

# ESSAYONS *forward*

U.S. Army Corps of Engineers  
Gulf Region Division, Iraq - Volume 5, Issue 7

July 2008

Workers connect  
turbines at Qudas

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**On the cover:**



A 50-ton crane holds the 400kV insulator overhead as workers connect it to the bushing in the Qudas electrical generating plant switchyard, see page 12

USACE photo by Kendal Smith

## Gulf Region Division people donate chairs



Gulf Region Division Deputy Commander Col. Vincent Saroni presents Ministry of Defense Prosthetics Clinic staff with 44 wheel chairs purchased with funds raised at the GRD Organization Day. Transportation of the chairs to Iraq was provided by Spirit of America ([www.spiritofamerica.net](http://www.spiritofamerica.net)), a U.S.-based nonprofit. The clinic is located in the Freedom Towers in the International Zone, Baghdad, Iraq.

USACE photo by H. Al-Taie

# Commander's Commentary



## New leaders bring expertise

July has been a month of significant leadership change throughout the Gulf Region Division. Our very accomplished District Commanders, Colonels Hill, Pfenning and Vasta, have completed their tours in an outstanding manner and taken their valuable experience onward to positions of increasing responsibility.

While their talent will be missed, we have a deep bench and three very capable colonels have volunteered to command our Districts. Col. Margaret Burcham, Col. Jack Drolet and Col. Ron Light are bringing their expertise to the reconstruction of Iraq. These fine officers are not the only new members of the GRD leadership team.

Here at the headquarters, Mike Ensich has joined us as the new Director of Programs, replacing Lloyd Caldwell. Mike comes on board at a critical time as we draw the huge and very successful IRRF program to a close and then ramp up to support the Multi-National Security Transition Command-Iraq program involving Iraqi Security Forces infrastructure.

Other key positions are changing in the GRD Headquarters. Col. Van Fuller is already here making his rounds to the Districts as he prepares to take the Deputy Commanding Officer reins from Col. Vince Saroni, Col. Paul Legere becomes the new Chief

of Staff on the redeployment of Col. Gary Pease, and Lt. Col. Chuck Samaris replaces Lt. Col. Steven Roemhildt as the new G3.

All of these departing leaders have performed magnificently and contributed greatly to the success of this organization during their tenures. It has been my honor to have served with them.

While their replacements have large boots to fill, their reputations precede them and we know they will help us all take GRD to even greater heights.

Our next terrain feature to surmount is fiscal year end. We need to work very hard to keep those contract awards involving expiring funds and other actions tied to the end of the fiscal year, on track. The American taxpayer and the citizens of Iraq are counting on us to make the most effective use of the money allocated to rebuilding this country.

I appreciate the sacrifice each of you is making to take part in this important mission, and the contributions of your families in supporting your work here. Together, with this new group of leaders, we will continue to make steady progress in assisting the Government of Iraq rebuild for a secure and prosperous future.

**ESSAYONS!**

*Brig. Gen. Jeffrey Dorko  
Gulf Region Division  
Commander*

# Command Sgt. Maj. Message



## Best results from commitment

Persistence pays.

Hundreds of projects have been completed in the reconstruction of Iraq since I arrived the first week of June 2007 to become the Gulf Region Division Command Sergeant Major.

I have been continually impressed by the people stepping up to take part in this one-of-a-kind engineering

mission in answer to our Nation's call and to help secure the future of the people of Iraq as citizens of a free and democratic country.

At each month's Hail & Patch ceremony our former Commanding General Brig. Gen. Walsh and our current Commanding General Brig. Gen. Dorko have welcomed our newest volunteers, and at each award ceremony, they have recognized the many individual contributions of our team members who have completed their tours and are moving on to other assignments. Each one of these people has contributed in a tangible way to greater stability in the region.

We must remain committed to continue on delivering quality construction on time and within assigned budget simultaneously maintaining integrity and building the capacity the Iraqi

Government needs to assume full responsibility of their national infrastructure.

Persistence pays not only in the projects the Gulf Region Division is completing in support of the Government of Iraq, but persistence in doing "the right things right" has also helped us accomplish so much while avoiding unnecessary risk.

Safety involves following established procedures. They are not laid out to hinder us, but to ensure we all take the time to avoid common mistakes.

Know your physical limitations. When it's hot, drink plenty of fluids. Stay aware of your surroundings and watch out for tripping and fall hazards.

Vehicle accidents can happen in an instant. Always buckle up to prevent the "second collision" of your body and the hard parts of your vehicle. Secure loose objects before you travel to prevent their becoming airborne. It is better to use a minute of your life, than lose your life in a minute.

Each of you is a tremendous resource and asset to the mission. You belong to unique cohort of the doers while others are on the sidelines. Keep safety in mind and stay in the game.

**ESSAYONS! Army Strong!**

*Command Sgt. Maj. Eloy Alcivar  
Gulf Region Division*



# Al Karkh Maternity Hospital nears renovation completion

BY ERICH LANGER

GULF REGION DIVISION

Al Karkh Maternity Hospital, located in the Karkh district of western Baghdad, recently began receiving truckloads of much needed medical equipment; deliveries that are speeding the opening of the hospital to hundreds of Baghdad mothers-to-be.

Sgt. 1<sup>st</sup> Class Hector Cruz, a construction representative from the Gulf Region Division, U.S. Army Corps of Engineers Central district, makes final checks on numerous hospital construction initiatives recently completed. From new heating, ventilating and air conditioning to electrical and mechanical upgrades, GRD managed this U.S.-funded hospital refurbishment. Nearly \$600,000 was spent on sorely needed repairs to a hospital that received no upgrades and little maintenance from the Saddam regime. In fact, no new hospitals were completed in Iraq since the mid-1980s.

“To date, GRD has completed 21 renovations at 18 hospitals across Iraq that will treat 15,000 patients per day,” said Brig. Gen. Jeffery Dorko, GRD commander. “Also, working with our Government of Iraq partners, we have constructed 113 of 132 new Primary Healthcare Centers that will treat 8,000 Iraqis each day. We still have more to achieve in helping provide health care to Iraqis, but we are making great strides in this important area.”

The improving security situation is paying dividends as GRD and its contractors complete more and more construction projects. Dr. Eman A. Atta, Karkh’s manager/hospital administrator, worked at Karkh Maternity for only six months, but has seen Baghdad and the neighborhood around the hospital improve dramatically.

“The security situation has improved greatly,” said Atta. “It was very, very bad here for so long; so bad that I refused delivery of vital medical equipment until it was safe from those who would rob and steal from the hospital.”

Atta was painfully aware of the poor security situation after one large delivery of expensive diagnostic equipment that included X-ray machines and other high-end medical equipment was hijacked. “Stolen before it ever made it to the hospital,” she said with anger and frustration. “To keep this from happening again, Dr. Emad Sabry and I arranged to store the equipment in various secret locations around Baghdad until security improved.”

Iraqi Army Maj. Hussain is in charge of security at Karkh and the area around the hospital, and echoes Atta’s reflection of security in the neighborhood. “It has gotten better, it is much safer here. My soldiers are always watching for any danger that would come to the hospital and its patients.”

“We hope to open the hospital to inpatient care, surgeries and deliveries within two months,” said Dr. Emad Sabry, an anesthesiologist and one of Karkh’s ten senior physicians. “The hospital still needs additional equipment—all types from beds to incubators and most importantly the pharmaceuticals. The Ministry of Health has promised to provide these required items.”



USACE photo by Erich Langer

*As security in Baghdad’s western Karkh district has improved, hospital management has been accepting Ministry of Health deliveries of medical equipment and supplies that complement the Gulf Region Division’s nearly \$600,000 in essential repairs.*

Managing scores of projects and frequently on construction sites four or five days each week, Cruz stays very busy. “We rely heavily on our Iraqi engineers who are on project sites every day,” he said. “They work directly with the contractors and provide our office with regular reports, photos and updates on project progress. We just couldn’t do the job without them.”

To minimize interruptions of essential hospital activities, the local Iraqi construction firm coordinated all construction work with the hospital and Atta.

