Murr, from the garrison's Directorate of Public Works' (DPW's) engineering services section. "It's going to be a shell game moving people around until then. … And we're going to rely a lot on the Corps to make that happen."

Historically, said Damian O'Neill, the District's acting resident engineer at Vicenza, the Corps has been asked to execute small-ticket infrastructure and renovation projects due to the primacy of the Navy's facilities engineering command (NAVFAC) – the principal military engineering agent south of the Alps. However, since the announcement of USAG Vicenza's effort to enact one of the largest MILCON programs in Europe, the Corps has noticed a boost in duties – mostly, he said, showing up as infrastructure projects.

In fact, the infrastructure work awarded in 2007 is 76 percent higher than the five-year average, O'Neill said.

Greg Vallery, chief of the DPW's engineering services section, said the garrison in general has seen a similar increase due to the preparation for the 2020 plan. "Our overall program has probably doubled in the past three years," said Vallery. "And the Corps is a big part of the team making it happen."

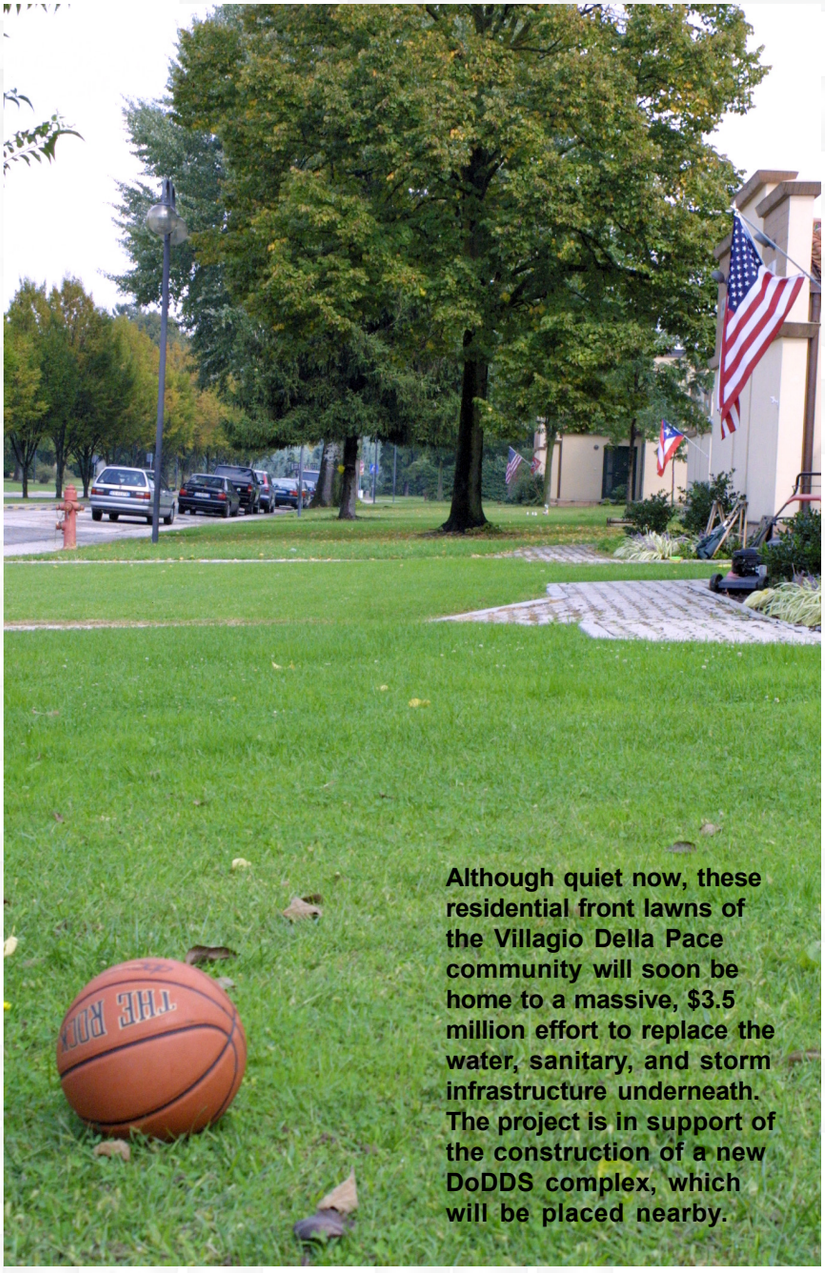
"There's big stuff going on here," said O'Neill, rattling off some of the larger MILCON projects coming to the garrison as part of the 2020 plan, including a new $10 million Soldier and Family Entertainment Center, and a new $35 million Enhanced Health Services Center, and a new $54 million build-to-lease family housing complex in Quinto Vicentino. "We just support in whatever way we can – and that's mostly in utility work."

