



LTCOL TERRENCE O'CONNELL



SGTMAJ WILLIAM McCoy

## MARINE WING SUPPORT SQUADRON 272

Marine Wing Support Squadron 272 was activated on June 6, 1986 at Marine Corps Air Station New River, North Carolina. MWSS-272 was organized from the assets of Marine Air Base Squadron 26, Marine Air Base Squadron 29 and Detachment "A", Marine Wing Support Group 27, which were deactivated on 5 June 1986.

Since 1992 MWSS-272 has provided essential engineer services to 2D Marine Aircraft Wing (MAW) by conducting horizontal and vertical construction, providing bulk fuel services, significant utility support, and Motor Heavy Equipment (MHE) support. The engineers of MWSS-272 also specialize in K-Span construction with the ABM and UBM, Rapid Runway Repair (RRR), soil stabilization/dust abatement, Base Recovery After Attack (BRAAT), and Air Base Ground Defense (ABGD).

In July 1993, MWSS-272, the Untouchables, spearheaded the total restoration of Landing Zone Bluebird by removing 166, 272 square feet of weathered matting, extensive earth work improvements, soil stabilization, and re-laying of 158, 976 square feet of matting. This project was completed ahead of schedule through exceptional efforts by Combat Engineers and Heavy Equipment operators.

In September 1993, the squadron's engineers extracted an AV-8 Harrier as part of an aircraft recovery mission aboard Camp Lejeune, NC. This fundamental mission is called upon MHE operators in OEF and OIF today.

In 1999, MWSS-272 supported a New Horizons Humanitarian Civic Assistance (HCA) exercise in the Chaco region of southeastern Bolivia. MWSS-272 engineers were part of 240 U.S. military engineers who formed "Combined Task Force Chaco" to build schools, expanded a medical clinic, dig wells, improved roads, built a base camp in the town of Boyuibe. The task force worked alongside Bolivian army engineers and security forces.

In 2000, MWSS-272 supported another New Horizons Humanitarian Civic Assistance (HCA) in Nicaragua by providing engineering services in renovating a clinic and assisted in the building of a new clinic in the towns of Antigua and Barbuda.

After a two year break MWSS-272 engineers supported their third HCA in Jamaica in 2002. Also in 2002, from August till September, bulk fuel Marines from MWSS-272 supported JTF-6 by refueling numerous aircraft in Arkansas.

The Untouchables deployed to the Persian Gulf in support of Operation Iraqi Freedom (OIF) in February 2003 and remained there until June 2003. The Untouchables provided aviation ground support (AGS) to three Forward Operating Bases (FOBs) at Al Jabr, Ali Al Salem, and Joe Foss. FOB Joe Foss was the largest expeditionary airfield built since World War II, requiring extensive engineer support by Combat Engineers and MHE operators.

Untouchable engineers and MHE operators assisted in the construction of two 6,000 foot runways while the bulk fuel Marines maintained 350, 000 gallons of fuel. The efforts of the bulk fuel were directly responsible for dispensing over 1,000,000 gallons of fuel allowing the air combat element to successfully complete over 1,000 sorties by the end of the war. FOB Joe Foss was vitally important to air assault and medical evacuation operations during OIF.

In 2004 MWSS-272 augmented both MWSS-271 and MWSS-273 with combat engineers for their AGS mission in Iraq as well as providing personnel to support operations for OEF in the Horn of Africa.

Also in 2004, an engineer attachment from MWSS-272 provided general engineering and MHE support to the U.S. Border Patrol at Naco, Arizona. This mission successfully ended with extensive road improvements patrolled by the U.S. Border Patrol.

In August 2005 the squadron deployed to Iraq again. The role of the engineers in Al Asad, Iraq was extensive. The engineers provided exceptional construction support in continuously building Southwest Asia Huts (SWA Huts) on a daily basis, which is a hybrid of the Sea Huts us older engineers are use to constructing. In addition to building SWA Huts, the engineers did minor repairs to existing facilities. They conducted rapid runway repair with pavement and concrete as well as repairs to main supply routes placing them in harms way. Utility Marines were faced with the challenge of doing repairs and improvements to an aging infrastructure aboard the air base dealing with unsafe wiring and civilian electrical equipment. MHE aboard the air base proved to be extensive with daily MHE support going well into the night hours.