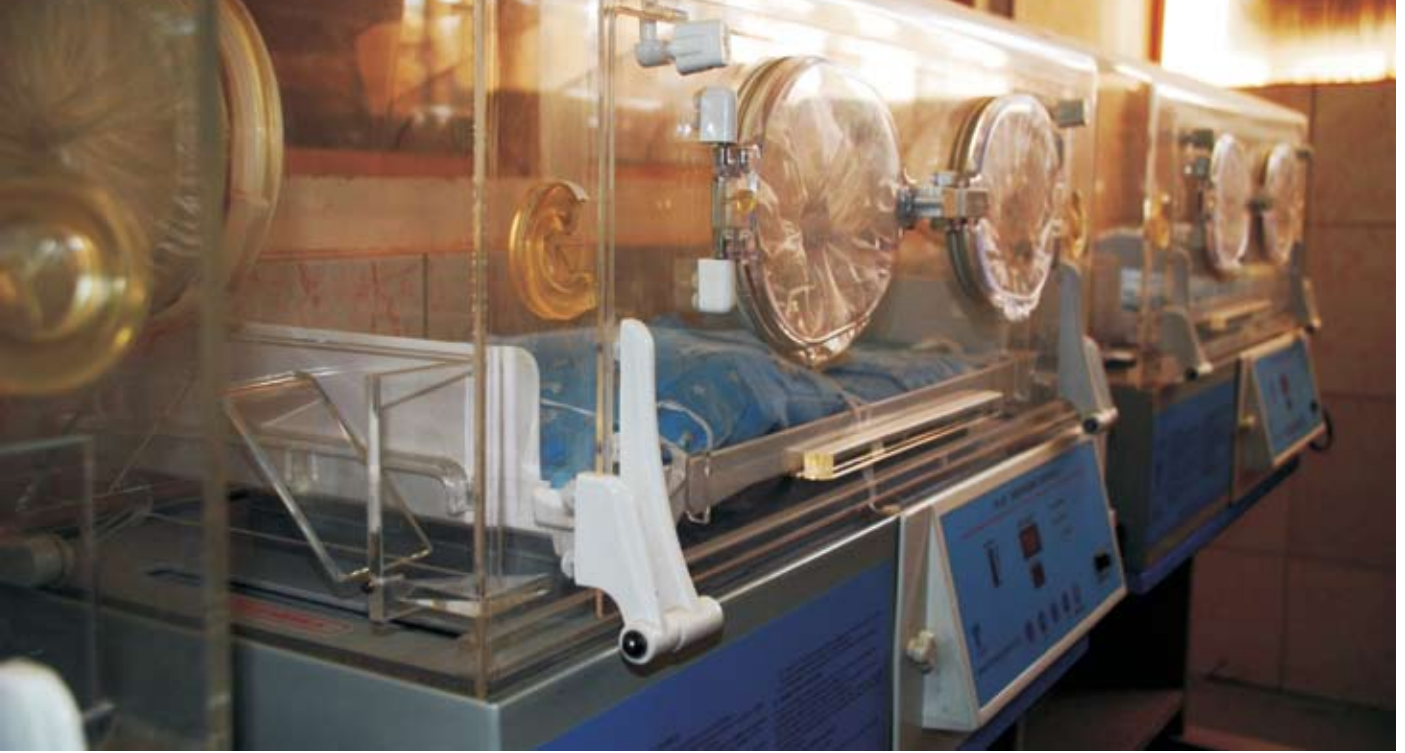
The renovation construction included replacing the HVAC system, mechanical system (boilers), electrical, structural, reverse osmosis water purification system, new medical waste incinerator, medical gases center, nurse call system, data communication network, TV system, elevator upgrade, and fire alarm with a fire fighting extinguishing system.

“The new medical gases center is much improved over the old Iraqi way,” said Sabry. “This is much more modern, efficient and safer, too. The old way had oxygen tanks in each of the rooms. Hospital staff had to frequently move and handle the tanks—very inefficient and more dangerous.”

Cruz said, “Previously, this was a facility in disrepair after years and years of neglect. But now, Karkh’s patients will be able to come to the hospital and have their babies in a clean, secure functioning hospital. Dr. Atta and her staff will have the tools to provide full spectrum medical care for women from a population of more than 250,000.”

“We hope to open the hospital to inpatient, surgeries and deliveries within two months.”

Dr. Emad Sabry  
Anesthesiologist



## مستشفى الكرخ للولادة يفتح ابوابه قريبا

بقلم اريك لانكر  
فرقة منطقة الخليج

الشهور الستة الأخيرة قائلة "تحسن الوضع الأمني كثيرا بعد أن كان سينا للغاية لمدة طويلة، كان سينا لدرجة أنني رفضت تسلم معدات طبية مهمة حتى استقر الوضع مخافة أن تتعرض للسرقة من المستشفى".

والمديرة على دراية بسوء الأوضاع سابقا، فقد تعرضت للسرقة تحت التهديد شحنة كبيرة من معدات التشخيص الباهضة الثمن، ضمنها أجهزة الأشعة السينية وبعض الأجهزة المتقدمة، حيث قالت بغضب "سُرقت قبل أن تصل إلى المستشفى"، وأضافت "لتفادي حدوث ذلك مرة أخرى قررت مع أحد الأطباء خزن المعدات في عدة أماكن سرية حول بغداد حتى تتحسن الأوضاع الأمنية". وأكد الرائد حسين المسؤول عن حماية المستشفى والمنطقة ما قاله الأطباء حول تحسن الأوضاع الأمنية حيث أوضح أن "الأوضاع تحسنت وأصبح هذا المكان أكثر أمنا، يراقب جنودي دائما أي خطر قد يتعرض له المستشفى أو مرضاه".

وقال أحد الأطباء العشرة الأقدمين في المستشفى "نأمل أن يفتح المستشفى أبوابه لرعاية المرضى الراقيين وإجراء العمليات الجراحية والولادات في غضون شهرين"، مضيفا أن المستشفى "لا يزال بحاجة إلى معدات إضافية - كالأسرة والحاضنات والأهم من ذلك الأدوية، وقد وعدت وزارة الصحة بتوفير هذه المواد". ويعكف كروز على المساعدة في إدارة مشروعات كثيرة ويزور مواقع البناء أربع أو خمس مرات في الأسبوع، ويقول "نعتمد كثيرا على المهندسين العراقيين في مواقع المشروعات، فهم يقومون بأعمال مهمة ويعملون مباشرة مع المقاولين ويقومون بالأعمال المنجزة".

وقال الطبيب الأقدم ان "مركز الغازات الطبية الجديد متطور وأفضل من القديم، لانه فعال وأكثر أمنا، فيما كان القديم يتطلب وضع خزانات الاوكسجين في كل غرفة، وكان يتعين دائما على موظفي المستشفى نقل الخزانات والتعامل الخطر معها". وأردف كروز بالقول "عانى هذا المستشفى من الإهمال لمدة أعوام، لكن أصبح بمقدور الحوامل المحيي إلى المستشفى وانجاب أولادهم في بيئة نظيفة وأمنة وفعالة فلدى الأطباء المعدات اللازمة لتقديم رعاية طبية كاملة للنساء الموجودات في مجتمع يبلغ تعدادها ٢٥٠ ألف نسمة".

بغداد، العراق - فيما انهمك عمال بافراغ شاحنتين محملتين بمعدات طبية تشدد الحاجة إليها، تفاعل العاملون في مستشفى الكرخ للولادة (غرب بغداد) باقتراب موعد افتتاحه لكي يستقبل مئات من النساء الحوامل في بغداد ليضعن اولادهن فيه.

ويقوم السارجنت هكتور كروز، ممثل الاعمار في قسم الوسط من فرقة منطقة الخليج التابعة لفيلق مهندسي الجيش الأميركي، بعمليات التدقيق النهائية على أعمال الترميم والتجديد في المستشفى التي تنوعت من ترفية أنظمة التكييف والتهوية إلى الأنظمة الكهربائية والميكانيكية، وأدارت فرقة منطقة الخليج أعمال الترميم التي مولتها الولايات المتحدة بنحو ٦٠٠ ألف دولار أنفقت على تصليحات مست الحاجة إليها لمستشفى لم يتلق تطورا أو صيانة منذ الاطاحة بنظام صدام حسين.

