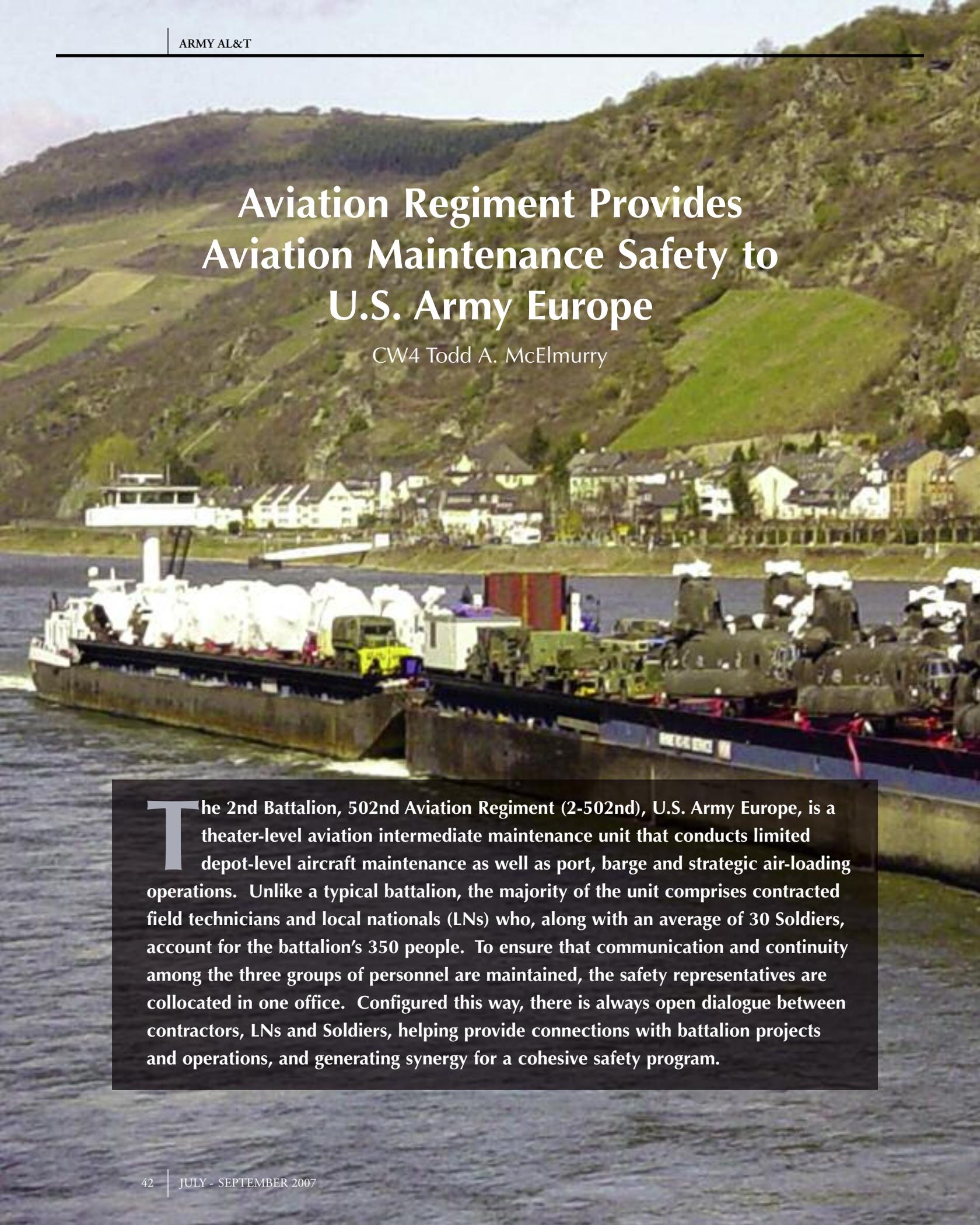


Aviation Regiment Provides Aviation Maintenance Safety to U.S. Army Europe

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The 2nd Battalion, 502nd Aviation Regiment (2-502nd), U.S. Army Europe, is a theater-level aviation intermediate maintenance unit that conducts limited depot-level aircraft maintenance as well as port, barge and strategic air-loading operations. Unlike a typical battalion, the majority of the unit comprises contracted field technicians and local nationals (LNs) who, along with an average of 30 Soldiers, account for the battalion's 350 people. To ensure that communication and continuity among the three groups of personnel are maintained, the safety representatives are collocated in one office. Configured this way, there is always open dialogue between contractors, LNs and Soldiers, helping provide connections with battalion projects and operations, and generating synergy for a cohesive safety program.

Composite Risk Management

Collectively, the three safety managers (military, contractor and LN) use composite risk management to identify and assess hazards in the workplace and, ultimately, select control measures to mitigate associated risks. Potential hazards are identified through regular inspections, surveys, safety meetings and councils. As with any safety program, the unit hazard inventory sheet is a critical tool that must be maintained and updated on a daily basis. Once a hazard is identified, it is logged onto the hazard inventory sheet and then a risk assessment is conducted on each hazard in terms of potential

accident severity and probability of occurrence. The hazards are worked on a “worst-first” case basis, meaning that the worst hazards are corrected first. Hazards are monitored, ensuring that the control measures implemented are working, and constant supervision and evaluation is provided throughout the process.

