MISHAP REDUCTION SUCCESS AT NAVAL AIR WEAPONS STATION, CHINA LAKE, CA

The Naval Air Weapons Station, China Lake (NAWSCL) is located in the Western Mojave Desert region of California, approximately 150 miles North of Los Angeles. As part of the Commander, Navy Region Southwest, which operates under the Commander, Navy Installations Command, NAWSCL operates and maintains base facilities and provides base-operating support to more than 16 tenant commands, activities, and transient units -- occupying more than 2,000 buildings. The China Lake installation includes a vast complex of laboratories and test-range facilities that support the mission of its tenants, including the Naval Air Warfare Center Weapons Division, the largest tenant aboard NAWSCL. The Station covers more then 1.1 million acres of land and is the Navy’s largest land holder.

China Lake is unique in that its demographics are largely civilian and contract employees. Supporting mishap reduction safety programs at a facility of this vast size is challenging. The fact that personnel and buildings are spread over an area of 1,723 square miles poses problems outside the scope of traditional safety programs typical of smaller bases. Compounding the challenge, is the diverse nature of the operations at China Lake, which include weapons testing and evaluation on air and ground ranges, research and development, and work in highly sophisticated laboratories, which serve virtually every scientific discipline.

The impressive mishap reduction trend at China Lake is the cornerstone of its Mishap Program’s success. NAWSCL has worked diligently to achieve the Secretary of Defense (SECDEF) and Secretary of the Navy (SECNAV) goal to reduce mishaps by 75% by the end of fiscal year 2012 (FY12) as compared to an FY02 baseline. As of 31 May 2009, NAWSCL has realized a 76% reduction of Occupational Safety and

![China Lake Injury/Illness Rate](image-url)
Health Administration (OSHA) recordable mishaps as compared to its FY02 baseline.

NAWSCL began its venture to achieve this mishap reduction goal when it was first introduced by SECDEF and SECNAV in FY03. At that time, the challenge was to achieve a 50% mishap reduction experience. NAWSCL received national recognition by the Under Secretary of Defense in November of 2005 for coming off the Department of Defense “Top 40” list (a ranked list of the forty DoD installations with the highest number of civilian total lost days and corresponding rates resulting from work-related injuries). The command also received recognition by Commander, Naval Safety Center in January of 2006 for reduction of civilian total lost days by 56%. Since that time, as the mishap reduction goal became more aggressive, challenging a 75% mishap reduction result, so did the actions of NAWSCL.

In 2003, NAWSCL stood up a “Mishap Reduction Team” made up of personnel from the local Occupational Medicine Office, Workers Compensation Office, Industrial Hygiene, as well as safety representatives from customer organizations/tenants and personnel from the Safety Office. The group reviewed current or on-going mishap and workers compensation cases, discussed mishap prevention challenges, and outlined ways to better work together to reduce mishaps. This collaborative effort promoted a better understanding of program challenges and increased communication between each key agency involved when a mishap occurred. Many of NAWSCL follow-on initiatives to reduce mishaps stemmed from the work of this team, most of which have a common theme of communication.

Many communication efforts were started, largely focused on four main areas: 1) timely notification of all mishaps through direct communication between safety personnel, the local medical clinic, and supervisors of injured personnel; 2) direct communication with senior leadership/management on all recordable mishaps; 3) increased publicity and communication on safety to customers through media and signage; and 4) focus on Safety Specialists spending more time in the field communicating with supervisors on their specific safety challenges and needs, with a continued emphasis on Operational Risk Management (ORM) in the...
workplace. [ORM is the Navy’s primary process to assess the potential for mission failure, inadequate force protection, and practices of personal risk. It is a decision making tool used by all personnel to increase effectiveness by identifying hazards and reducing the risk associated with each hazard.]

The first communication effort which received attention involves the communication that takes place immediately after a mishap occurs. Timely notification ensures the mishap investigation is started immediately, which is critical to the identification of root causes and the implementation of corrective actions to prevent recurrence of the mishap. Following every mishap, the Safety Office is immediately notified through a number of avenues. Supervisors input the mishap into the Enterprise Safety Application Management System (ESAMS), a centralized safety database, which in turn, sends an immediate e-mail notification to the Safety Office. In addition, NAWSCL has briefed supervisors to contact the Safety Office through the “S.T.O.P.” procedure.

S.T.O.P. is a mishap reporting process designed to help the field supervisor quickly remember what to do following a mishap. S.T.O.P., stands for S- Send the employee to the local clinic for treatment; T – Telephone the Safety Office at 939-STOP (7867) to report mishap; O – Obtain the facts about the mishap; P – Participate actively in the investigation.