وتنسق الشركة العراقية أعمال البناء مع ادارة المستشفى لتقليل احتمالات توقف أنشطة المستشفى الأساسية.

وتتضمن أعمال الترميم والتجديد تبديل نظام التكييف المركزي والتهوية ومرآج التسخين الميكانيكية ونظام التناضح العكسي للماء ومحرفة جديدة للنفايات الطبية ومركز للغازات الطبية ونظام استدعاء الممرضات وشبكة اتصالات وتطوير المصعد ونظام اطفاء الحرائق. وفي الحقيقة، لم يتم بناء مستشفيات جديدة في العراق منذ منتصف الثمانينيات.

وقال البريكادير جنرال جفري دوركو قائد فرقة منطقة الخليج أن الفرقة "أنجزت حتى الان ٢١ عمل ترميم ل ١٨ مستشفى في أنحاء العراق كافة تقدم العناية الصحية ل ١٥ ألف مريض في اليوم"، مضيفا "نعلم مع شركائنا في حكومة العراق، بنينا ١١٣ مستوصفا ومركزا صحيا من اصل ١٣٢ مركزا خططنا بنائها بامكانها استقبال ثمانية الاف مريض يوميا، ولا يزال لدينا المزيد لننجزه فساعد بتقديم العناية الصحية للعراقيين".

ويؤتي تحسن الأوضاع الأمنية ثماره بينما تنجز فرقة منطقة الخليج ومقاولوها مزيدا من مشروعات البناء. وتصف مديرة المستشفى تحسن الوضع الأمني في الكرخ وبغداد بنحو عام في



# محطة المسيب تولد مزيدا من الكهرباء



بقلم اريك لانكر  
فرقة منطقة الخليج

المسيب، العراق - فيما حل على العراقيين صيف قاتظ، تزايدت الحاجة الى الكهرباء وغذاها شراء العراقيين للوازم كهربائية يستهلك بعضها كثيرا من الكهرباء كأجهزة التكييف والأفران وأصبحوا يستعملوها كثيرا. وتحاول منشآت كهربائية جديدة او مرممة كمحطة كهرباء المسيب العاملة بالتوربين الغازي ردم الفجوة بين الحاجة وبين القدرة على اضافة مزيد من الميكائوات الى الشبكة الكهربائية.

ويعمل مهندسو فرقة منطقة الخليج التابعة لفيلق مهندسي الجيش الاميركي مع وزارة الكهرباء العراقية لحل مشكلة الكهرباء المستعصية. يعد مشروع محطة كهرباء المسيب الغازية بتكلفة ٢٦،٨ مليون دولار ضمن المشروعات التي تم تجديدها مؤخرا لكي تسهم بنحو فاعل في ردف الشبكة الكهربائية.

وقال جوزيف ويندل، مسؤول توليد الكهرباء في فرقة منطقة الخليج "سوف تضيف هذه المحطة ٤٠٠ ميكا وات وهذا يعني تجهيز ٣٦ ألف منزل بالكهرباء"، وأضاف "لكن الزيادة كانت من نصيب المصفاة الجديدة القادرة على انتاج ٤٠ الف برميل من وقود الديزل في اليوم".

وتتضمن اعمال البناء للمحطة بناء وحدة معالجة المياه واعادة تأهيل المولدات بماكيناتها من طراز آل أم ٦٠٠٠ وهي نفسها التي تستعملها طائرات الجمبو ٧٤٧ فضلا عن بناء مصفاة جديدة. وبنشاء مصفاة قريبة من محطة المسيب اصبحت الاخيرة تحصل على امدادات وقود الديزل بنحو منتظم لتشغيل مولداتها. واكد ويندل "مثاليا، سوف تنتج المصفاة كمية من الديزل اكثر من المطلوب في المسيب ... يخطط وزير الكهرباء لاستخدام الوقود الاضافي لمحطات كهرباء بغداد التي تعمل بالغاز، وهذا مهم جدا لان الديزل شحيح".

ونصبت مولدات آل أم ٦٠٠٠ التي تنتجها شركة جنرال ألكترى قبل وصول فرقة منطقة الخليج في ٢٠٠٤، لكنها لم تكن تعمل وكانت المنشأة شبه متروكة بسبب عدة عوامل، فقد عانى المصنع من نقص حاد في الصيانة والعاملين ذوي الخبرة وقطع الغيار الأساسية.

وقال مدير عقد اعمار المسيب ان "أبرز المشكلات في المحطة هو عدم توفر المواد المهمة في العراق"، مضيفا "تستورد هذه المواد عادة من الخارج، لم يتمكن العراق من الحصول على الأجزاء الميكانيكية بسبب الحرب الطويلة مع ايران وحرب الخليج وحرب الاطاحة بصدام في ٢٠٠٣، ولم يستطع الحصول على المعدات المتخصصة في مدة الحصار الطويلة". وتنفقر منشأة المسيب الى مصدر للوقود فضلا عن العمالة الماهرة والمواد، لذا كان بناء المصفاة مهما.

وقال كينيث مكاناني نائب مسؤول قطاع الكهرباء في فرقة منطقة الخليج "من الصعب الحصول على وقود الديزل، من ناحية اخرى يسهل نسبيا الحصول على النفط الخام"، وأضاف "يضخ النفط الخام بالانابيب او ينقل بالشاحنات الى المسيب ثم يصفى الى الديزل بالوحدة التي بنيت حديثا، وسوف تستعمل محطة المسيب جزءا من الديزل والباقي سينقل الى محطات الكهرباء الاخرى العاملة بالتوربين الغازي".

ووفقا لمكاناني، هناك منافع لتصميم الوحدات النموذجية للمحطات الكهربائية الغازية، "بافتراض أننا نستطيع الحصول على ماكينات تعمل بالتوربين الغازي والمولدات وكل المعدات المتعلقة،

فان الامر لن يستغرق وقتا طويلا للحصول على منشأة جديدة تعمل بهذا النحو".

من جهتم، قال مقاولو بناء المحطات الكهربائية ان بالامكان بناء محطة كهذه في غضون أقل من عام في البلدان الغربية حيث تتوفر الاجزاء ولا تؤخذ الأوضاع الأمنية بالحسبان. أما في العراق فان الامر يستغرق ١٤ شهرا أو أكثر.

لكن السلبى في محركات التوربينات الغازية هو التكلفة المرتفعة، حيث تقترب من ٥٠ مليون دولار لكل محرك طراز آل أم ٦٠٠٠ ما يعد باهض التكاليف مقارنة بالانتاج.

وعلى النقيض من ذلك، فان محطات التوليد الحرارية كالمنشأة التي تبعد ٣٠٠ متر من محطة المسيب والتي بنيت في منتصف الثمانينيات، تعمل على النفط الخام وباستطاعتها توليد عشرة أضعاف ما تولده الغازية لكن بناءها يستغرق وقتا وتكاليفا اعلى بكثير.

وقال مكاناني ان "توليد المحطة الحرارية يعد قفزة كمية اعلى من المحطة الغازية ... وكذلك يكون تشغيلها أرخص لانك تحصل على مزيد من الطاقة بالميكائوات من مقدار أقل من الوقود ولاسيما ان الحصول على النفط الخام اسهل بكثير في العراق". وبمرور الوقت، يعوض الادخار الذي توفره المحطة الحرارية النفقات المرتفعة لبنائها.

وشدد مكاناني على أن "المناقشات مستمرة بين فرقة منطقة الخليج ووزارة الكهرباء العراقية للتوصل الى نوع المحطات التي سينصبوها"، مضيفا "مازال هناك قدر كبير من العمل يتعين القيام به للحصول على شبكة كهربائية شبيهة بتلك الموجودة في الولايات المتحدة. الأمر يحتاج الى الوقت وكثير من المال، حيث لم يتم استثمار أموال في الشبكة لمدة ٢٥ عاما".