The MHE support ranged from filling HESCOS, loading and unloading of equipment and supplies, vehicle recovery, and aircraft recovery. HESCOS are a prefabricated, multi-cellular defense system made of galvanized steel weld mesh and lined with non-woven polypropylene. HESCOS are filled with rocks or sand to offer protection against indirect fire attacks.

In November 2006, Combat Engineers and MHE operators assisted in the removal of over 3,000 feet of AM2 matting at the LHA Deck aboard Camp Lejeune, NC. This project was an effort mandated by HQMC to accumulate excess AM2 matting in order to refurbish and redeploy to OEF and OIF.

## *LINEAGE OF MARINE WING SUPPORT SQUADRON 272*

1986-2004

ACTIVATED 5 JUNE 1986 AT NEW RIVER, NORTH CAROLINA, AS MARINE WING SUPPORT SQUADRON 272, MARINE WING SUPPORT GROUP 27, 2D MARINE AIRCRAFT WING, FLEET MARINE FORCE, ATLANTIC

PERSONNEL OF THE SQUADRON PARTICIPATED IN OPERATIONS DESERT SHIELD AND DESERT STORM, 1990-1991

ELEMENTS PARTICIPATED IN SUPPORT OF OPERATION SUPPORT DEMOCRACY, HAITI, JULY-AUGUST 1994

DEPLOYED DURING FEBUARY 2003 TO KUWAIT IN SUPPORT OF OPERATION ENDURING FREEDOM

PARTICIPATED IN OPERATION IRAQI FREEDOM, IRAQ, MARCH-MAY 2003

*The following awards follow the Untouchables where ever we go:*

Presidential Unit Citation Streamer

Iraq-2003

National Defense Service Streamer with one bronze star

Global War on Terrorism Expeditionary Streamer

Global War on Terrorism Service Streamer

The following personal and section awards recognizing the Untouchable Engineer community is as follows:

Outstanding Marine Wing Support Squadron Engineer Division of the Year for 2003

Engineer Equipment Operator of the Year for 2003

Bulk Fuel SNCO of the Year for 2003

Bulk Fuel Marine of the Year for 2003

*The following Commanding Officers had the honorable pleasure of leading the Untouchables:*

LtCol Kelly from 1992 till 1994  
LtCol Anderson from 1994 till 1996  
LtCol Shook from 1996 till 1998  
LtCol Brush from 1998 till 2000  
LtCol Lee from 2000 till 2001  
LtCol Fearheller from 2001 till 2002  
LtCol Haviland from 2002 till 2004  
LtCol Merrit from 2004 till 2006  
LtCol O'Connell from 2006 till the present



*LT COL GREGORY LEMONS*



*SGTMAJ VINCENT CLAXTON*

## *MARINE WING SUPPORT SQUADRON 274*

Returning from Desert Shield/Desert Storm, MWSS 274 deployed to provide AGS support for Marine Aircraft Group 40 to Bodo and Bardufuss, Norway for Team Work 92 and additionally to support Maritime Pre-positioning Force operations during exercise Ocean Venture 92.

The Engineers demonstrated their capability to foster goodwill with the local community in 1993, by constructing a Boy Scout Camp at Camp Bonner in Chocowinity, North Carolina. Soon thereafter, 274 deployed to Current Island, Bahamas in support of hurricane relief operations in the wake of Hurricane Andrew. Then the Squadron embarked upon a major road construction project in Harlowe, North Carolina.

During 1997, Ironmen Engineers overseas commitments included; construction of a school, renovation of an orphanage and running a base camp for a JTF engineering exercise in Guyana. A K-Span structure was built aboard Cherry Point, for use by the Station Rifle/Pistol Range.

In 1998, while supporting CAXs 3-98 and 4-98, MWSS 274 Marines constructed (19) K Span structures for the new Camp Wilson complex. The highlight of 1998 was the completion of Creekside Park, a two year long construction project.