Finally, upon arrival of the injured at the local clinic for treatment, the Safety Office is actually called by the medical personnel. A Safety Specialist then proceeds to the clinic to interview the injured and immediately begin the mishap investigation. Additionally, information from the Human Resources Office and from the Payroll Office allows for a cross check with Workers Compensation claims to ensure that all occupational mishaps are reported, investigated, and recorded.

It is the philosophy of the China Lake Safety Office that upper management needs to be aware of all mishaps that occur on the base. In addition to timely notification, direct communication with senior leadership on every recordable mishap has been invaluable to NAWSCL’s mishap prevention efforts. The local Commanding Officers (COs), Commanders, and/or Officers in Charge are provided a written preliminary report of all OSHA recordable mishaps directly from the Installation Program Director within three days of the event. In turn, this report is sent down through the appropriate management chain requiring that the investigation be completed and corrective actions identified by the field supervisor, not solely by Safety personnel.
Safety is an emphasis area for NAWSCL Command Leadership. Every NAWSCL staff meeting begins with a safety message and update. This sets the tone for each meeting and re-enforces the fact that to the CO, the priority for safe operations is critical for the accomplishment of the mission. Safety is also stressed at Command wide bi-monthly luncheons. At these events, the CO not only discusses his focus and concerns for safety, but awards individuals with a “Safety Pro of the Month” award to celebrate the exceptional safety efforts of a chosen employee. At these events, the CO clearly communicates his expectations for health and safety aboard the facility.

NAWSCL’s mishap reduction success can also be attributed to a focus on publicity as one of the Station’s strongest communication tools. Every two weeks an entire page of the NAWSCL local newspaper, The Rocketeer II, is dedicated to safety. This page features informational articles and Command safety messages from NAWSCL leaders and CO. In addition, a variety of safety topics published in the newsletter include: current mishap information, publicity on upcoming safety training, and a series of safety word puzzles, which serve as an innovative and eye catching method of training on safety topics.

To further this publicity effort, NAWSCL obtained two mobile, programmable, solar powered, electronic signs that are frequently moved throughout the base and positioned in key or high traffic areas, displaying safety messages and information. Included in the electronic message is a real-time posting of the number of OSHA recordable mishaps that have occurred year-to-date at NAWSCL. The goal is to provide current, dynamic, and thought provoking messages, which reach a wide population with highly visible safety awareness messages.

The electronic signs have created more interest and awareness on safety than any other recent safety initiative. Personnel talk about the signs, ask about the signs, and even look for the signs. The use of the electronic signs provides a
direct and real-time communication tool between the safety office and personnel aboard the base.

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Finally, the NAWSCL relies heavily on direct and personal communication between Safety Specialists and customers. The focus of the safety professional has shifted to working primarily in the field rather than at a desk. The goal of the safety staff continues to be spending at least 75% of their time in the field working with customers, discussing safety issues unique to each group, observing real work, and assisting with the implementation of ORM at all levels. This personal approach to safety has been an invaluable contribution to NAWSCL’s mishap prevention effort. It promotes working directly with customers to understand safety concerns and helps to put in place real solutions and controls aimed at reducing risk.

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The Safety staff not only serves as a regulatory force to ensure that safety regulations and instructions are enforced, but strives to work side by side with customers to resolve safety concerns with real world solutions. Every Safety Specialist is assigned a department which they are responsible to provide services for, including: safety inspections, mishap investigation, evaluations, consultation, regulatory oversight, and just plain, old-fashioned field visits to see how folks are doing. NAWSCL’s efforts are based on the belief that prevention of mishaps does not happen solely from working behind a desk, writing regulations, or updating databases with data required for compliance. Prevention of mishaps happens primarily by understanding the work being
done in the field and the associated risks, then providing guidance and workable options on how to reduce risk. This can only happen when the safety professional works together with the customer on real work where it is accomplished – in the field.

The prevention of mishaps decreases losses experienced by the NAWSCCL and increases the readiness, productivity, efficiency, and quality of life for China Lake personnel so that they can be successful at achieving their mission. The mishap reduction results experienced are evidence that the safety communication strategies implemented at China Lake are working. Whether it is through timely notification and immediate investigation of all mishaps, devoted Command attention in the review of every recordable mishap, innovative publicity efforts, or by increasing field time and decreasing desk time, it seems that NAWSCCL has made a connection. Personnel truly understand that safety is essential to the accomplishment of the mission, and NAWSCCL continues to be successful at the Navy’s ultimate safety goal -- the prevention of mishaps.