واستثمرت الولايات المتحدة ٦،٦ مليار دولار في برنامج كهرباء العراق، وهذا المبلغ هو أقل من ٢٠ مليار دولار كان البنك الدولي قدرها في ٢٠٠٤. لكن مكتب مساعدة العراق الانتقالي التابع لوزارة الخارجية الأميركية قدر حاليا تكلفة "اصلاح" البنية التحتية للكهرباء في العراق بنحو ٣٠ مليار دولار.

ومع ذلك فليس كل شيء قاتما، اذ قال ويندل "تزيد حكومة العراق من استعمال أموالها المخصصة للمشروعات وتحرص على أكمال ما بدأها". مرة اخرى تستمر الشراكة الايجابية في ان تكون مفتاح مشكلة الكهرباء في العراق.

# On-site refinery fuels Mussayib electric plant

STORY & PHOTOS BY ERICH LANGER  
GULF REGION DIVISION

Iraqis are immersed in another summer of triple digit heat. Electrical demand, largely fueled by more consumer purchase and use of electricity-loving appliances, like air conditioners, washing machines and microwave ovens, continues to outstrip supply. Electricity generated from new and refurbished electrical generation facilities help reduce the gap between need and capacity by putting additional megawatts on the grid.

Gulf Region Division engineers and the Government of Iraq's Ministry of Electricity (MoE) are working in partnership to solve the enduring problem of providing more electricity to the Iraqi people. The \$26.8 million Mussayib Gas Generation Power Plant project is among the most recent plant refurbishments.

"This power plant will bring on-line approximately 400 MW of electricity, which is enough to power 36,000 Iraqi homes," said Joseph Wendl, GRD Electrical Generation lead. "But, the added value of Mussayib centers on the new refinery currently being commissioned. The new state-of-the-art refinery has the capacity of producing more than 40,000 barrels of diesel each day."

Construction work at the plant includes building the water treatment plant, energizing the switch yard, rehabilitating the LM 6000-engine driven generators—the same engines that power Boeing 747 jumbo jets—and building the new refinery (topping plant).

By co-locating a refinery at Mussayib, the plant is set to have a steady supply of diesel to run the facility's powerful generators.

"Ideally, the refinery will produce more diesel than is required at Mussayib,"

SEE **GENERATION**, PAGE 8





# Generation up

CONTINUED FROM PAGE 7

said Wendl. “The Minister of Electricity plans to use the additional fuel to help power other Baghdad-area gas engine generation plants. This is very important because diesel is difficult to come by in this country.”

The General Electric LM 6000 generators were in place prior to the arrival of GRD in 2004, but were not functioning. The facility was almost scrapped for a number of factors—all synonymous to the electrical problem in Iraq. The plant suffered from a severe shortfall in maintenance, trained workers and access to essential spare parts.

Mussayib’s Contract Director Abdul Latif Mohammed said the greatest obstacle faced inside the power plant is the unavailability of materials. “Usually, these materials must be imported from outside Iraq. Iraq did not have access to mechanical parts and trade due to the long Iran War, the Gulf War and the liberation from Saddam in 2003. Much of the time Iraq was under embargo for specialized equipment,” he said.

In addition to the shortage of materials and skilled labor, the Mussayib facility lacked a fuel source. The construction of the refinery was of critical importance for the MoE and GRD.

“Diesel fuel is a difficult commodity to get your hands on. Crude oil, on the other hand, is comparably easy to get,” said Kent McAnany, GRD deputy Energy Sector lead. “The crude is piped or trucked to Mussayib and refined into diesel at the new topping plant.

“There remains a tremendous amount of work that needs to be done in order to have an electrical grid similar to the one we have in the United States,” said McAnany. “These things take time and a lot of money—money that was not invested in the grid over the past 25 years.”

The United States is investing \$6.6 billion into Iraq’s electrical program. Still, the World Bank’s 2004 estimate of \$20 billion will not be reached by U.S. contributions. Currently, the U.S. Department of State Iraq Transition Assistance Office estimates the cost of “fixing” Iraq’s electricity infrastructure approaches \$30 billion. All is not bleak, however. “The GoI is increasingly stepping up with their own Iraqi funds for projects and are anxious to build on what we have started,” said Wendl.

## Memorial held for teammate lost

Members of the Gulf Region North district came together May 7 to remember Jim Lockard, friend and co-worker, killed May 2 as a result of enemy action.

Lockard, a DoD contractor and project manager at GRN headquarters since July 2007, died at the Combat Support Hospital at Coalition Operating Base Speicher from injuries sustained in an improvised explosive device attack while traveling to a project site along the Bayji to Baghdad Pipeline Exclusion Zone.

Members of the command gathered to honor Lockard’s life and service to the cause of helping others. For almost a year, he served as a member of GRN Programs and Project Management Division as project manager for 45 primary healthcare centers, projects in the province of Salah Ah Din, and most recently, the pipeline exclusion zone. He began work in Iraq in 2004 with the Gulf Region South district at Camp Talil, Iraq.

GRN Commander Col. Michael Pfenning described Lockard as an inspiration to all, a person everyone gravitated to, and a person who always helped others.

“For those of us who knew Jim, he was always dedicated to his work, technically competent and totally selfless. He was a man of courage, competence and character,” Pfenning said. “He is remembered by us all as an honorable and courageous man.”

Pfenning said, “We will continue to treasure not only the memories of his service alongside us as members of the Coalition Forces in Northern Iraq, but also his passion for serving his country.”

Lockard, a native of Kentucky, is survived by his wife, Maria, and daughters Danielle, 17, and Nicole, 14.

Maria wrote, “Jim was a dedicated father and husband. Jim and I were married for 22 years, meeting during our 8<sup>th</sup> grade

year, while living in Louisville, Ky. We became good friends, kept in touch through letters and reconnected after college. He went to the University of Kentucky and I went to the University of Louisville.

“He was the most romantic guy I knew and made me feel like a queen every day. Even though he was a world away, he still felt so close to us. We spoke every day and emailed each other constantly. Our girls felt as though he was next to them every step of the way in their lives.

“We miss him terribly and his memory will live forever in our hearts. He is gone, but his spirit they cannot ever kill. Jim’s dreams were to provide the best education he could for his girls and was the main reason he started...but soon saw it to be a calling as well. He saw the good in the works he and others did there for the Iraqi people and would often send pictures to show us as well...he was proud to be a part of the rebuilding efforts there.

“Jim’s funeral was such a beautiful tribute to his life and people overflowed the funeral home to pay their respects. He will be forever in our hearts and will never be forgotten.”

Those who desire may contribute to an educational fund for Jim’s daughters: Danielle & Nicole Lockard Fund c/o US Bank, 3808 Lexington Rd., Louisville, KY 40207.



Nicole, Maria and Danielle

Courtesy photo



# Renovation, new units supply village water

STORY & PHOTO BY ERICH LANGER  
GULF REGION DIVISION

When Toni Graves pulls up to one of her 35 Iraq reconstruction projects she really doesn't know what to expect.

Will workers be there toiling in the oppressive Iraqi heat? Will the construction materials be onsite?

Or maybe she'll be fielding questions from local officials or Iraqi contractors and engineers responsible for executing the work.

No, she won't really know answers to any of these questions until she's onsite. And, it isn't beyond reason for her to have more questions than answers after she leaves.

Just another challenge in helping the Iraqi people rebound from three decades of infrastructure neglect. Former Iraqi strongman Saddam Hussein preferred constructing opulent palaces for himself and his cronies while leaving cities, towns and villages like Al Fadhlya without essential infrastructure.

Iraq reconstruction is challenging for Graves and her colleagues from the U.S. Army Corps of Engineers' Gulf Region South district. GRD and partners have completed more than 4,000 Iraq infrastructure projects—from small schools to huge electrical generation, water/sewage and oil infrastructure projects across the country.