Currently, the Corps is working on about $—-3 million in utilities upgrades throughout the garrison's footprint, said Tom Perkins, civil engineer with the Corps' Vicenza office. This work not only sets the stage for the demands of future MILCON work, he said, but it also modernizes the garrison to accommodate the demands of current force levels.

"We're really the infrastructure go-to guys here," Perkins said. "It's our job to be receptive to the DPW's needs and support the garrison in any way we can."

Most often that involves what Perkins called "horizontal work" – the building and sustaining of infrastructure to support readiness, power projection, and the well being of Soldiers, Families and Civilian employees.

One of the larger infrastructure projects the Corps has taken to modernize the garrison is to revamp the existing roads and



Although quiet now, these residential front lawns of the Villagio Della Pace community will soon be home to a massive, $3.5 million effort to replace the water, sanitary, and storm infrastructure underneath. The project is in support of the construction of a new DoDDS complex, which will be placed nearby.

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utility lines in the Longare military installation, a small installation now mostly used for barracks, storage, and maintenance space.

"The roads up at Longare used to be old goat trails," said Perkins, who was in charge of the $350,000 project to widen, lengthen, and restore the roads, sidewalks, and curbs as well as install new drain lines, electric lines, and light fixtures. "Now it's a pretty nice road. It's pretty nice up there."

Another massive infrastructure project is the upcoming $2 million co-generation power plant, a set of internal combustion diesel engines to be located on Caserme Ederle, which would produce enough electricity and heat to supplement by almost half the existing electricity and heating draw from the local community.

"In at least three of the four high electricity rate periods, it's going to save us money," said Vallery. "Effectively, we're going to be able to produce electric power cheaper than we can buy it. And the heating … almost comes along for free."

The Corps' largest infrastructure project, however – which is in support of the future MILCON work – is a $2.5 million replacement of all the existing water, sanitary, and storm lines in the nearby Villagio Della Pace residential area.

The project precedes a new $50 million, 18,000-square-meter DoDDS complex – including a new middle school, elementary school, child development center, and school age services building – which will tie into the existing 40-year-old utility infrastructure of the housing area directly across the street.

"These utility systems … have pretty much exceeded their life expectancy," said Vallery.

"We have to ensure we can match up and be able to handle what's coming out of the new DoDDS complex," said O'Neill of the project. "The water wells, water treatment system, and the discharge point for both the sanitary and the storm lines are in the existing housing area. What we're trying to do is make sure it all matches up."

All this utility work is the realization of one of the four guiding principles the garrison's master planners say is necessary to fulfill the 2020 plan.

"This is a very small base – a postage stamp base. But we don't utilize the space appropriately," said Kambiz Razzaghi, chief of the garrison's Transformation Construction Management Office. "The work the Corps has done for us is to direct … funds in an appropriate way to support not only the current needs, but also in the future when we go from 133 buildings to only 33 buildings, that all those buildings will be

When completed, this $350,000 construction site on Longare, a military installation located near Vicenza's main garrison, will unveil widened, lengthened, and restored roads; renovated sidewalks and curbs; and new drain lines, electric lines, and lighting fixtures.

supported by the same system. This is part of the master plan."

In fact, whether it's following through with the garrison's ideas of continuous improvement, enhancing resource efficiency, or practicing fiscal discipline, the bottom line, say planners, is a well planned, high quality, and sustainable network of pipes, drains, and roads, and facilities to bridge the years leading up to 2020, delivered on time, on scope, and on budget. And they have confidence, they say, that that will happen.