The Ironmen Engineers began 1999 with Exercise Battle Griffin 99 in Norway. They also participated in a NATO exercise at Varnes Airfield, which included running a 2,000 man base camp, establishing a Forward Operating Base from the ground up at Aimo, Norway and participating in NALMAGTF operations. Additionally, the Ironmen deployed to 29 Palms to provide AGS to CAX 9/10 99.

June of 2003 saw the colors of MWSS 274 cased, and the unit re-designated as MEU Service Support Group 22, which supported OEF in Afghanistan.

MWSS 274 entered the combat zone of Iraq to participate into Operation Iraqi Freedom 05-07 in February 2006. While in Iraq, the Engineers shined as they supported forward operating base Al Asad and forward operating base Al Qaim. The Marines performed exemplarily as they endured 7 months of sustained combat operations. Significant missions performed include but are not limited to;

- Over a three day period, repaired a washed out bridge along a Main Supply Route (MSR) in the Al Anbar Province. This repair consisted of hauling, filling, and compacting over 1,800 cubic yards of earth and the placement of a 30 cubic yard concrete wearing surface.
- Improved force protection at a local Iraqi Police station by constructing an obstacle plan consisting of over 170 concrete jersey barriers and two vehicle check points.
- Constructed a firm base for a reinforced weapons company from 3rd Battalion, 3rd Marines. This support consisted of: installation of an expedient shower system, wiring and plumbing of washing machines, plumbing to provide host nation water, wiring to provide host nation power, emplacement of 268 cells of 7 foot HESCOs for force protection, construction of a vehicle check point and entry control point, construction of four bunkers and guard towers along the perimeter, and installing of four air conditioning units.
- Provided heavy equipment support to repair a local Water Treatment Facility (WTF) that had been damaged by insurgents. The WTF provides host nation water to Al Asad AB and the local community.
- During a water shortage, the utilities platoon utilized three Reverse Osmosis Water Purification Units (ROWPU) to purify and distribute over 90,000 gallons of water aboard Al Asad.
- Responded and completed 152 electrical trouble calls.
- Provided over 65,000 hours of tactical generator power to units aboard Al Asad that did not have host nation power.
- Completed a major electrical renovation of sixteen existing structures ensuring the safe and efficient functioning of a major Combat Operations Center aboard Al Asad.
- HE platoon completed 943 runs, totaling 3823 hours and operated at 96% readiness.
- Recovered (multiple) vehicle and aircraft utilizing Heavy Equipment Assets.
- Surveyed, prepped and emplaced gravel for (4) Helicopter pads at FOB Al Qaim.
- Conducted (30) Counter Improvised Explosive Device (CIED) Route Sweeps.
- Conducted (11) IED responses where the Engineers provided security to the site and a cordon around the danger area for the safe and expedient reduction of the IEDs.

MWSS-274 Engineers continue to meet the challenges of supporting MAG 14 in garrison, while supporting MAG 29 in support of their deployment cycles. Ironmen Engineers take pride in exceeding mission requirements and being ever ready to support Marine Aviation in time of conflict. The Ironmen have an attitude best exemplified in our Squadron motto, Aeternus Adjuvo (Eternal Support), MWSS 274 Marines are dedicated professionals who accept nothing less than providing exemplary aviation ground support to Marine Aviation.

## MARINE WING SUPPORT SQUADRON 273



*The unit is deployed in support of OIF and at the time of printing no information is readily available about the organization. The unit's command team is shown at the left. LtCol Jeffrey Hooks and SgtMaj Linton Hardy.*



COL MICHAEL DANA



SGTMAJ DONEIL YARN

## MARINE WING SUPPORT GROUP 37

Marine Wing Support Group 37 (MWSG-37) is a United States Marine Corps aviation Combat Support (CS) and Combat Service Support (CSS) unit based at Marine Corps Air Station Miramar that is currently composed of four Marine Wing Support Squadrons and Headquarters Company, that provide the 3rd Marine Aircraft Wing (3d MAW) and I Marine Expeditionary Force (I MEF) with complete Aviation Ground Support (AGS) to an Aviation Combat Element (ACE) of a Marine Air Ground Task Force (MAGTF).