Graves recently visited several water projects in the small hamlet of Al Fadhlya. Both projects are nestled along a river within a stones throw of each other; one new, while the other is the restoration of an antiquated water pumping station. Both projects are integral to providing residents with potable water.

An odd collection of misfit parts, junked motors, valves, gauges and whatchamacallits, the old pump station reminds one of a museum of early 1900's waterworks. For this pump station to work, the whole operation needs an extreme makeover.

"The Gulf Region Division is supplying and installing two submersible pumps with a rate of 200 cubic meters per hour," said Graves. The project will also provide two raw water pumps with three times that capacity and repair two existing pumps and the pumping station's electrical control panel.

The project is typical of the aged infrastructure projects GRS is helping rehabilitate. With little or no money for infrastructure repairs, Iraqi managers and technicians did the best they could to keeping facilities operational.

"This pumping station has six pumps, of which two are operational," she said. "The plant manager has been cannibalizing parts for the past three years to keep the system operational. The work we're doing here should greatly increase the station's output."

The neighboring new compact water unit project is well under way. Once finished, the new 200 cubic meter per hour water unit treatment plant and water distribution system will have the capacity of providing 20,000 people with their daily water needs.

"I am responsible for 11 water projects in Thi Qar Province," said Graves. "Each of these, once complete, will provide clean water to the people of the nearby area. We're constructing new compact water units with output of 25, 50, 100 and 200 cubic meters per hour."



*John Morgan takes a measurement, right, as Toni Graves notes the condition of a motor and pump.*

The smaller 50 cubic meter per hour units are designed to satisfy the water needs of small villages while the larger ones, like the one under construction in Al Fadhliya, can augment existing water treatment plants.

Water distribution systems tied into compact water units are designed to be "filling stations" or tank units.

"Most of these distribution stations are community-based facilities where folks in town will fill water vessels from one of 16 spickets fed by large holding tanks," said John Morgan, GRS contract representative. "The units provide a quick way to get potable water to the people—many of the areas we are working don't have a house-to-house distribution system and the community-based compact water unit treatment plant and distribution system is the best way to go."

Still, constructing compact water units takes more time than Morgan or Graves would like. In the United States the construction period is around 90 days.

"Actually, it may take 12 to 15 months to build a compact water unit in Iraq—the actual time is dependent on security, availability of construction materials, and having an available trained/quality labor force," said Morgan. "Competition for quality workers is a real issue and getting the essential construction components to the job site can be very difficult. And, the security situation can run from permissive to difficult."

Regardless, Graves and Morgan are optimistic about Iraq's future and want to help where they can and both have extended their tours of duty.

# من اجل عراق اكثر أمنا بناء مجمع محكمة في بغداد

بقلم بولي كيلر  
فرقة منطقة الخليج

ويضم المجمع كاميرات مراقبة تلفزيونية وجدار حماية خارجي مع نقطة دخول مسيطر عليها ومرأبا أمنا. ونظرا لأوضاع لا يمكن التنبؤ بكنهها، كانت وتيرة اعمال البناء بطيئة، فقد اعاققتها الاضطرابات في مدينة الصدر حيث يسكن معظم العمال، وكانت حكومة العراق فرضت حظرا للتجوال على الاشخاص عدة مرات لايام كاملة خلال مدة البناء فيما منعت شاحنات النقل تحرزا من سرقتها واستعمالها في نقل وتفجير مواد ناسفة.

وقال ايلوي ألسيفار السيرجانت في فرقة منطقة الخليج ان "هذا المشروع المهم، بناء دار المحكمة، شاهد محسوس آخر لقدرات فريق فرقة منطقة الخليج للعمل تحت ظروف قاتلة وغير مستقرة". و اضاف ألسيفار "نتعهد مواصلة أعمال بناء جيدة في الوقت المحدد لها وضمن التكلفة المقررة، ونقدم المساعدة في الوقت نفسه الى الحكومة العراقية لتتحمل مسؤولياتها الكاملة فيما يخص البنية التحتية".

واعيد تخصيص مساحات تفتيش الشاحنات لكي تسلم حمولتها مرة اخرى، ويتوقع ان ينجز المشروع في منتصف أيلول أو أواخره.

ومول المشروع صندوق اغاثة واعادة اعمار العراق بقيمة ١٠،٨ مليون دولار وقامت بأعمال البناء شركات عراقية. وأدار مهندسو فرقة منطقة الخليج كل من اعمال البناء والتعاقد وضمان الجودة للمشروع.

وعندما ينجز المشروع، سوف يدعم مجمع دار محكمة الرصافة ببغداد في جهودها الرامية الى خدمة المواطن وتطبيق القانون ما يعد أمرا أساسيا لبناء دولة آمنة ومستقرة تحكم نفسها بنفسها.

بغداد، العراق - بينما يسعى العراق حثيثا لاصلاح نظامه القضائي، تتواصل جهود فرقة منطقة الخليج لانجاز مجمع محكمة الرصافة في بغداد.

قامت بأعمال البناء شركات محلية فيما دقت فرقة منطقة الخليج مدى جودة العمل، ويتألف مجمع المحكمة من دار المحكمة ومبنى أمن الشهود فضلا عن اعمال بناء وتجهيز طالت ١٦ فقرة تتعلق بعضها بالحماية والصيانة.

وهناك مرافق آمنة للشهود شبيهة بالشقق السكنية تتسع ل ١٥٠ شاهدا، ومكاتب للقضاة وغيرهم من المستشارين القانونيين تقع في مبنى حماية الشهود الذي تبلغ مساحته أربعة الاف متر مربع، فيما تقع المكاتب وقاعات المؤتمرات وردهات المحكمة التابعة للمجلس الأعلى القضائي العراقي في دار المحكمة الذي تبلغ مساحته نحو ١٠ الاف متر مربع. المبنى مرتبطان بممر مغلق يسمح للشهود وموظفي المحكمة بالحركة بين المرافق فيها بحرية من دون التعرض للخطر.

وقال ديفيد كرامبتون نائب قائد قطاع الأمن والعدالة في فرقة منطقة الخليج التابعة لفيلق مهندسي الجيش الأميركي ان "دار المحكمة هذه تسهم في اجراء محاكمات عادلة وعلنية لمن يشتبه بكونهم مجرمين".

واضاف ان "هذا المجمع اساسي لتثبيت الأمن ولكسب ثقة العراقيين في تنفيذ عمليات قضائية عادلة، وسيلعب مجمع المحكمة دورا في تكامل جهود العراق لتنفيذ عملية 'سيادة القانون' بنحو فعال في البلاد".





# Court House Complex aids effort for stable, secure Iraq

STORY & PHOTOS BY POLLI BARNES KELLER  
GULF REGION DIVISION

As Iraq strives to reform the country's system of justice, Gulf Region Division efforts are under way to complete Al Rusafa Court House complex in Baghdad.

Built by local construction companies with quality assurance by GRD, the compound consists of a court house, a witness security facility and 16 additional structures for security, maintenance and concessions.

Secure, apartment-style living quarters for approximately 150 witnesses, and offices for the judges and other legal advisers are located in the 4,000 square-meter Witness Security Facility. Offices, conference rooms and court rooms for the High Judicial Council of Iraq are located in the 10,200 square meters court house. The two buildings are joined by an enclosed corridor that allows witnesses and court officials to move between the facilities without exposure to danger.

"This courthouse provides the capacity to fairly and openly conduct trials of criminal suspects," said David Crumpton, GRD deputy sector lead for security and justice. "The complex is essential to improve security and gain confidence of the Iraqi people in a fair judicial process. This court house complex will play an integral part in Iraq's effort to implement an effective 'Rule of Law' process within



*Offices, conference rooms and court rooms for the High Judicial Council of Iraq are located in the 10,200 square meter court house connected to witness living quarters by a secure corridor.*

the country."

The compound also includes closed caption television, security cameras and an outer force protection wall with an entry control point and secure parking.

Due to the unpredictable environment, construction progress was slow. The contractor's progress was interrupted by unrest in Sadr City, where the majority of the labor force resides.