"We're a happy customer," said Razzaghi. "The Corps is doing a great job here. … When, from the command point of view, they don't really see a difference between the Army Corps of Engineers and the DPW, we think that's a good thing. It's one engineering team."

Vallery said he has valued the Corps' work in the five years he has been on the organization and will continue to rely on them in the future. "They're an organization of choice because they're an organization we trust," Vallery said. "You can quote me on that."

By supporting the garrison's long-range development plans, O'Neill said, the Corps is doing more than just lowering maintenance and utility costs.

"We're making this garrison more livable, which improves the quality of life for the warfighter and their families and allows them to focus more on the mission."

Top right: Damian O'Neill, acting resident engineer in the Corps' Vicenza office, oversees a water line project near Longare, Italy.

Right: An eternal flame to honor fallen Soldiers and remember those of the Sept. 11 attacks stands in front of the Southern European Task Force Headquarters building, the main tenant at Vicenza and those most affected by the 2020 master plan.

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Embattled Urban Terrain

Story and photos by Justin Ward

With mosques that blast muezzin prayer calls and infrared sensors on almost every street, this Military Operations in Urban Terrain (MOUT) site in Israel's Negev Desert is unlike any other in the world.

A Hebrew sign commemorating the ground breaking ceremony of the Military Operations in Urban Terrain (MOUT) site in the Negev Desert is mounted in front of the newly completed site, the largest MOUT site in the world.

A warren of low-rise buildings in the casbah section of the Israeli Defense Force's recently completed Military Operations in Urban Terrain site, managed by the U.S. Army Corps of Engineers, will help both Israeli and U.S. troops to train for urban warfare.

Amid the shrubs and sand in the arid northern patch of Israel's Negev desert lies a warren of low-rise buildings and narrow alleyways. Piles of burned tires and the occasional wrecked vehicle lay waste in the jumbled clutter of streets. In the distance a donkey brays, bespeaking a rural but settled community.

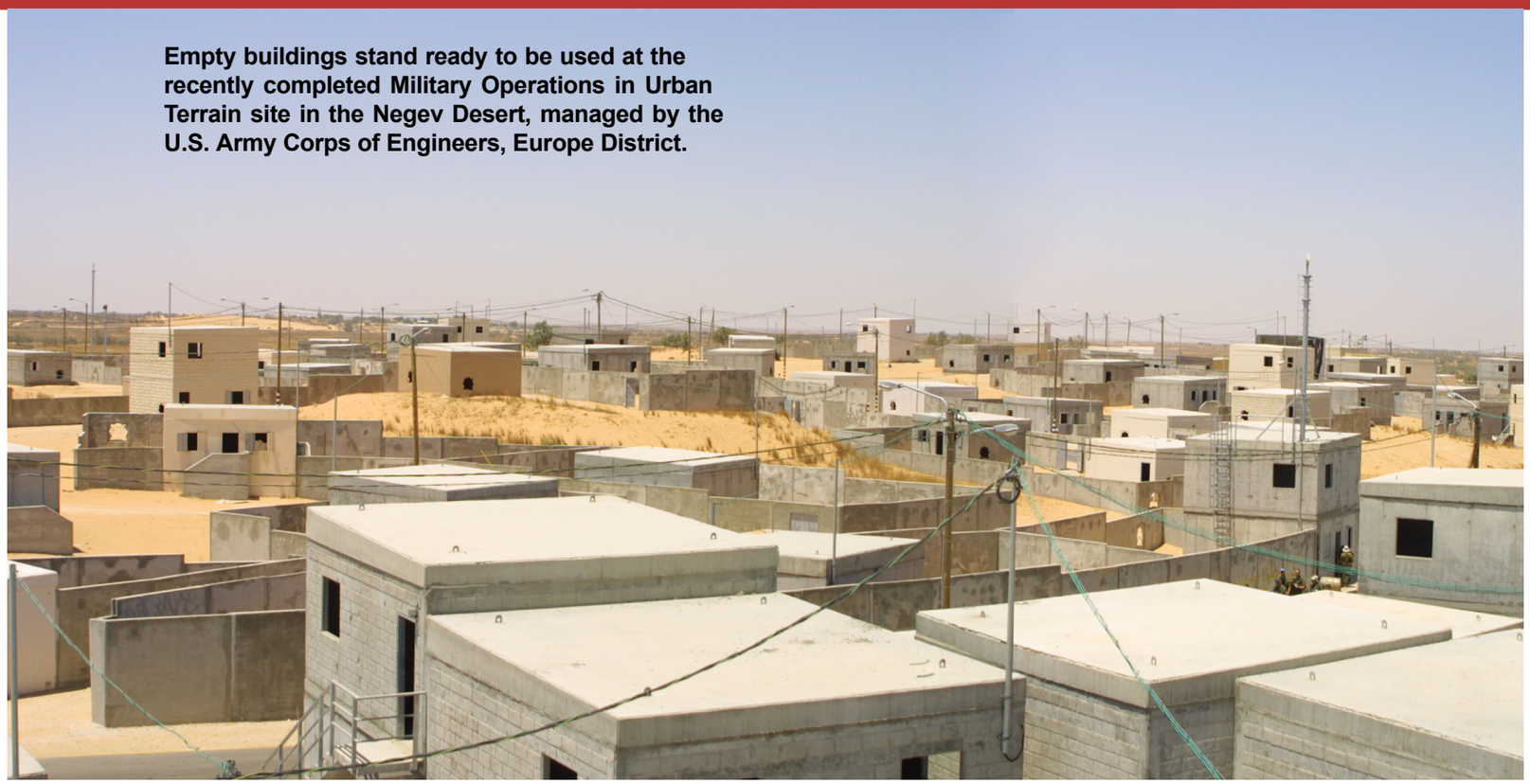
This city is not settled, however. It is brand new. And it's empty.