AGS consists of ground support functions required (less aircraft supply, maintenance, and ordnance) for sustained air operations at Forward Operating Bases (FOBs) and air bases. AGS directly supports the employment of the six functions of Marine aviation. It is the critical component that gives Marine aviation its expeditionary capability. AGS consists of numerous ground functional capabilities that support MAGTF aviation assets in austere environments. Functions such as expeditionary airfield (EAF) services, aircraft rescue and fire fighting (ARFF), aircraft refueling, and Meteorological and Oceanographic (METOC) services are unique to the aviation community. Other functions such as engineer services, motor transport, communications, and field messing enable the ACE to conduct expeditionary operations. These functions allow the ACE to project its assets ashore and generate sorties at a rate beyond that capable from sea-based platforms. AGS is compatible with U.S. Navy (USN) aircraft and can support and accommodate U.S. Army (USA) rotary-wing aircraft and most U.S. Air Force (USAF) aircraft. The Marine wing support groups (MWSGs) and subordinate Marine wing support squadrons (MWSSs) provide the ACE with the following 14 AGS functions, which are discussed in detail in chapter 2 of the publication.

- Internal airfield communications.
- Weather services.
- EAF services.
- ARFF.
- Aircraft and ground refueling.
- Explosive ordnance disposal (EOD).
- Essential engineer services.
- Motor transport (MT).
- Field messing facilities.
- Routine and emergency sick call and aviation medical functions.
- Individual and unit training of organic personnel and selected personnel of support units.
- Nuclear, biological, and chemical (NBC) defense.
- Security and law enforcement services.
- Air base commandant functions.

The original MWSGs began in the 1970s by merging the Marine Air Base Squadron, Wing Engineer Squadron, Wing Transportation Squadron, Wing Engineer Repair Squadron, and Headquarters and Headquarters Squadron (H&HS). By the late 1980s, the MWSG

evolved into its present configuration. The MWSG was developed to place AGS functions within the MAW under a single commander. The MWSG is a deliberate and careful balance of centralized command with decentralized control. Until recently, the MWSG contained four MWSSs: two organized and equipped to support fixed-wing Marine Aircraft Groups (MAGs), (MWSS [FW]), and two organized and equipped to support Rotary-Wing MAGs, (MWSS [RW]). Over the last few years a “right-sizing” effort was initiated to derive an optimal mix of overall strength and military occupational specialties to optimally and efficiently support the ACE. Concurrently, a “mirror imaging” effort has been undertaken to provide the MWSSs with the manpower and equipment necessary to support either a fixed wing or rotary wing MAG, giving the MWSG Commander both enhanced capability and maximum flexibility. The MWSG headquarters includes a personnel support detachment that provides administrative support to the MWSG as well as serving as the remain-behind element in the event of a group-level deployment. The mission of the MWSG is to provide essential ground support requirements (less aircraft supply, maintenance, and ordnance) to a MAW. The MWSG is organized and equipped for employment as an integral unit in support of the MAW. Structured to provide task-organized or fully deployable elements in support of the garrison or deployed posture of the MAW, the MWSG assigns a supporting MWSS to a specified MAG, airfield or FOB. The MWSG exercises administrative, operational, and logistical control of the MWSSs and ensures that the MAW receives the required AGS. When deployed, the MWSG will collocate with the MAW headquarters while its MWSSs locate with and provide direct support to a specified MAG at an airfield or FOB. Currently, there are three active MWSGs and one reserve MWSG. Both MWSGs within 2d and 3d MAW possess four deployable MWSSs each and operate expeditionary airfields at Bogue Field, NC, and Twenty-nine Palms, CA, respectively. The MWSG headquarters is the key to efficient and effective use of AGS within the ACE, both in combat and in garrison. It provides the MAW Commanding General with a commander who can supervise, prioritize, and coordinate AGS employment for the entire MAW, to include the Marine Air Control Group (MACG), the MAW headquarters, as well as the MAGs. Specifically, the MWSG:

- Develops courses of action to establish and sustain multiple airfields or FOBs and associated AGS.
- Analyzes support requirements for each MWSS at each FOB, as well as additional expeditionary aviation support missions, and realigns personnel and equipment between MWSSs as necessary to accomplish the mission.
- Coordinates with the wing headquarters on any support issues that exceed the capabilities of the MWSG.
- Conducts FOB and AGS planning, as part of wing course of action development, pertaining to the deployment and employment of MWSG assets in support of the wing mission for a commanders in chief (CINCs) operations plan or contingency.
- Oversees and redistributes AGS assets in support of training, exercises, and operations.
- Oversees the readiness posture of MWSSs.

## LINEAGE

1. Activated on 1 July 1953 at Miami, Florida, as Marine Wing Service Group 37 and assigned to the 3d Marine Aircraft Wing.
2. Relocated during September 1955 to El Toro, California.
3. Re-designated 1 April 1967 as Marine Wing Support Group 37.
4. Participated in numerous training exercises during the 1970s and 1980s.
5. Participated in Operations Desert Shield and Desert Storm, Southwest Asia, December 1990 – April 1991.
6. Elements participated in Operation Restore Hope, Somalia, December 1992 – March 1993.
7. Relocated during October 1998 to Miramar, California, through the Base Re-Alignment and Closure process (BRAC).
8. Participated in Operations Enduring Freedom and Iraqi Freedom from March 2003 – Present.

## HONORS

- a. Navy Unit Commendation Streamer for Southwest Asia Operations 1990 – 1991.
- b. Meritorious Unit Commendation Streamer 1997 – 1998.
- c. National Defense Streamer with two bronze stars.
- d. Southwest Asia Service Streamer with three bronze stars.
- e. Operation Iraqi Freedom Service Streamer.
- f. Expeditionary Service Streamer.

*Current and former Group Commanders:*

Col O.B. Johnson	1 Apr 67 – 31 Jan 68
Col W. Sienko	1 Feb 68 – 29 May 68
Col W.L. Beach	30 May 68 – 24 Apr 69
F.L. Wilson	25 Apr 69 – 29 Jul 70
R.A. Savage	30 Jul 70 – 23 Jun 71
LtCol F.R. Smoke	24 Jun 71 – 18 Nov 71
Col B.J. Frankovich	19 Nov 71 – 10 Aug 72
Col O.L. Owens	11 Aug 72 – 22 Apr 73
LtCol A.F. Ribbeck	23 Apr 73 – 9 Jul 73
Col G.L. Brusser	10 Jul 73 – 19 Jul 73
Col D.E. Gillum	19 Jul 74 – 6 Jun 75
LtCol V.P. Hart	7 Jun 75 – 2 Sep 75
Col J.J. Mitchell	3 Sep 75 – 18 Jun 76
Col D.C. Alexander	19 Jun 76 – 2 Sep 77
Col R.F. Eggars	3 Sep 77 – 18 May 78
Col J.D. Pierce	19 May 78 – 29 Jun 79
Col A.F. Ribbeck	10 Jun 79 – 30 Jul 81
Col D.E. Baker	Jul 81 – 28 May 82
Col H.M. Whitfield	29 May 82 – 26 May 83
Col E.F. Baulch	27 May 83 – 6 Jun 84
Col M.F. Stone	7 Jun 84 – 18 Apr 86
Col P.M. Schafer	19 Apr 86 – 23 Sep 88
Col R.M. D'Amura	24 Sep 88 – 3 Aug 90
Col R.W. Coop	4 Aug 90 – 28 May 92
Col J. Hatch	29 May 92 – 16 May 93
Col W.A. Stanley	17 May 93 – 13 Jul 95
Col B.E. Dyck	14 Jul 95 – 2 Jul 97
Col M.W. Blackledge	3 Jul 97 – 27 May 99
Col J.L. Sweeney Jr	28 May 99 – 21 Jun 01
M.C. Anderson	21 Jun 01 – 18 Jul 03
J.G. Ayala	19 Jul 03 – 29 Jul 05
M.G. Dana	30 Jul 05 – Present