Several times during construction, the Government of Iraq imposed all-day

curfews on citizens to prevent movement on the streets. Delivery trucks were banned as a precaution because stolen trucks were used to carry vehicle-borne improvised explosive devices.

"This important court house construction project is another tangible demonstration of the GRD team's capability to function under lethal and unstable conditions," said GRD Command Sgt. Maj. Eloy Alcivar. "We are committed to continuing to deliver quality construction on time, on budget while simultaneously assisting the government of Iraq to assume full responsibility of their infrastructure."

Truck inspection areas are set up to allow deliveries once again. The project is expected to reach completion by mid- to late-September.

This \$10.8 million project was funded by the Iraqi Relief and Reconstruction Fund and built by local Iraqi construction companies. Engineers from GRD participated as the contracting and construction management/quality assurance for the overall project.

Once complete, Al Rusafa Court House complex will support the Baghdad Governorate in its efforts to govern and provide for its people, ensuring justice is fundamental and at the forefront to building a secure, stable and self-governing nation.



*Secure, apartment-style living quarters for approximately 150 witnesses, and offices for judges and legal advisers are located in the 4,000 square-meter Witness Security Facility.*

# Workers connect turbines



USACE photo by Kendal Smith

*The 32-meter gray concrete cooling chimney on the left is being assembled for Turbine No. 9. Workers in the foreground are preparing battery-container formwork for placing concrete.*

BY KENDAL SMITH

GULF REGION CENTRAL DISTRICT

The Gulf Region Division oversees the \$160 million installation of two new gas turbines and their auxiliary modules at the Qudas electric power station that will generate 200 megawatts of electricity, sufficient to power approximately 180,000 Iraqi homes. The project is an expansion of the existing power plant, adding two General Electric Frame 9 combustion turbines and their associated support equipment to four GE Frame 9s and four GE LM6000s already in operation.

“The impact of this project for the Iraqi people is that electricity means life, new life. This electricity brings more homes, more water, more laborers, more farming, more markets. It is life for Iraq,” said an Iraqi engineer at the plant.

Work at Qudas is lively with 300 to 400 workers per day busy on the job site. A second evening shift was added to increase productivity.

To increase turbine generator efficiency, an evaporative cooling system is being installed on the inlet side of each turbine. Inlet air chillers cool the turbines’ incoming air and add water vapor by a series of water-soaked panels, much like “swamp coolers” cool hot, low-humidity air in the southwest United States.

Depending on the outside air temperature, wet bulb temperature, cooling system efficiency, and an adequate amount of treated water available for cooling, the restoration of power using chillers can fall between 5 percent and 9 percent.

With turbine combustion chamber temperatures in excess of 1,000 degrees Celsius, a lube oil system with 30 individual fan units will feed a manifold to cool circulated liquid that in turn cools the main turbine and bearings and generator moving parts.

Labor continues on the construction, installation and completion of two, 32-meter high, cooling chimneys, one each for the turbines’ individual outlet. The chimneys will have an inner stainless steel layer with a middle layer of carbon steel and a

SEE QUDAS POWER PLANT, PAGE 13



# Qudas power plant expansion adds 200 megawatts to national electric grid



A 50-ton crane holds a 400kV insulator overhead as workers connect it to the bushing in the Qudas electrical generating plant switchyard

CONTINUED FROM PAGE 12

concrete outer layer.

Extensive rebar and concrete placing work is in progress to form and build hardened tunnels and trenches, as well as junction and distribution enclosures to contain control and output cabling on the site. These concrete encasements house electrical cables from the turbines to the switchyard where the created electrical energy will transfer to the overall Iraqi national electrical grid for distribution to the population.

Eight overhead cranes are used around the installation of the new turbines and in the switchyard ranging from a capacity of 80 tons, 50 tons or 20 tons.

“It’s a great project, comprehensive and challenging,” said Navy Cmdr. Jerome Zinni, the GRD Qudas Project Manager. “It will be a significant achievement for the Gulf Region Division to turn this much needed and substantial amount of energy over to the Iraqis. “I’m very proud to be part of the efforts,” he said.



USACE photos by Kendal Smith

Workers prepare the rebar for placing the concrete channels that will contain control and output cables from the turbines to the switchyard. Water is used to ensure the newly placed concrete cures properly.





USACE photos by Norris Jones

# Votech opens

*A \$1.24 million rehabilitation of Al Khaseeb Vocational Technical Center in Basrah included repairs to the roof, electrical and plumbing systems, plastering, interior renovations and a new perimeter wall.*

BY A. AL BAHRANI AND NORRIS JONES  
GULF REGION SOUTH DISTRICT

Students in Basrah are now attending a newly refurbished vocational technical school as they acquire training in important job skills.

The school's headmaster, Mohammed Hassan Al Hassani, says he is very pleased with the \$1.24 million rehabilitation of the Al Khaseeb Votech Center that included major roof repairs, new electrical and plumbing, plastering, interior renovations and a new perimeter wall.

He has been a votech headmaster for more than three decades and pointed out that because of the deteriorating conditions at that facility prior to the start of the project last fall, only about 30 students were enrolled there. Al Khaseeb was built in the early 1980s.

"Today we have 600 students attending courses in such areas as welding, auto mechanics, carpentry, lathe work, masonry, plumbing, computers, electric installation, air conditioning and refrigeration," he continued. "With the structural improvements, I'm optimistic that next year we'll be teaching over 1,000 students, ranging in age from 16-25." He has a faculty and staff of about 130 employees working there now.

"This project is very important for our students," he noted. "This greatly-improved learning environment is a definite plus as they develop their skills."

Among those visiting the project recently was Maj. Stephen Dale with the U.S. Army Corps of Engineers, whose office oversaw the renovation work. Dale toured the welding and mechanics classes and he later told the headmaster it brought back memories from his teen-age years.

"I took agricultural mechanics in high school that covered a number of areas including welding, small engine repair, basic electricity, carpentry and masonry," he explained to Al Hassani. "I remember being in the same situation as your students are today," said Dale, who attended Mineral County Vocational Technical School in

Mineral County, W. Va. After graduating, he attended Fairmont State College majoring in civil engineering. "Many of those skills I was taught in high school, I still use today," he added.

James Hodges, Gulf Region Division construction representative who has been overseeing the work since the project's start last fall, said, "I'm very proud to be involved with this effort to help Basrah's young people learn skills needed for good jobs benefiting their households. The facility, when we got here, was in definite need of structural repairs. But the votech staff was eager to help and have contributed immensely to bringing this project to where it stands now. The improvements have allowed the school to substantially increase its enrollment, positively impacting hundreds of additional Basrah families and it's just a start to what this school can do."

Under a separate contract, the 358<sup>th</sup> Civil Affairs Brigade funded \$487,000 to upgrade the equipment for the classrooms. Those materials included welders, grinders, air compressors, drills, voltage meters, alternators and starter motors, compressors, work tables, desks, chairs, circular saws and sanders, electric nail guns, Pentium 4 computers, projectors, surveyor's instruments and a variety of supplies (nails, paint, sandpaper, welding rods).



USACE photo

*Mohammed Hassan Al Hassani, Al Khaseeb Votech headmaster, signs close-out documents June 8, 2008.*



# Alternative energy eyed

STORY & PHOTOS BY ERICH LANGER  
GULF REGION DIVISION

In the Doura district of Baghdad, security is improved near one of Iraq's older oil refineries. Al Doura refinery, a rusting relic constructed in the 1950's, wouldn't seem to be the likely bastion of wind and solar energy for Iraqi leadership.

Dathar Al Khashab, director general and general manager of Midland Refinery Company for the Ministry of Oil, has many responsibilities at al Doura. Most of his hours are spent trying to keep the refineries under his charge producing diesel and gasoline to quench the nation's growing thirst for petroleum products. His other principle challenge is getting enough crude oil from the Basrah oilfields of southern Iraq. For his refinery operations to operate efficiently, he must have abundant supplies of raw crude to generate refined products.