Built by the U.S. Army Corps of Engineers and contractor M+W Zander as part of the Israeli Defense Forces' emphasis on lighter, more agile units which are more apt for urban warfare, this city can train combat units from platoon up to brigade level.

"Similar to how the U.S. forces are transforming to better fight in urban terrain, the Israeli forces are doing the same," said Dave Vale, U.S. Army Corps of Engineers project engineer. "It seems like nowadays more and more warfare is in urban settings."

There are 472 structures in this 100,000-acre "city," including shops, mosques, schools, a hospital, and an old casbah quarter. During training scenarios, these are staffed by performers play-acting as local civilians. The performers might also act as humanitarian representatives of the Red Cross or as enemy fighters, firing sniper shots from one of the 1,200 doorways, 2,500 windows, or multiple rooftops, underground bunkers, and defensive barriers.

"This is as real as it gets," said Vale. "The Israelis are taking all their lessons-learned from previous urban warfare encounters and employing them



Empty buildings stand ready to be used at the recently completed Military Operations in Urban Terrain site in the Negev Desert, managed by the U.S. Army Corps of Engineers, Europe District.

all here. It's the best training facility I've ever seen."

The recently unveiled MOUT site – as U.S. forces call them – is not as big as some training sites including the Joint Readiness Training Center in Fort Polk, La. But as a pure urban warfare training facility, it is the biggest in the world.

Already, legions of Israeli troops donning wireless MILES (Multiple Integrated Laser Engagement System) gear have trained there, forming their own battle tactics and lessons-learned after each scenario. Soon, Israelis say, U.S. warfighters will also have the chance to train in the labyrinthine layout, which is important considering the ongoing urban firefights in Iraq.

"We also hope that some foreign armies, of course the U.S. Army, will come and train here," said Maj. Rubi Omer, commander of the facility. "[This facility] simulates very well the challenges the U.S. Army is facing."

"This is the most unique project I've ever worked on and will probably be the most unique project in my career."

-David Vale, project engineer, Israel Area Office

Omer said while he is very proud of the facility as a whole, he is most proud of its battlefield technologies.

To better simulate the variety of possible urban warfare situations, the U.S. Army Corps of Engineers has overseen the installment of a public address system, controlled street lights, and an elaborate audio system that can replicate helicopters, mortar rounds, muezzin prayer calls, and about 20 other distinct sounds.

Moreover, above almost every street and in every

building are infrared cameras that detect each Soldier's movements and display them in the facility's main command center. The force identification and location system, as it's called, is used to help the commanders and analysts who gather in the facility's command center after every exercise, conduct after-action reviews.