Training

Quality and realistic training is a critical control measure in the safety

arena. Training and education can reduce 99 percent of all accidents in the workplace. The three safety managers regularly conduct performance-based evaluations to:

Potential hazards are identified through regular inspections, surveys, safety meetings and councils.

- Ensure that all workers are familiar and knowledgeable about their job requirements.

- Ensure that all workers understand the risks associated with their jobs.
- Manage and practice the proper safety procedures to keep workers safe.



To preclude potential water safety hazards during barge and ship operations, all personnel wear flotation devices and are trained how to properly use them. Here, barges carrying CH-47 Chinook helicopters, trucks and replacement parts head downriver for the port of debarkation. (U.S. Army photo courtesy of the 2-502nd.)

For example, safety managers monitor hangar, warehouse and shop facilities, and the LN safety specialist can make on-the-spot corrections to Soldiers regarding safety violations, and the contractor safety manager is authorized to make on-the-spot corrections to the LN employees. This one voice and one message implementation of safety programs is an important element in ensuring the unit maintains a safe work environment.

Because of the inherent risks associated with these types of operations, regular safety briefings and rehearsals are conducted prior to each operation.

German road network for extended distances to deliver aircraft either to the barge site or airfield. Battalion personnel also load or unload aircraft from ships either by towing them or lifting them with cranes. Along with towing aircraft and loading them on boats, the battalion also conducts strategic air load outs at its remote site at Ramstein Airbase, Germany, or personnel are sent to other airfields and ports in Europe to conduct these operations. Battalion leaders regularly conduct coordination staff meetings to identify risk mitigation techniques and develop controls for the many hazards identified when conducting movement operations.

international law enforcement authorities from two separate German states is critical to secure the route to the barge site. Also, the unit performs a route reconnaissance to remove any overhead obstacles or other types of barriers before executing the operation. Contracted civilian vehicles are used to tow the aircraft from the maintenance facility to the barge loading site. Safety oversight is most critical during the hookups and the actual pull of aircraft.

Aircraft brakes must be off prior to the pull, and a pace vehicle must lead the convoy to ensure that aircraft are not being towed too fast. Coordination with both the American and German fire departments is executed to provide an emergency vehicle in the event of a wheel fire and also to provide one fire extinguisher per tow aircraft for immediate response. In preparation for tire blowouts, vehicle breakdowns or other maintenance issues, a maintenance contact team follows the convoy as the trail vehicle. This precaution has

Controlling Movement Hazards

As an aviation maintenance battalion, the 2-502nd moves large quantities of aircraft in and out of the European theater. The battalion routinely tows AH-64 Apache, CH-47 Chinook and UH-60 Black Hawk helicopters on the

Aircraft Towing Operations

When towing helicopters to the barge site, coordination with local



The 2-502nd's safety managers use composite risk management to identify and assess potential hazards. Here, an AH-64D Longbow Apache helicopter mechanic, SPC Judson McNamara, Charlie Co., 1st Battalion, 101st Aviation Regiment, checks technical data on his laptop while performing routine maintenance. (U.S. Air Force photo by TSGT Andy Dunaway, 1st Combat Camera Squadron.)



The 2-502nd provides depot-level aircraft maintenance as well as port, barge and strategic air-loading operations. This organization, composed predominantly of contracted field technicians, has proven to be a force multiplier in returning retrofitted aircraft to ongoing operations in support of *Operations Enduring and Iraqi Freedom*. (U.S. Army file photo.)

proven to be the best time-tested technique to address potential transportation issues en route to the delivery destination.

Port and Airfield Operations

During barge and ship operations, the greatest identified hazard is the danger of personnel falling into the water. All personnel wear flotation devices and are trained to use them. Flotation rings are strategically placed for quick and easy access. The battalion coordinates with local authorities to provide shore patrol boats for security and rescue operations. Other control measures include minimizing the numbers of personnel that must board these vessels (barges and ships) and ensuring that they wear rubber-soled shoes with serviceable tread. Personnel are equipped with whistles to stop all movement when a serious hazard or risk is identified, an especially important element in the safety program considering existing language barriers. Similar to the technique of calling cease fire on weapons firing ranges

when unsafe acts are observed, all personnel are briefed that when a whistle blows, all movement stops. Other safety measures include wearing high visibility vests and hard hats for head protection.

As with port operations, many safety measures also apply to airfield operations when loading helicopters onto U.S. Air Force strategic aircraft. Experienced and trained tow vehicle operators are vitally important to this type of operation. During loading onto aircraft, personnel must listen to the cargo load masters and take all commands from them. Because of the inherent risks associated with these types of operations, regular safety briefings and rehearsals are conducted prior to each operation. Mission and safety briefings are also executed prior to conducting any strategic air requirement, similar to a convoy briefing prior to departure. This exemplifies the education and awareness process and reinforces good safety practices.

Safety Oversight From the Top Down

Safety must always be emphasized from the top down and managed by everyone in the organization. The 2-502nd has an active and fully involved command safety program. The only way to develop a successful safety program is to ensure that each team member takes an active role, accepting complete ownership of program responsibilities. Safety professionals understand that their mission is to promote this concept to all personnel, including those who work to maintain and move helicopters in this command. This emphasis and focus ensures our warfighters are getting the best equipment that can be provided to them, delivered in a safe and efficient manner.

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