



# 2018 SECRETARY OF DEFENSE

## ENVIRONMENTAL QUALITY - INDIVIDUAL/TEAM

### MR. TIMOTHY UPLINGER



### BACKGROUND

Located on the Bay of Cadiz on the southwestern coast of Spain, Naval Station (NAVSTA) Rota, known as “The Gateway to the Mediterranean” is strategically located approximately 120 miles northwest of Gibraltar. The 6,100-acre Base is owned by the Spanish government and US personnel are guests on this Base and behave as such, including the environmental (EV) program. Its mission is to support the safe and efficient movement of US Navy and US Air Force ships, aircraft and passengers, and provide cargo, fuel and ammunition to units in the region. It also provides operational, logistical, and administrative support to 38 tenant commands, including four high operational tempo Aegis class destroyers as Forward Deployed Naval Forces (FDNF). NAVSTA Rota consists of: three active piers; a 670-acre airfield (support US Navy, US Air Force, and Spanish military aircraft); 400 facilities (many of them shared between the U. S. and Spanish Navies); 375 housing units; a firing range; and supporting utilities and infrastructure.

Mr. Timothy Uplinger is an Environmental Protection Specialist for Naval Facilities Engineering Command (NAVFAC) Europe Africa and Southwest Asia (EURAFSWA) Public Works Department Rota. Mr. Uplinger manages multiple programs in his current position as the Qualified Recycling Program (QRP) Manager and Environmental Conservation Manager in charge of both Natural and Cultural resources management. During the FY 16-17 period Mr. Uplinger also filled the roles of the Environmental Planning and Environmental Management System (EMS) Manager. *Due in large part to the well-managed QRP and EV Conservation programs on the installation, NAVSTA Rota received the 2016 Chief of Naval Operations (CNO) and Secretary of the Navy (SECNAV) environmental awards for Environmental Quality – Overseas Installation.*

### POSITION DESCRIPTION

Mr. Uplinger is responsible for the management and oversight of multiple EV programs at NAVSTA Rota. As the QRP Manager, he acts as the subject matter expert on recycling efforts by continually analyzing waste streams to develop and carry out plans to improve and expand



Figure 1: Mr. Uplinger handles a falcon at NAVSTA Rota’s Falcon Show during Earth Week. This was one of the many community outreach events coordinated by Mr. Uplinger through the Spanish Government to help showcase the installations US and Spanish environmental programs.



Figure 2: Mr. Uplinger is an Environmental Protection Specialist for Naval Facilities Engineering Command (NAVFAC) Europe Africa and Southwest Asia (EURAFSWA) Public Works Department Rota. He manages multiple environmental programs in his current position as the Qualified Recycling Program (QRP) Manager and Environmental Conservation Manager in charge of both Natural and Cultural resources management.

pollution prevention initiatives. A major component of these initiatives has been his revamping of the QRP into a direct sales authorized program that is operated by contractor employees, saving the government \$280,000 annually in operation costs. As the Natural and Cultural Resources Program Manager, Mr. Uplinger led the effort to make large scale revisions to the NAVSTA Rota Natural Resource Management Plan (NRMP) and Cultural Resource Management Plan (CRMP) and is responsible for the management and implementation of these newly revised Plans. His cultural and natural resources management skills directly support the warfighter and he is involved in the management of work that facilitates mission readiness directly for the components of the installation. Gapped positions and high turnover are inherent challenges for overseas installations. To mitigate this, Mr. Uplinger stepped up to also fill the positions of Environmental Planner and Environmental Management System (EMS) Coordinator. As the Environmental Planner, Mr. Uplinger ensured that natural and cultural resources compliance and recycling was integrated into all phases of project planning, design, and construction. Work included reviewing/editing initial project plans, providing input at design charrettes and during MILCON and other construction project planning processes, and conducting field visits and inspections. Mr. Uplinger's efforts as the EMS coordinator can

best be seen through the community outreach efforts that he takes part in, including: coordination of Earth Week activities: presenting at new employee and family indoctrination courses, and promoting the Base's environmental protection and recycling programs to every single person who has moved to NAVSTA Rota. As EMS Coordinator, Mr. Uplinger led the process to ensure that all internal and external audit findings were being corrected and the findings closed out. He developed a clear process for determining Base significant EV aspects and taught the other Environmental Division staff the process. Mr. Uplinger ensured that all requirements of EMS and EMSWeb were being met and organized and conducted environmental inspections at facilities on Base.

