



FY 2015 Secretary of Defense

Environmental Awards

Environmental Sustainability, Industrial Installation
Robins Air Force Base, 78 Civil Engineer Group

Introduction

As the largest industrial complex in Georgia, Robins Air Force Base (AFB) employs approximately 23,500 personnel (6,482 military personnel, 14,632 civil servants, and 2,393 contracting and other individuals) and has a total annual economic impact of \$2.9 billion in the state. The boundaries of the base encompass approximately 6,935 acres with facilities for operation, industrial, administrative, and supply functions. Forested wetland habitats comprise over 2,200 acres. The most prominent physiographic features of the area are the Ocmulgee River, located one to two miles east of the base, Bond Swamp National Wildlife Refuge, located six miles to the north of the base, and Ocmulgee and Oaky Woods Wildlife Management Areas, to the south.

Robins AFB operates under the Air Force Sustainment Center and is the home of the Air Force Materiel Command's (AFMC) Warner Robins Air Logistics Complex (WR-ALC). Distinct capabilities at Robins AFB include the worldwide management and engineering responsibilities for the following

aircraft: F-15 Eagle fighter, C-130 Hercules transport, C-5 Galaxy transport, U-2 Dragon Lady surveillance, E-8 Joint Surveillance and Target Attack Radar System (JSTARS), all United States Air Force (USAF) and US Marine Corps (USMC) helicopters. The base is also responsible for the repair, overhaul, and modification of all USAF special operations aircraft and logistical support for the C-17 Globemaster III.

Robins AFB has created a model program for the Department of Defense (DoD) through commitment to environmental excellence, stewardship of community resources, and sustainability of the warfighter. Environmental excellence is exemplified by Robins AFB's receipt of nine environmental honors and awards in FY 2013-2014, to include:

- Secretary of Defense Environmental Quality Award (Industrial Installation)
- AFMC Environmental Quality Award (Industrial Installation)
- AFMC Sustainability Award (Team)
- AFMC National Environmental Policy Act (NEPA) Award (Team)

- AFMC Cultural Resource Management Award (Installation)
- 21st Consecutive Tree City USA Award
- 20th Consecutive City of Warner Robins Environmental Partnership Award

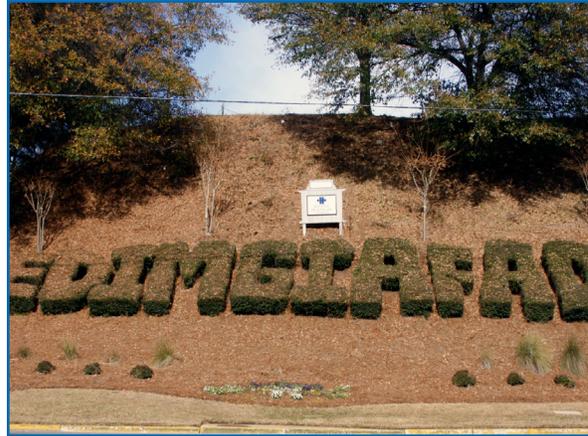
Robins AFB stands strong with partnerships throughout the community to include Middle Georgia Regional Commission, Robins Regional Chamber of Commerce, and the 21st Century Partnership. The base, along with the greater community of central Georgia, make up Team Robins, which is dedicated to protecting the environment while providing affordable combat superiority, readiness, and sustainability to the war fighter. Robins AFB has enjoyed unprecedented support from the surrounding communities since its beginnings in 1941. Community members perpetually live their motto EDIMGIAFAD—*Every Day in Middle Georgia is Armed Forces Appreciation Day*.

Background

The award winning Environmental Management Branch of the 78th Civil Engineer Group, Infrastructure Management Division, is responsible for planning, programming, and implementing the installation’s environmental protection programs in support of the WR-ALC, 78th Air Base Wing (78 ABW), JSTARS, and associated mission partners.

The Robins AFB Environmental Office as part of Team Robins created a focused, leadership-driven Environmental Management System (EMS) by incorporating the existing environmental programs into an integrated management tool. The installation EMS effectively meets mission objectives while ensuring compliance with federal, state, and local environmental laws and regulations. The base has integrated environmental accountability into day-to-day decision-making and long-term planning down to the shop level. Employees work together to reduce new environmental risks and to strengthen the lines of communication. All Robins AFB

employees are committed to environmental excellence, the stewardship of community resources, and sustainability of base and center operations by implementing the Robins AFB Environmental Policy.