But while the high-tech nature of the facility is undoubtedly impressive, Vale said what makes the facility distinctive is its size.

"There's GPS tracking, closed-circuit television cameras, and a lot of other [technological] things. But the uniqueness of it is the complexity of the buildings. Even if you had a few buildings it's good for training, but with 472 and a downtown area, 22 three- and four-story buildings, roadways, and the ability to conduct operations in day or night, this is truly a great, great facility."

Vale, who has worked on the $14 million project since 2005, said he was excited to finally hand over the facility, firing off facts about its size and impressiveness. But moreover, he said he was excited to have been a part of such a great project.

"It's been a good partnership on this project," Vale said. "Personally, I've been on projects where there's always problems and people don't try to solve them. Here, people try to solve them. It was a team effort and I think it shows."

Vale said he was also excited to go to Israel to help with such a large project. "This is the most unique project I've ever worked on and will probably be the most unique project in my career," Vale said. "I'm just glad to have been a part of creating something so elaborate and meaningful."

According to Omer, the facility was used heavily this summer, training Israeli forces for a variety of real-life urban combat situations. He added that because Israel has always been "in middle of everything" that he's very pleased to have this facility. "We are always struggling and always defending ourselves," he said. "This is only a small step to help us prepare ourselves and train better for future combat. … But it's working very well and we're very happy with the results."

GRAFENWÖHR MALL: OPEN FOR BUSINESS

Cutting the ribbon outside Grafenwöhr's new, joint commissary/post exchange "mall" are Col. Margaret Burcham, commander, U.S. Army Corps of Engineers Europe District, Thomas Milks, Defense Commissary Agency (DeCA) Europe director, Richard Page, DeCA Chief Operating Officer, Col. Brian Boyle, USAG Grafenwöhr commander, Randy Eller, DeCA Zone manager for Wiesbaden and Grafenwöhr, and Chudri Najdawi, Grafenwöhr commissary store director.

$38 million facilities designed with future, environment in mind

Story and photos by Justin Ward

It was just before 9:30 a.m. on Sept. 26 when shoppers and spectators alike witnessed the ribbon cutting for the Army's newest – and largest – shopping center in Europe. It was the last obstacle between them and the deals to be found in their new "mall" – a $38 million consolidated Post Exchange/ Commissary whose design and construction was managed by the U.S. Army Corps of Engineers.

Grafenwöhr's new mall is a huge quality-of-life improvement for the Soldiers, Civilians, and Family members living in the community, said Matt Mennona, Army and Air Force Exchange Service (AAFES) exchange manager.

"I firmly believe that we are really taking care of the Families and Soldiers that serve," said Mennona to a local Armed Forces Network television news crew. "To me, this is the best of the best. I don't think you'll find a finer facility in Europe."

The new commissary is four times larger than the previous store, said Richard Page, chief operating officer of the Defense Commissary Agency (DeCA), with the product selection easily doubling its predecessor's. The number of checkouts also more than doubles the previous commissary's, excluding the self-check out option, he said.

The combined complex, at almost 200,000 square feet, includes a bookstore, a 339-seat food court, a barber shop, a beauty shop, and space for 11 other concessionaires.

"Just two years ago this land was nothing but scrub," said Col. Margaret Burcham, Europe District commander. "Our fine planners, project managers, engineers, and architects turned this site into the Army's