### ENVIRONMENTAL ACCOMPLISHMENTS

#### *Qualified Recycling Program (QRP) Improvements – Transition to a Contractor Operated Program*

Solid waste/recycling was one of the top three EMS significant environmental aspects on NAVSTA Rota in FY 16-17. In this vein, as an effort to improve efficiencies to the Base recycling program and to generate cost savings to the government, ***Mr. Uplinger transitioned the QRP from a NAVFAC employee operated program to a contractor operated program managed by the QRP, saving \$280,000 annually in operational costs.*** This has resulted in more cost effective operations with improved service and program oversight, while also reducing the number of hours required to

manage the program. Also, with the transition to utilizing direct sales authority for the sale of recycled materials, the program now sells the materials competitively on the open market, thereby greatly increasing the revenues generated for the government. He executed twenty-one Direct Sales Agreements for recycled materials during the accomplishment period, ensuring that the government received the best price for the goods. The execution of the Direct Sales Agreements saved the government more than \$144,500 over the past two fiscal years, compared to conducting DLA sales.

Mr. Uplinger developed a new process for the tracking and managing of recyclable materials and sales receipts. To accomplish this task, weight tickets were developed for materials entering and leaving the Base's Recycling Center Compound. Another benefit of the improved process is that the monthly billings to the local recycling centers for the materials they purchased has been expedited and the government now receives payment from the companies much more quickly. This process and the operations of the QRP are outlined in the "QRP Business Plan" which was developed by Mr. Uplinger. ***Creating the plan in-house saved the government \$80,000 and this successful plan is now being used as the template for other QRPs in the region.*** Additionally, the new process generated by Mr. Uplinger results in valuable metrics about the quantity of solid waste that is being recycled, which is then provided in monthly and quarterly reports to the Public Works Officer and QRP Board.

Mr. Uplinger has expanded the QRP public outreach and communication efforts. Benefits from this can be seen in the measurable decrease in solid waste leaving the Base en-route to landfills and the increase in recyclables collected and sold. Solid waste from NAVSTA Rota sent to landfills decreased from over 2,400 tons in FY15 to roughly 1,650 tons in both FY16 and FY17. This decrease occurred despite the addition of four FDNF ships newly homeported at NAVSTA Rota and the increase in solid waste from ship operations and maintenance, as well as waste generated from ship personnel and their families. The changes Mr. Uplinger implemented to the QRP increased the weight of materials recycled by more than 180 tons from FY15 to FY16. During FY16, NAVSTA Rota recycled 1080 tons of material



Figure 3: Mr. Uplinger has worked to expand the QRP by adding new collection points throughout the installation. In addition, containers throughout the installation have undergone relabeling and branding ensuring that all recyclables are placed in the proper containers reducing separation cost.

that otherwise would have gone to landfills, the most ever recycled at NAVSTA Rota. ***During FY16 and FY17, NAVSTA Rota exceeded the requirements of EO 13693 by increasing the diversion of solid waste to recycling rate from 48% in FY15 to 69% and 66% respectively.***

This impressive increase in the amount of recycled material and the decrease in the amount of solid waste in recent years can also be attributed to improved community education and involvement and increased communication between the environmental division, tenant commands, installation personnel, and residents. This is most clearly demonstrated by the addition of the homeported ships to the recycling program. Mr. Uplinger advances various methods of environmental outreach, including the distribution of solid waste reduction and recycling flyers, recycling awareness events, and presenting recycling information to the Base Intercultural Relations (ICR) Orientation course

participants. The ICR presentation to all new arrivals to NAVSTA Rota includes information on what can be recycled and where, special item recycling rules, specific recycling instructions, and recycling points of contact. He even put built a recycling themed float for the NAVSTA Rota High School Homecoming Parade which was a huge hit! Mr. Uplinger is working to expand on these accomplishments with the addition of a new tenant and ship recycling “command of the year” contest. This program was kicked-off during the 2017 Earth Week celebrations and the first winners will be announced during the 2018 Earth Week.

### *Environmental Planning for Recycling*

Mr. Uplinger has improved construction and demolition project recycling rates with his efforts through the environmental planning process. As a result of his efforts, **NAVSTA Rota’s overall diversion of solid waste to recycling rate for FY17 reached 95% and saved the government over \$2.46M.** While the planning process does take some foresight, it provides a great return on investment due to the amount of material that is diverted from the landfills. Only 8,000 tons of construction and demolition material was diverted during FY14 and FY15 compared to over 63,000 tons diverted during the reporting period, **an amazing 780% increase in construction and demolition project material diversion.** This increase in diversion wouldn’t have been possible if the environmental planning process had not properly been utilized to ensure that all MILCON and other contracts include requirements for construction and demolition debris recycling.