*MARINE WING SUPPORT SQUADRON 371*

LTCOL DANIEL LONGWELL

SGTMAJ SHAW

*1986-2006*

Activated 2 June 1986 at El Toro, Santa Ana, California as Marine Wing Support Squadron 371, Marine Wing Support Group 37, 3d Marine Aircraft Wing, Fleet Marine Force, Pacific

Relocated during April 1988 to Yuma, Arizona

Participated in support of Operations Desert Shield and Desert Storm, Southwest Asia, August 1990-April 1991

Element participated in Operation Restore Hope, Somalia, January to May 1993

Element participated in support of Operation Sothern Watch, Iraq, March to June 2001  
 Element participated in Operation Enduring Freedom, Afghanistan, September to October 2002  
 Deployed during February 2003 to Kuwait in support of Operation Enduring Freedom  
 Participated in Operation Iraqi Freedom, Iraq, March to October 2003  
 Participated in Operation Iraqi Freedom, Iraq, March to October 2005



*MARINE WING SUPPORT SQUADRON 372*

*LTCOL ERIK KRAFT*

*SGTMAJ DONALD JONES II*

Marine Wing Support Squadron 372 was activated on June 1986 at Camp Pendleton, California, with 2 officers and 97 enlisted Marines. Today, the Squadron T/O has grown to 35 officers and 619 enlisted with 418 combat reportable equipment items.

The Squadron was formerly Detachment "A", Marine Wing Support Group 37 and was formed on 1 July 1977. At the time, the unit's mission was to provide motor transport and engineer services in support of Marine Aircraft Group 39. Today, the Squadron provides all essential Aviation Ground Support (AGS) to Marine Aircraft Group 39 and all tenant and transient units of Marine Corps Air Station, Camp Pendleton. The Squadron continually staffs detachments to support Marine Air Ground Task Force Units on operational commitments around the world.

Over the years, MWSS-372 has been tasked with various missions and projects in support of Marine Aircraft Group 39, Marine Aircraft Group 46 (Detachment "A"), Marine Air Control Group 38, 1st Marine Division, 1st Force Service Support Group, Marine Corps Base Camp Pendleton, Marine Corps Air Stations (MCAS) Camp Pendleton, El Toro, Tustin, Miramar, and Yuma.

From December 1992 to May 1993, the Squadron deployed to the republic of Somalia as the Aviation Ground Support Element for Operation RESTORE HOPE. In January 1993, MCAS Camp Pendleton was devastated by the flooding of the Margarita River, completely shutting down aviation operations and destroying millions of dollars of equipment. MWSS-372 (-), despite having most of the unit's personnel and equipment in Somalia, spearheaded the recovery with communications, heavy equipment and construction support. The unit was awarded the Navy Unit Commendation in recognition of these efforts.

In December 1994, the Squadron was nominated by the 3D Marine Aircraft Wing as Marine Corps Aviation Association's MWSS of the year. From April to May of 1996, the Squadron deployed to Twenty-nine Palms in support of Combined Arms Exercise 5/6-96, where they refueled 1,650 aircraft with over one million gallons of fuel, transported 14,000 passengers and eight million pounds of cargo, and provided superior aviation ground support that earned a Certificate of Commendation from MAG-39.

In December 1996, the Squadron completed construction of the first K-Span structure built aboard Camp Pendleton, providing Marine Aviation Logistics Squadron 39 with a cost efficient means to accommodate the growing maintenance demands of the next millennium.

In addition to the events listed here, during an average year, the Squadron provided well over one million gallons of aviation fuel to 3D MAW aircraft, drove over 120,000 miles and hauled over two million pounds of cargo and provided motor transport, engineer, utility, communication and heavy equipment support wherever and whenever it is needed.

Since its inception, Marine Wing Support Squadron 372 has received two (2) Meritorious Unit Commendations, one (1) Navy Unit Commendation, and the Armed Forces Expeditionary Medal.