The director general deals with all too common pipeline flow disruptions—spurring from maintenance neglect, insurgent attacks and common thievery. He also manages daily logistical issues associated with trucking gasoline to Baghdad area petrol stations.

“Going green isn't just a trend in the U.S. and other western nations,” said Khashab. “I am an oilman so I should be interested in all types of energy. We think we are a little bit behind in researching and developing alternative energy sources; we are an oil producing country, but this is no reason not to look toward the future.”

Of particular interest is tapping into



*Al Doura refinery produces diesel and gasoline for Iraqi consumption.*



*Director General Dathar Khashab, Minister of Oil director general for the Midland Refinery Company, points out Phase II of the new Government of Iraq funded construction at Doura refinery to Gary Vogler, GRD energy sector engineer, right.*

wind and solar energy. With the assistance of engineers from the Gulf Region Division, Khashab thinks he has a plan that can be implemented.

“The people of Iraq need more power and what Dathar Khashab is proposing is going to supply more power,” said Gary Vogler, GRD energy sector engineer who has worked with Khashab since 2003. “If the electricity is directed to the refinery there will be more power on the grid for the rest of the population. Also, in rural areas that have little or no connectivity to the grid, the solar panels and wind farms he wants to bring to Iraq could help satisfy these isolated pockets' quest for power.”

With assistance from officials such as Dr. Ali Alak with Multi-National Force – Iraq's Energy Fusion Cell, Khashab is assembling a team of resource professionals that can help him move from the drawing board to implementation.

“Thanks to American taxpayers, the United States has been hard at work assisting GoI (Government of Iraq) improve the infrastructure to increase crude oil, natural gas and liquefied petroleum gas production in Iraq,” said Vogler. “With the U.S. contribution of \$1.7 billion, we have seen substantial improvements in these areas. Of course, our effort to ‘jump

start' Iraq's oil infrastructure rehabilitation helped them get over the hump. Today, GoI is only spending Iraqi money on oil projects.

“I will be sharing Dathar's ideas with many experts from the private sector and academia,” said Vogler. “It is all about assembling the right team to start connecting the dots.”

With Khashab and Vogler teaming up, Iraq's quest to develop a road map for alternative energy should be on a strong foundation.

“We are trying to find possibilities to supply certain facilities, oil refineries in Samawah and Najaf and maybe others, to provide power for those refineries using wind turbines,” said Khashab. “We'll need to get wind survey data. Some of the initial work can be done with satellite technology while fine tuning the specific areas for wind farms will come from scientists gathering data at sites in Iraq.”

The benefits of using wind or solar energy to run refinery operations will not only impact the oil facilities.

“The sun and the wind is a gift from God. If you have it, why not use it? Rural people can use alternative energy as a heat and light source and you can use photo-electric cells to add electricity directly to the grid,” said Khashab.

# Partnering brings better outcome

BY LUANNE FANTASIA  
GULF REGION NORTH DISTRICT

“A successful partnering workshop is measured by the level of engagement by those attending—their dialogue, their situational awareness and shared problem-solving,” said Col. Michael Pfenning, commander of the Gulf Region North district.

Good reconstruction project candidates for partnering workshops are typically those with a budget of more than \$5 million and those considered to be more complex from an engineering perspective. Since November, Pfenning has hosted a number of partnering workshops.

“Partnering creates the opportunity for government representatives and the contractors to explain their scope of work, initial construction timelines, address initial concerns, and to discuss these plans with the customers and local stakeholders,” said Pfenning. “We approach a partnering workshop from the perspective of starting a relationship, introducing the provincial leaders, contractors and other

stakeholders to the concept of working together as members of a project delivery team.”

Trust is the root of successful partnering with the Iraqi leadership and contractors, said Gary Lowe, project manager in the Sulaymaniyah Resident Office.

“When you gain these people’s trust, you’re the only person who can make that go away,” said Lowe.

Key goals of successful partnering include maintaining a professional atmosphere of mutual respect and empowering each other to resolve problems and make decisions at the lowest possible level within the team.

“It’s open communication and trust,” said Lowe. “In partnering, everyone re-



USACE photo

*Lessons learned from the first partnering session for Chamchamal Correctional Facility, above, have been applied to subsequent projects.*

“But this refurbished facility will employ corrections officers who will [retrain] our people. This new institution improves our country’s quality of life, and for that reason, I ask that we change the name from Chamchamal Prison to Chamchamal Correctional Facility.”

After the general’s request, the name was changed at the same meeting, said Lowe. The quality of relationships involved with the Chamchamal project sets the standard, and is the watermark, said Pfenning.

“The fact that those attending were willing to openly raise issues and concerns provides a lot of credibility to the project delivery team’s efforts,” said Pfenning. “My measurement of a workshop’s overall success is how much the attendees actively participate in raising and resolving issues ... and by that measurement, the Chamchamal event was extremely successful.”

Lessons learned from the Chamchamal workshop were applied to the Ibn Sena Hospital Renovation in Mosul two months later, said Pfenning.

The Ibn Sena cardiac wing addition was complex due to its non-permissive location and the requirement for the main hospital to continue operations, while the cardiac-care wing was renovated.

“We relied heavily on the Ninewa Provincial Reconstruction Team while planning the Ibn Sena workshop because they knew the provincial leaders who should attend, who could make customer-needs decisions on the spot, and how to contact them,” said Pfenning.

In support of Iraq’s plan for improving its Rule of Law facilities, GRD has constructed or renovated 12 correctional facilities; completed 155 border posts and 14 point-of-entry facilities, and 38 courthouse projects with five more ongoing.



USACE photo

*Col. Pfenning welcomes Gen. Aziz, director of Peshmerga Intelligence, in Sulaymaniyah Province.*



# Villagers 'very happy' with water project

BY NORRIS JONES

GULF REGION SOUTH DISTRICT

For the first time, a small village in Dhi Qar province will soon have access to clean drinking water.

Sheik Abdul Razak says his community is "very happy" about the ongoing work.

The project includes a 50-cubic-meter-per-hour water treatment plant with a reverse osmosis unit, 1,000 meters of pipe connecting that plant to the community's existing water network, and an above ground storage reservoir for the treated water.

About 1,500 residents live in Al Haboosh, located near Tallil Air Base, and Sheik Razak says they had been pumping their water out of a canal. "It was very bad water. This project is important for the health of everyone who lives here. It's a great sign of progress."

He also complimented the contractor on the quality of the ongoing construction. "It looks great. We're very thankful."

The project is being overseen by Construction Representative Toni Graves with the Gulf Region South district, U.S. Army Corps of Engineers. "They're very excited seeing it being built and anxious to see it finished." The construction, which started last fall, should be completed and operational by September.

Graves, who is overseeing the construction of ten water treatment plants in Dhi Qar, says this project is her favorite because of the enthusiastic pride she sees every time she visits the project as town leaders and children stop by. "I think it's wonderful we're able to help them get access to a fundamental necessity. They're always kind and friendly, delighted to see it taking shape, and



USACE photo by Norris Jones

**Construction Representative Toni Graves, Gulf Region South district, meets with Sheik Abdul Razak at the site of the new water treatment plant.**

grateful for what we're doing."

Graves deployed to Iraq in December from USACE's Louisville District, where she was a construction representative at the Fort Knox Area Office. She says during her 12 years there, she's been mainly involved with civil works projects such as flood control, detention basins, state parks, locks and dams. She has a total 34 years government service.

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Staff Sgt. Bobby Tullos, GRD

# Security teams goodwill ambassadors

BY LUANNE FANTASIA  
GULF REGION NORTH DISTRICT

Aegis Reconstruction Liaison Teams' hard core job of exchanging battle space information with Coalition Forces is softened by offering a small measure of goodwill to the Iraqi people through an outreach program directly supporting the Gulf Region Division reconstruction program in Iraq.

RLTs verify that reconstruction projects are developing on time, are fit for their purpose, and subsequently used at their best capacity, according to Mark Sekula, an Aegis team leader supporting the Kirkuk Area Office.