During FY16 the Base conducted a large demolition project which included the removal 91 multi-family housing units. Through coordination with the PWD Facilities Engineering and Acquisition Division, the QRP under Mr. Uplinger’s direction was able to compact the demolished metal materials onsite for recycling and pick-up. This resulted in the government receiving a higher price for the recycled metal materials as well as the benefit of less truck traffic driving through the Base housing area, thereby reducing noise and potential impacts to air quality. Additionally, he assisted in obtaining Spanish authorization to crush and reuse the concrete foundations onsite as fill material while separating the rebar for recycling. The use of the material onsite eliminated an estimated 900 truckloads of material being transferred off-Base and 900 truckloads of fill being imported to the



Figure 4: Mr Uplinger arranged for recycling contractor to compact material on a large demolition site, reducing transportation costs and increasing profit for the government.

Base, thereby **reducing the project’s carbon footprint by a calculated 88 metric tons. This recycling and reuse of this material saved \$830,000 in landfill tipping fees alone.**

FY17 saw a large increase in the volume of construction and demolition debris recycled. In this banner year, NAVSTA Rota recycled 39,427 tons of construction/demolition material as part of an overall installation diversion rate of 95%. This achievement also saved the government over \$2.46M in landfill tipping fees. Contributions to this very high diversion of solid waste to recycling rate included 100 percent reuse of crushed concrete from an extensive runway and parking pad project, a housing renovation

project, and the reuse of soil from the expansion of on-base schools. These accomplishments were achieved as a direct result of Mr. Uplinger's integration of solid waste reduction/recycling measures into early project planning processes.

### *Hazardous Waste Reduction and Public Health Protection*

Mr. Uplinger is continually working to reduce the amount of hazardous waste that is being disposed of off Base through the use of Pollution Prevention (P2) and recycling. During the reporting period he instituted a new program for the recycling of used oil filters. This program will remove 5 tons of hazardous waste from disposal and save over \$1,200 annually in disposal costs. He also instituted new material controls within the QRP which increased the number of used lead acid batteries being recycled to over 19 tons in FY17 (from 11.7 tons during the previous 5 years combined). In addition, these new controls have generated an additional \$16,112 in revenue for the QRP. During this reporting period the QRP also diverted over 91 tons of used motor oil saving the government more than \$46,300 in disposal costs. Mr. Uplinger's efforts to ensure that the QRP maximizes hazardous waste recycling opportunities have helped NAVSTA Rota ***divert over 115 tons of potentially hazardous waste to recycling saving and generating the government more than \$63,000.***

### *Natural and Cultural Resources*



Figure 5: Mr Uplinger handles a baby chameleon found during a natural resource survey. The common chameleon is a Spanish protected species and requires mitigation during natural habitat disturbance.

NAVSTA Rota's Natural Resources Program, led by Mr. Uplinger, strongly supports the Base's military readiness mission while conserving its natural resources. The past few years of increased oversight of NAVSTA Rota's Environmental Program by the Junta de Andalucía, Spain's Regional Government, has resulted in the Base placing an even greater emphasis on the protection of natural resources. This increased oversight has also resulted in new requirements being developed for the management of protected species and other sensitive natural resources. In order to comply with the new requirements, Mr. Uplinger initiated the effort to develop Landscaping Guidelines for NAVSTA Rota. The finalized guidelines provide a larger variety of native vegetation species (approved by the Spanish Navy) for planting on the Base as new construction and reconstruction project mitigation measures.

The new homeporting of the FDNF ships has required new facilities to be built near the harbor within a prime habitat for the common chameleon, a species protected under the Bern Convention. As NAVSTA Rota had not previously undertaken actions in chameleon habitat, these projects required new procedures to be developed in coordination

with the Spanish Government. Mr. Uplinger worked with the host nation Spanish environmental office to develop procedures that met their requirements to protect chameleons and chameleon habitat, including mitigation measures related to potential MILCON and other project impacts. His efforts resulted in the formalized “Protected Species Protocol” that has been agreed upon by NAVSTA Rota and the Spanish Government. The protocol allows Mr. Uplinger and future Natural Resource Program Managers, instead of highly paid consultants to relocate chameleons on smaller projects, thus *saving the government on average \$20,000 per project. Mr. Uplinger’s dedication and ability to successfully work with the Spanish Government on this effort supports military readiness as facility and infrastructure construction projects that may previously have been delayed due to the presence of chameleons and other protected species can now move forward quickly. The positive impacts of this accomplishment extend far beyond the achievement period as it will help to expedite construction projects well into the future.*