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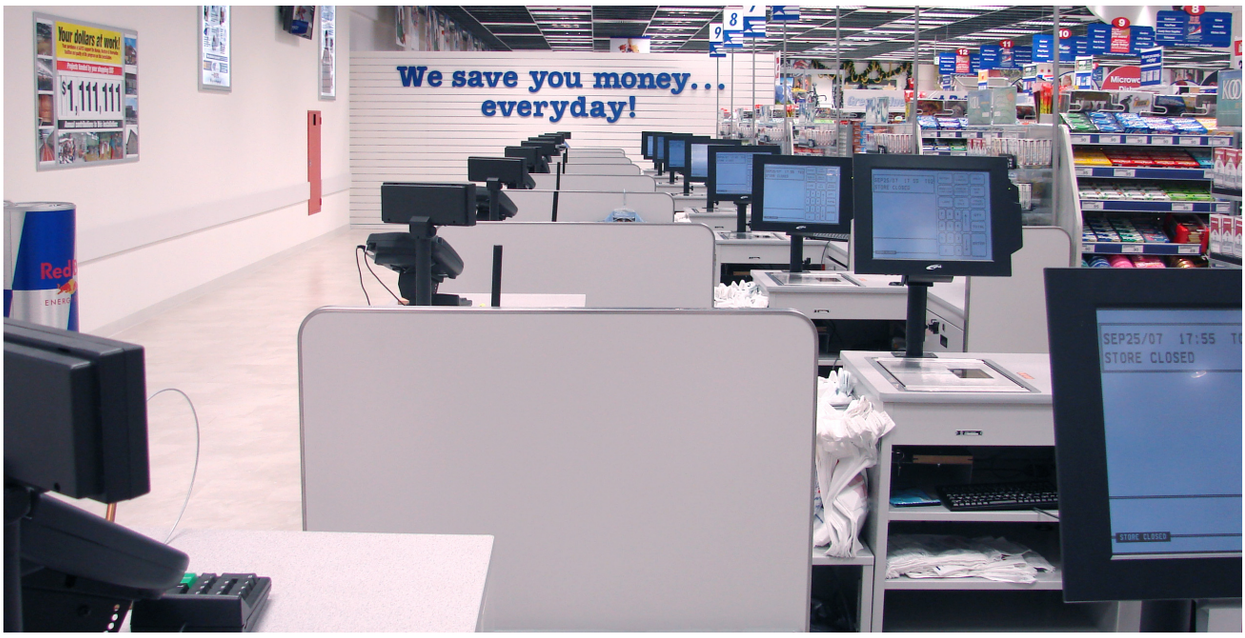

The new 140,000-square-foot post exchange includes this retail sales area as well as a food court, concessions mall, administrative office, and merchandise processing area.

largest shopping complex in Europe - one which meets the needs of today and also those well into the future."

The mall was indeed designed with the future in mind, said Susanne Bartsch, public affairs officer at Grafenwöhr. The population on the installation, which used to include just 1,200 Soldiers, will soon be home to 4,500 active-duty Soldiers and 7,000 Family members, she said.

The facilities were also designed with the "college campus" concept in mind, said Douglas Blaisdell, the District's project engineer at Grafenwöhr. The mall – located within walking distance of several new barracks, the upcoming lodge, and battalion and company operations buildings – will be the hub of what's to be a new community center.

"Almost $100 million of construction goes into Grafenwöhr every year, transforming it into a modern, well-developed, livable overseas garrison - truly a Community of Excellence," said Burcham. "And, together with all our partners, we can achieve that level. We can make Grafenwöhr a Community of Excellence."

The mall also boasts environmental and energy friendliness, as it was the first joint AAFES-DeCA initiative to be certified gold with the Sustainable Project Rating Tool, or "SPiRiT," for ecological design, operation, and refurbishment of buildings and infrastructure.

"The term 'SPiRiT' applies more to a process or way of thinking during the design phase," said Blaisdell. The new facilities, he said, take into account energy efficient equipment, complementary insulation in the walls, floors, ceilings, glass, and doors, and an interesting energy conservation design that allows both heat and cold air to be recovered.

In addition to the new mall, the District was able to help cut the ribbon this summer on a new $8.3 million dining facility, a renovated $13 health and dental clinic, and several new barracks buildings. Next year, the District plans to hand two new schools, a child development center, a youth activity center, a new washrack, and several renovated headquarters buildings.

A patriotic display at the new commissary sits near the "Grab & Go" area for quick check out.

"And, when they're completed," said Burcham, "I know each one will be of the highest quality – because we believe that the quality of these facilities should be commensurate with the sacrifice our great warfighters are making for our nation. And with every facility we complete, I believe we accomplish that."

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Open for business

Col. Margaret Burcham, District commander, speaks with Col. Brian Boyle, USAG Grafenwöhr, Randy Eller, DeCA Zone Manager for Wiesbaden, and Thomas Milks, DeCA Europe director, during the VIP night opening of the new mall at Graf.

Photo by Justin Ward