EDIMGIAFAD

The community of Warner Robins works closely with the local, regional, state and national governments to ensure the long-term viability and sustainability of Robins AFB and economic development throughout the region. The official motto of Warner Robins is EDIMGIAFAD, which is an acronym for “Every Day In Middle Georgia Is Armed Forces Appreciation Day.” The coining of this phrase is attributed to Dr. Dan Callahan, a local civic leader.

The Robins AFB EMS conforms to the International Organization for Standardization 14001 standard, *Environmental management systems—Requirements with guidance for use*. It is assessed annually, and its conformance is reaffirmed by senior management with a documented statement of conformance. EMS training is required for all employees and contract support services at Robins AFB, which ensures the entire workforce understands not just compliance and conservation, but also pollution prevention (P2). The unique blend of environmental aspects creates challenges for the base EMS including management of the following:

- 1,920 Title V air emission sources
- 14 million gallons (MGal) of fuel stored in 150 Aboveground Storage Tanks and 25 Underground Storage Tanks
- 28,000 tons solid waste generated per year; 70% recycled
- Between 500,000-750,000 hazardous

materials items (HAZMAT) consumed annually

- Approximately 1,500 tons regulated waste and 1.25 tons rags per year
- 10 rare plant species (one state listed); 2,230 acres of wetlands
- 20 Historic National Register-eligible buildings; 16 Historic National Register-eligible archaeology sites
- Regular consultations with 12 Native American Tribes
- 489 MGal water per year produced by 6 water wells
- Four wastewater treatment plants and the discharge of 54 MGal per year

The Robins AFB Environmental Office has developed over 70 environmental plans, permits, operational controls, guidance documents, and permit-related materials to ensure compliance requirements do not impact mission. Meetings, training, and environmental plans are important tools for educating all Team Robins mission partners. Routine working group meetings are held for base wide participation, examples include Green Procurement Program (GPP) Team, HAZMAT Management Process Team, Cross-



Environmental Team

The Award winning Robins Environmental Team is responsible for planning, programming, and implementing the installation's environmental protection programs. The Team works together to reduce environmental risks and strengthen the lines of communication down to the shop level. All Robins' employees are committed to environmental excellence, the stewardship of community resources, and sustainability of base and center operations by implementing the Robins Environmental Policy.

Functional Team (CFT), Unit Environmental Coordinator (UEC), and Qualified Recycling Program (QRP). The Environmental Team also facilitates the following training and community awareness events:

- Environmental awareness provided at newcomer briefings for military personnel
- Program specific training (Air, Hazwaste, HAZMAT, Spills, Tanks, Stormwater, UEC)
- Computer-based EMS training for all military, civilian, and contractor employees
- Month-long Earth Day events each spring
- Articles for the base newspaper, *The Robins REV-UP*, and the Environmental, Safety, and Occupational Health (ESOH) Newsletter
- Quarterly community environmental advisory board (EAB) meetings

Summary of Accomplishments

Environmental Management System

Robins has revitalized many of its award winning environmental programs and plans, which are encompassed in its EMS. The ESOH Council (ESOHC) took ownership in 2013 with monthly meetings. The CFT followed the example of the ESOHC with monthly reviews and increased working groups. The frequent ESOHC and EMS CFT meetings were successful in identifying and addressing compliance concerns and facilitating leadership involvement. The Environmental Office commitment to comply with ESOH requirements and continual improvement is demonstrated by the fact that Robins AFB was issued no notices of violation identified during fiscal year (FY) 13 and FY 14. As a further demonstration of Team Robins' dedication to compliance, Robins AFB's Environmental Office joined the 78 ABW Inspector General Wing Inspection Team (WIT). As a WIT member, the Environmental Office works with base wide organizations to assess and communicate compliance across wings.