"...in our travels, we're always looking for projects that a community or village need, which we then propose to the Provincial Reconstruction Team or to the Brigade Combat Team," Sekula said. "It's another aspect of what we do for the mission."

For the past three years, the Aegis Reconstruction Civil Affairs team managed a program of low-cost, high-impact community development projects for Iraqi citizens, according to Peter Maxwell, the program's manager.

"Just recently we supplied summer and winter clothing for the workers developing the Kirikuk-to-Bayji oil pipeline exclusion zone," Maxwell said. "This was high-quality outdoor clothing donated by the Quartermaster chain of stores from the United States."

Maxwell said the Aegis Reconstruction Civil Affairs team works with several other organizations - the non-profit United Kingdom-registered charity Aegis Foundation, the British Embassy, and the U.S. Department of State. "Every penny donated goes directly to the projects

**Getting to know the neighborhood and letting locals know the good work being done next door is a role enacted by the Gulf Region Division's contracted security firm, Aegis. Reconstruction Liaison Teams engage local Iraqis to gain their support for reconstruction taking place in their area.—Ed.**

*Do good to your friends to keep them, to your enemies to win them. —Benjamin Franklin*

we coordinate here in Iraq," he added.

The Aegis goodwill projects are small-dollar initiatives, averaging \$600 to \$4,000, with access to quick-reaction funds up to \$25,000 for project requests meeting specific criteria.

"We want to positively affect public opinion of the reconstruction program not only in Iraq, but with our community of donors," Sekula said. "Because our teams employ Iraqis, we can interact with the Iraqi people in non-permissive areas."

Sekula said his team is pursuing a large stationery supplier in the U.K. to donate school supplies, and a long-term goal is to find sister schools in the U.K. that would

"adopt" Iraqi schools to correspond and learn from each other.

"We have schools and primary healthcare clinics, both here and in the Sulaymaniyah Province, that could benefit from water

filtration systems," said Lt. Col. Mario Trevino, the officer in charge of the GRD Kirkuk Area Office. "All of these reconstruction projects have reverse osmosis systems included in the contracts, but could use a backup water filtration system for emergencies."

Aegis provided water filtration systems for several schools in Iraq costing about \$3,500 and providing capabilities for up to 1,000 liters of clean water daily. Other community outreach initiatives include immunizations for Iraqi children; school supplies and furniture; sports and medical equipment; clothes, toys and shoes; basic medical care; and minor rehabilitation of various facilities.



Courtesy



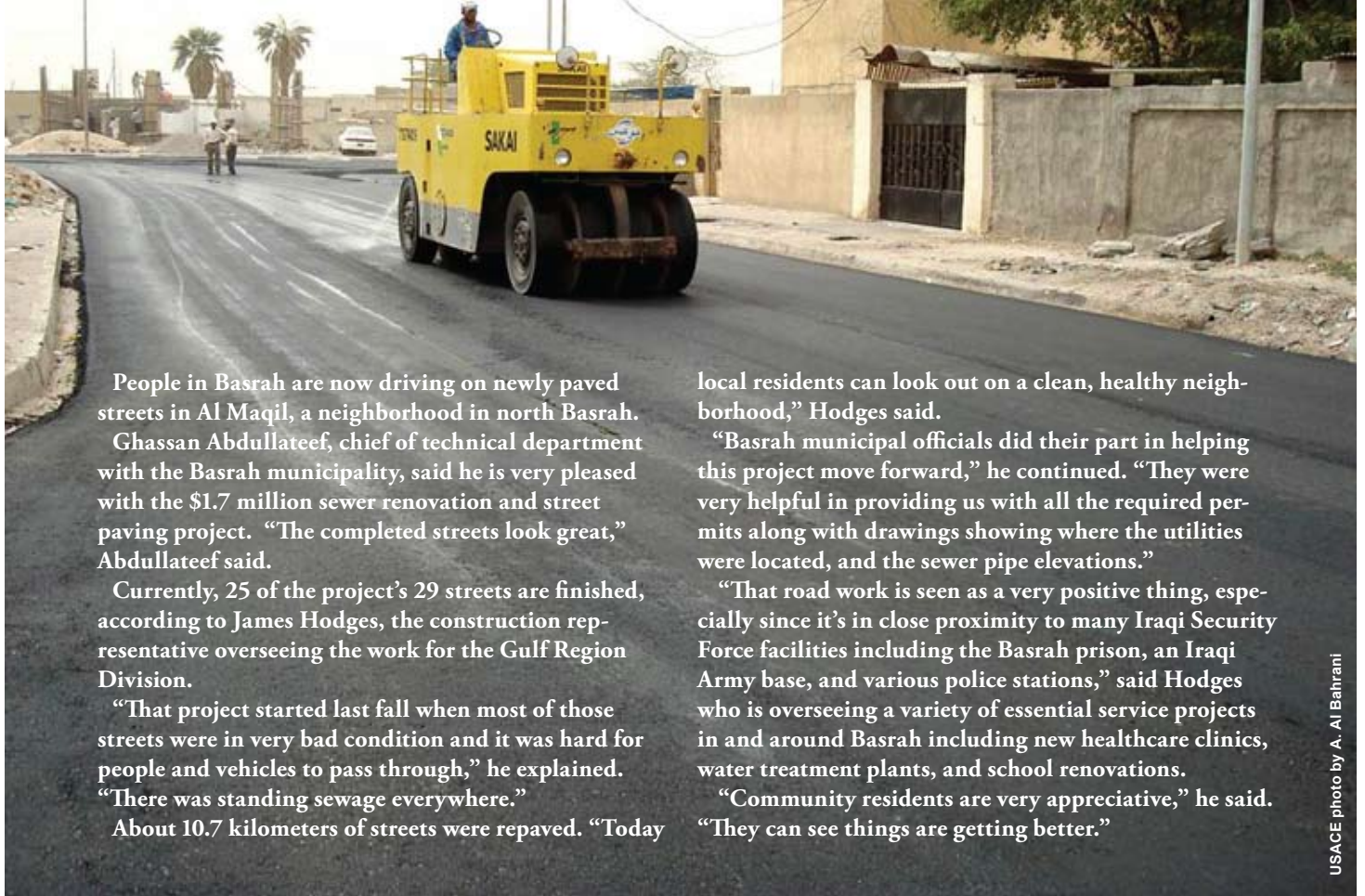
Courtesy



# North Basrah sees improvements

BY A. AL BAHRANI

GULF REGION SOUTH DISTRICT



USACE photo by A. Al Bahrani

People in Basrah are now driving on newly paved streets in Al Maqil, a neighborhood in north Basrah.

Ghassan Abdullateef, chief of technical department with the Basrah municipality, said he is very pleased with the \$1.7 million sewer renovation and street paving project. “The completed streets look great,” Abdullateef said.

Currently, 25 of the project’s 29 streets are finished, according to James Hodges, the construction representative overseeing the work for the Gulf Region Division.

“That project started last fall when most of those streets were in very bad condition and it was hard for people and vehicles to pass through,” he explained. “There was standing sewage everywhere.”

About 10.7 kilometers of streets were repaved. “Today

local residents can look out on a clean, healthy neighborhood,” Hodges said.

“Basrah municipal officials did their part in helping this project move forward,” he continued. “They were very helpful in providing us with all the required permits along with drawings showing where the utilities were located, and the sewer pipe elevations.”

“That road work is seen as a very positive thing, especially since it’s in close proximity to many Iraqi Security Force facilities including the Basrah prison, an Iraqi Army base, and various police stations,” said Hodges who is overseeing a variety of essential service projects in and around Basrah including new healthcare clinics, water treatment plants, and school renovations.

“Community residents are very appreciative,” he said. “They can see things are getting better.”

*Above, a rolling compactor flattens and smoothes the freshly-laid asphalt on a road in Basrah.*

*Two Iraqi workers prepare to remove sewage from an Al Maqil street, below, at the beginning of the project.*



USACE photo by A. Al Bahrani



*Al Mawan’aa Hospital street, above, one of the busiest streets in Al Maqil, has been upgraded.*



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