

AIR FORCE CIVIL ENGINEER CENTER



Advanced Meter Reading System (AMRS)

Vision:

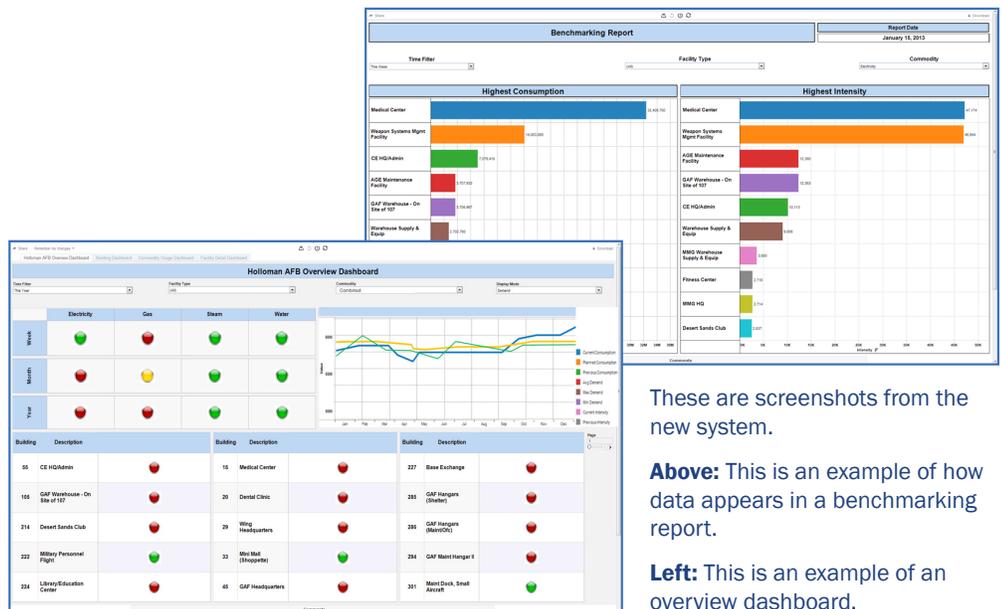
Provide enterprise tools to monitor and manage energy consumption in order to operate buildings as efficiently as possible and identify potential energy-saving opportunities.

Initiative:

The Air Force Civil Engineer Center is overseeing a contract with Benchmark Construction Inc, and TolTest, Inc. to install AMRS at 40 installations in 2013, with plans to add 40 more installations in 2014. The system manages utility data for individual buildings and provides critical information required by the Energy Independence and Security Act of 2007.

Contract Deliverables:

- ✦ “Front-end” hardware and software
- ✦ Wireless Communications
- ✦ Training
- ✦ Technical support
- ✦ System sustainment



These are screenshots from the new system.

Above: This is an example of how data appears in a benchmarking report.

Left: This is an example of an overview dashboard.

AMRS is an important tool in an Energy Manager's toolbox.

Incremental Development

Air Force CE is initially deploying AMRS without connection to other systems so the main function is as a “window” into the building energy profile. Eventually, some but not all AMRS data will roll up to NexGen.



What will AMRS do for you? A lot!

Benefits:

Flag anomalies: AMRS includes flags and alarms to notify you of significant changes in utility consumption. If a building’s consumption is trending up or spikes, base engineers will be able to assess the reason and implement changes or repairs if needed.

Establish baselines: Useful for measuring status quo energy use, as well as validating projects and saving opportunities, as required by EISA 07 Section 432.

Promote awareness: Drive cultural change by educating facility managers and customers. Studies have proven that awareness results in 2-5% reduction in energy use, without further investments. AMRS can save the Air Force energy and money – as much as \$25 million annually.

Forecast usage: Program and budget planning are more accurate.

Reporting: AMRS includes an interactive map for quick access to facility data and reports. You can create customized and ad hoc reports, and identify potential targets of opportunity for energy savings.

The Air Force Civil Engineer Center AMRS Program Management Office will provide AMRS playbook guidance in coming months.

Bases receiving advanced meter reading systems over the next two years:

Year 1	Year 2
Pilot: Holloman AFB, N.M.	RAF Alconbury, England
Pilot: Beale AFB, Calif.	JB Andrews, Md.
Altus AFB, Okla.	Arnold AFB, Tenn.
Barksdale AFB, La.	Aviano AB, Italy
Buckley AFB, Colo.	Cape Canaveral AFF, Fla.
Cannon AFB, N.M.	JB Charleston, S.C.
Cavalier AFS, N.D.	Clear AFS, Alaska
Cheyenne Mountain, Colo.	Dover AFB, Del.
Columbus AFB, Miss.	Eglin AFB, Fla.
Creech AFB, Nev.	Eielson AFB, Alaska
Davis-Monthan AFB, Ariz.	JB Elmendorf-Richardson, Alaska
Dyess AFB, Texas	Hanscom AFB, Mass.
Ellsworth AFB, S.D.	Hurlburt Field, Fla.
Edwards AFB, Calif.	Incirlik AB, Turkey
Fairchild AFB, Wash.	Kadena AB, Japan
FE Warren AFB, Wyo.	Kunsan AB, South Korea
Goodfellow AFB, Texas	RAF Lakenheath, England
Grand Forks AFB, N.D.	JB Langley-Eustis, Va. (2)
Hill AFB, Utah	Laughlin AFB, Texas
Keesler AFB, Miss.	MacDill AFB, Fla.
Kirtland AFB, N.M.	Maxwell AFB, Ala.
Little Rock AFB, Ark.	JB McGuire-Dix-Lakehurst, N.J.
Los Angeles AFB, Calif.	RAF Mildenhall, England
Luke AFB, Ariz.	Misawa AB, Japan
Malmstrom AFB, Mont.	Moody AFB, Ga.
McConnell AFB, Kan.	Osan AB, South Korea
Minot AFB, N.D.	Patrick AFB, Fla.
Mountain Home AFB, Idaho	Ramstein AB, Germany
Nellis AFB, Nev.	JB San Antonio, Texas
Offutt AFB, Neb.	Robins AFB, Ga.
Peterson AFB, Colo.	Seymour Johnson AFB, N.C.
Schriever AFB, Colo.	Shaw AFB, S.C.
Scott AFB, Ill.	Spangdahlem AB, Germany
Sheppard AFB, Texas	Thule AB, Greenland
Travis AFB, Calif.	Tyndall AFB, Fla.
Tinker AFB, Okla.	Wright-Patterson AFB, Ohio
USAF Academy, Colo.	Yokota AB, Japan
Vance AFB, Okla.	
Vandenberg AFB, Calif.	
Whiteman AFB, Mo.	



**Air Force
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