The Robins AFB EMS goals are closely linked to existing Executive Order, regulatory

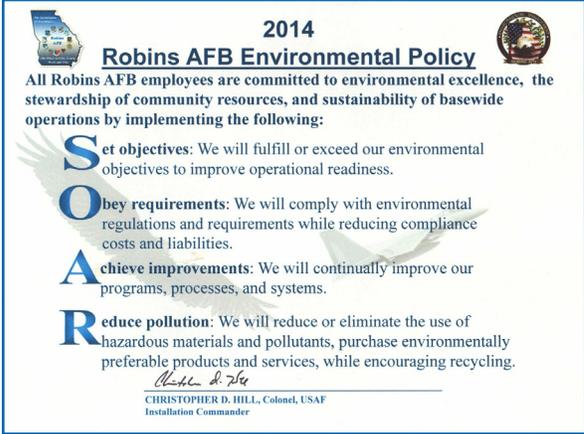
compliance, and mission requirements. Successful achievement of these goals has not only preserved the environment but also saved dollars while sustaining the mission.

- Water consumption was set to be reduced 2% annually or 16% from the baseline year (FY 07) through FY 15. Robins AFB is ahead of schedule with a reduction in consumption of 30% through FY 14, exceeding and almost doubling federal agency reduction goals.
- The goal to eliminate Class II ozone-depleting substances (ODS) by 50% by calendar year (CY) 15 has been met five years in advance! Robins AFB has exceeded Class II ODS by reducing 77% from the baseline year of CY 06 in CY14.
- In FY 14, 2,220 tons of recyclables were diverted from the landfill, resulting in \$461,736 in proceeds during the FY.
- In a remarkable effort to meet the Air Force P2 and Waste Minimization Goal, in CY 13 the amount of Toxics Release Inventory releases were reduced 22.5% compared to the CY 06 baseline. Reduction efforts through 2013 were successful in exceeding the 2015 goal.
- The Robins Geographic Information System (GIS) includes geospatial data and information for over 4.5 million linear feet of utilities and hundreds of detailed facility floor plans totaling nearly 15 million square feet, reducing potential soil contamination from damaged utility lines during construction projects.

Waste Reduction Efforts

Air

Robins has partnered with the Georgia Department of Transportation and the Georgia Clean Air Campaign since 2007 to promote clean commuting options. In November 2012, the 78 ABW was the recipient of the Partnering Atlanta's Commuting Employees (PACE) Award in the Government Champions/ Federal Employer category. This award is given to employers that have developed innovative approaches to reducing traffic and improving air quality. Participants in the Robins Transportation Improvement Program



The poster features a blue border and a central graphic of a white dove with its wings spread. At the top left is a small map of Georgia, and at the top right is the Robins AFB seal. The text is as follows:

2014
Robins AFB Environmental Policy
All Robins AFB employees are committed to environmental excellence, the stewardship of community resources, and sustainability of base-wide operations by implementing the following:

- S**et objectives: We will fulfill or exceed our environmental objectives to improve operational readiness.
- O**bey requirements: We will comply with environmental regulations and requirements while reducing compliance costs and liabilities.
- A**chieve improvements: We will continually improve our programs, processes, and systems.
- R**educe pollution: We will reduce or eliminate the use of hazardous materials and pollutants, purchase environmentally preferable products and services, while encouraging recycling.

Christopher D. Hill
CHRISTOPHER D. HILL, Colonel, USAF
Installation Commander

S.O.A.R. Environmental Policy Statement

S.O.A.R. is the Robins AFB Environmental Policy Statement. This policy is posted at facilities across the Installation. Protecting the Environment is Everyone's Job!

are members of vanpools or transit riders on the Buses into Robins Daily (BiRD) shuttle, which is a partnership between the Macon-Bibb Transit Authority and Robins. In addition to cost savings, carpooling has resulted in the prevention of over 6,700 tons of pollutants being released into the Earth's atmosphere.

Robins AFB has joined with local city and county governments under the auspices of the Middle Georgia Clean Air Coalition to participate in the United States Environmental Protection Agency's (U.S. EPA) Ozone Advance Program. This program is a collaborative effort to encourage emission reductions in ozone attainment areas to ensure that areas remain in attainment with the ozone standards. The base's proactive stance is important due to U.S. EPA's pending reduction of the national ozone limits. As an active participant in this program, Robins AFB has instituted an Idle Reduction Policy to eliminate unnecessary idling of vehicles to reduce emissions further and advocates open burning restrictions and use of alternative fuels.