The NAVSTA Rota Cultural Resources Program, under Mr. Uplinger’s leadership, has had great successes during the reporting period in supporting the mission of the installation while managing Spanish cultural resources on Base with minimal cost to the government. Mr. Uplinger negotiated the return to the Spanish government of more than 4,000 archaeological artifacts, including pottery from the Phoenician (800 – 200 B.C.) and Roman (200 B.C. – 409 A.D.) eras, which had been collected on the Base over the past 15 years. A costly inventory had been required prior to the artifacts being turned over to the Spanish government but it had never been funded. *Mr. Uplinger initiated successful negotiations with the Spanish Navy Environmental office to enable the 4,000 plus artifacts to be returned to the Spanish Government without the previously required cultural resources inventory, saving the government \$40,000.*

### *Environmental Outreach*

A success that sets NAVSTA Rota apart is its exceptional environmental outreach program and the positive results the Environmental Division has achieved within NAVSTA Rota and the local communities. EMS implementation, sustainment, successes, and continual improvement are achieved through the incremental efforts of all members of the NAVSTA Rota community. Communication with all installation personnel and residents is the key to achieving as much environmental participation and awareness as possible. Mr. Uplinger’s efforts in this area have greatly enhanced community environmental outreach as he has reached out to each stakeholder through a wide range of yearlong activities, events, training, radio media, and a NAVSTA Rota fun-filled “Earth Week” rather than just an “Earth Day”. Organized by Mr. Uplinger, Earth Week activities represent a key outreach initiative for the Environmental Division. Creative planning has resulted in the annual Earth Weeks growth to include even more exciting activities including: beach cleanup events; falcon show; showcasing an Earth Day presentation at the Navy Exchange; sidewalk chart



Figure 6: Mr. Uplinger provides a presentation for the local Girl Scouts on water conservation. This is one of the many community outreach programs that he organizes and takes part in at NAVSTA Rota.

art contest; 5k run; recycling facility tours; enhancing community environmental awareness by publishing articles in the NAVSTA Rota Coastline newspaper; and discussing Earth Day topics on NAVSTA Rota's radio station.

Promoting recycling increases the amount of recyclables collected, increases commodity proceeds, and reduces the cost of solid waste disposal. Continuous recycling education and outreach programs are especially important for the transient personnel and residents that reside at overseas locations. Methods undertaken by Tim to meet this continuous need include the



Figure 7: Local Girl Scouts and Boy Scouts work together to clean up Admiral's Beach on NAVSTA Rota as a part of the Earth Week celebration. During the cleanup, a significant amount of garbage was removed from the beach.

distribution of solid waste reduction and recycling flyers, recycling awareness events, and presenting recycling information to the ICR Orientation course. This ensures all new arrivals to NAVSTA Rota have information on what can be recycled and where, special item recycling rules, specific recycling instructions, and recycling points of contact.

Mr. Uplinger also provides trainings to the local Boy Scouts and Girl Scouts upon request covering a wide range of environmental topics from recycling, natural resources, cultural resources, and water conservation. Other efforts for environmental stewardship within the NAVSTA Rota community have included an extensive range of events and activities such as: Energy Awareness Week; school presentations; and presentations with the local Boys and Girl Scouts Chapters.

### *Summary*

Mr. Uplinger has been a valuable asset to the overall environmental program at NAVSTA Rota. He has improved all of the programs he has managed, including: solid waste/recycling; natural and cultural resources; environmental planning; and EMS. The benefits from the improvements he originated will extend into the future, far beyond his years working at NAVSTA Rota. With the high employee turn-over/transition rate at this overseas base, Mr. Uplinger has played a key role in teaching new employees the processes at NAVSTA Rota and how to implement successful environmental programs. He has not just excelled at his own work but taught others from his experience and lessons learned. His efforts have significantly reduced the amount of solid waste being disposed of in landfills and greatly increased the volume of materials being recycled and reused, with high corresponding cost savings and revenue to the government. His programs and initiatives have supported military readiness. For example, his coordinated work with the Spanish Government, produced a protected species protocol for NAVSTA Rota; which results in expedited construction projects in support of the Base mission, now and into the future. Mr. Uplinger has greatly enhanced community environmental outreach, particularly in the recycling program and "earth week" activities. ***Mr. Uplinger's exemplary efforts have saved and generated an estimated \$3.85 million dollars in waste reduction, increased recycling, and natural and cultural resources conservation.***