In an effort to reduce air emissions further, Robins AFB has installed a second aerospace Flashjet® depainting booth. The Flashjet process accomplishes coating removal by applying intense millisecond duration pulses of

light energy from a xenon flashlamp-reflector assembly to the coating surface. The exhaust flows through a three-stage air pollution control device, which removes 99.97% of the particulate matter (PM) larger than 0.3 microns in the first two stages and 100% of the volatile organic compounds (VOC) in the last stage. This innovative technology has contributed to a dramatic 37.51% decrease in the use of methylene chloride solvent-based stripper, a 31.5% reduction in VOC emissions, and a 24% reduction in PM emissions.



QRP

Since the base recycling center opened in July 2012, Building 987 has welcomed visitors daily. There are 16 drive-up windows to drop off recyclable goods easily. All windows are clearly labeled; materials that can be recycled at this location include mixed, brown and clear glass, metal/aluminum cans, plastics, white or mixed paper, cardboard, newspapers, and toner cartridges.

Solid Waste

Everyone plays a part when it comes to recycling materials at Robins AFB to Win the War Against Waste! The QRP has three primary sources of income: proceeds generated from the Happy Hour Service Center in Warner Robins, direct sales (including scrap metal operations, used oil, used batteries, and used toner cartridges), and revenue from the Defense Logistics Agency (DLA) Disposition Services. These sources of income have generated over \$461,736 in FY 14. During this period, Happy Hour collected 380 tons

of cardboard, 240 tons of paper, 9 tons of aluminum, 49 tons of glass, and 31 tons of plastics, generating \$93,650.

A significant QRP improvement occurred during FY 14 when the Environmental Team began managing its own used oil contract. This resulted in a more efficient pickup schedule and more timely receipt of payment, with 150 tons of used oil recycled. Additionally in FY 14, 1,225 tons of scrap metal, 12 tons of toner cartridges, 380 tons cardboard, and 25 tons of batteries were also recycled and sold, generating proceeds of more than \$255,000. The QRP diverted an overwhelming 87.2% of construction and demolition debris from local landfills.

Environmental Compliance

HAZMAT/Hazwaste

The HAZMAT and Hazwaste programs at Robins recently migrated to the Enterprise Environmental, Safety, and Occupational Health Management Information System (EESOH-MIS). With 331 industrial processes, Robins AFB not only managed the largest AFMC HAZMAT data migration but also had the smoothest EESOH-MIS transition in AFMC according to the EESOH-MIS on-site migration team.

The Robins HAZMAT team managed the review of over 3,200 Air Force Form 3952s (Chemical/ Hazardous Material Request Authorization Form). To ensure continual process improvement and to tackle compliance issues, the HAZMAT team held quarterly and supplemental working group meetings, which were comprised of members from DLA, Supply, and all industrial base and tenant organizations to ensure improvements and solutions met the needs of all customers. Success stories include the modification of bulk HAZMAT labeling procedures, which improved distribution, saved time, and reduced waste; and spearheading the creation of the Air Force-wide Safety Data Sheet (SDS) lookup tool in order to meet federal SDS requirements.

Water Quality

Due to the proximity of the installation to state waterways bordering three sides of the base, the age of the infrastructure, and the dynamic nature of logistic center operations, daily compliance with stormwater permits is a constant challenge. Robins AFB has continually achieved compliance with four different types of National Pollutant Discharge Elimination System permits: wastewater, industrial stormwater, municipal separate storm sewer system, and construction stormwater. It is notable that the base has not received a stormwater or wastewater Notice of Violation in nine years.

As sediment is the number one water pollutant in Georgia, the Environmental Team has developed numerous guidance documents including a standardized template for the state-required Erosion and Sediment Control Plan. Robins AFB completed a comprehensive Stormwater P2 Plan update in 2014 based on the requirements of the new Georgia industrial permit. In preparation of the document, regulatory agencies were invited for a tour of the stormwater management system and water quality program. Following the meeting, the State Stormwater Unit Manager commented, “We were impressed by the organization and intent of [the Robins] stormwater program.”

Community Relations

Robins AFB partners with stakeholders and the community to sustain a world class environmental program. The mission of the Robins AFB environmental advisory board (EAB) is to encourage participation of surrounding communities in the base’s environmental programs and allow community members and other stakeholders to have meaningful dialogue with Robins AFB officials. The base also partners with local stakeholders in the Keep Warner Robins Beautiful Commission (Youth Advisory Board, Electronics Recycling, Earth Day Awareness, Christmas Tree Round-Up), the Clean Air Coalition, the Clean Air Campaign

(carpool initiative), and the Clean Cities Coalition (E-85 Station, Waste to Energy).

The base also partners with local community and state officials on efforts to find, contain, and eliminate invasive plant and animal species. Robins AFB utilized contract support, the pest management shop, and volunteers from scout troops and colleges to reduce populations of kudzu, alligator weed, English ivy, Chinese tallow tree, and wisteria. Volunteer trappers were also recruited to assist in on-going efforts to reduce the population size of troublesome feral hogs, capturing approximately 300 over a two-year period. Robins AFB provides the Georgia Department of Natural Resources with annual black bear population surveys by monitoring nine scent stations. Another natural resources partnership involved the recruitment of Explosive Ordnance Detonation personnel to detonate beaver dams causing flooding on the airfield, thus reducing concentrations of ducks and birds beneath the runway approach path and eliminating bird aircraft strike hazards.



Happy Hour

Houston County Association for Exceptional Citizens, Inc. (Happy Hour) is the contractor responsible for recycling glass, metal/aluminum cans, plastics, paper, cardboard, and newspapers on base. The recycled goods are transported to the Happy Hour facility for sorting and packaging. In the picture above, loose cardboard is properly baled/ packaged for resale.

The Robins AFB Environmental Office continues to perform as a Public-Public and Public-Private Partnerships champion. Robins AFB engaged with the Georgia-Robins Aerospace Maintenance Partnership by providing NEPA expertise and conducting an Environmental Assessment (EA) for the creation of a commercial aircraft depot site adjacent to base property.

In continued efforts to ensure equitable treatment to all community members as well as meet DoD Readiness and Environmental Protection Integration compliance, the Robins NEPA Program Manager conducted inspections on 65 properties that were beneath the aircraft departure/arrival flight paths. Because the inspections raised concerns that low-income residents at these properties would be unduly affected by noise of flight operations, the NEPA Program Manager assisted the Middle Georgia Regional Commission to acquire the 65 properties valued at \$6 million.

NEPA

The Environmental Office processed over 20,000 work orders that resulted in 200 Environmental Impact Analysis Process reviews and created an Air Force Form 813, *Request for Environmental Impact Analysis*, customer checklist. This document provides a detailed list of all environmental questions to fully evaluate and address all potential environmental regulatory issues. The implementation of this document has dramatically improved the quality of Air Force Form 813 submittals, resulting in an estimated 50% reduction in Program Manager review time.

The Environmental Team continues to provide exemplary support to all installation and interagency customers to help the installation meet or exceed environmental goals while also acting as a watchdog to ensure shrewd oversight of taxpayer dollars. Examples include:

- Supporting the AFCEC Green Program 54-acre solar array project by developing

an Extended Use Lease. The green energy project will contribute to the ability of the Air Force to meet required 10 United States Code energy goals.

- Working with Robins AFB legal office, creatively reprogrammed \$130,000 in obligated funds to accomplish a NEPA Environmental Assessment (EA) and Environmental Baseline Survey well ahead of AFCEC-required planning mandates, resulting in no additional cost to the proponent.
- Managing a request from the National Aeronautics and Space Administration to deploy their ER-2 aircraft to Robins AFB to participate in the Integrated Precipitation and Hydrology Experiment, a joint activity with the National Oceanic and Atmospheric Administration.
- Supporting a USMC request to establish a low-altitude training area over an environmentally sensitive publicly used wetland. An in-house EA saved vital Air Force dollars and ensured community acceptance by outlining how the mission will result in fuel usage reduction and have minimal potential to impact the human or natural environment.



Birding

Robins Natural Resources are shared both statewide and with the local community. Birding trips are held during the annual spring Earth Day events. An average of 75-80 species are identified during these events.