*MARINE WING SUPPORT SQUADRON 373*



*MARINE WING SUPPORT SQUADRON 374*



*LEFT: LTCOL ERMER and SGTMAJ WALLINGTON SIMS, JR. RIGHT: LTCOL JAMES HANLON and SGTMAJ THOMAS BROWN*







## BULK FUEL

*We were unable to obtain any historical information from HQMC or the Bulk fuel school, but MCEA member CWO-4 Brad Patch USMC (Ret) did respond to our requests for input. One of the documents he provided was "The Fuel Spill" which was a Newsletter he produced while assigned as the Development Project Officer, Bulk Fuel Equipment, Engineer Support Branch, Mobility and Logistics Division, Development Center, Marine Corps Development & Education Command in the 1980s. The below edited excerpt is taken from the 1 January 1987 newsletter. Brad & I were to produce Newsletters together when we served as the III MEF engineer Officers in '88-'89.*

### *Why History and Requirements?*

*"Those who forget history are destined to relive it." And, we reinvent wheels all the time.*

A little fuel community history, with some description of "old" requirements documents, which guided the Corps into acquiring the AAFS, TAFDS, and HERS, coupled with a description of the latest requirement document, will show us how seldom we critically think about the subject. In other words, we'll find we only seriously decide critical bulk fuel issues about every 40 years; and 1986 may have been our 40th year.

### *Present Capability Note*

The tactical fuel equipment presently in our hands is excellent gear, and it provides the wherewithal to support the old missions to a satisfactory degree. Not easily, mind you, but satisfactorily. In fact, as we'll see later, old missions caused the development of the present fuel gear.

If we look at what we have and why, we surprise ourselves at the capabilities inherent in the fielded systems, and at how the overall MAF capabilities inherent in the fielded systems, and at how the overall MAF – MEF capabilities came into being. And, we see why it is time once again to address bulk fuel issues from a Marine Corps requirement point of view.

### *One View of History or Stepping Back in Time*

The Goodyear Tire & Rubber Company was founded in Akron, Ohio in 1898. By 1916 they were the largest company in the rubber business. Someone back then thought of putting fuel in rubber bags. The idea did not sell very well, nor can it be credited to any one person. Goodyear and others were considering military applications, options, and looking at requirements, even way back in the WW I time frame. Storing more fuel, more efficiently, moving it farther forward, faster, flying fuel, moving it across the beach faster, turning the boat around quicker, all 1900 stuff, as ideas go.

### *World War Two*

In spite of rudimentary bulk fuel systems on someone's drawing boards, (and to be fair, not very good ones yet) the 5 gallon jerry can and the 55 gallon drum were the mainstays of tactical and wholesale fuel movement through WW-II. The bulk systems of the '40s were ridged-wall, steel, bulk tanks. Collapsible, moveable, expeditionary bulk systems were only experimental ideas.

### *Industry Capabilities Drive Requirements; A Beginning*

Mr. T. A. Underwood joined Goodyear's Fuel Tank Development Department in September, 1942. He became Manager of the Department by 1946. He and his helpers revived ideas, added new rubber technology, and began putting together ideas and "things."

Noting that WW-II landing beaches were a cluttered, fuel drum-infested place, and that something needed to be done in the bulk fuel arena, the Commandant of the Marine Corps asked his staff to come up with a solution for fuel handling problems.

## *Development Center*

MCDEC files show, on 18 July 1949, the Commandant tasked the President, Marine Corps Equipment board to look into better ways to move fuel. Initial movement was limited in scope, and reads “establish a project for testing and evaluating the modified O’Neill Pump to determine its suitability for use in amphibious operations.”

(Ed. Note! While at CamPen in 1986, making a site visit to the 7th Bulk Fuel Co., a Bulk Fuel Sergeant sidled up to CWO4 Patch, saying, “Gunner. We need something like this.” Pointing to . . . you guessed it – an O’Neill Pump. Hand-lever operated, one foot on each side to hold it to the Earth – maybe 20 gpm if you worked hard enough.)

## *Korea*

The Korean War both interrupted development efforts and offered a proving ground for new concepts. The Marines and Army rediscovered a need for storage of fuel in larger moveable containers. Goodyear, and other companies, offered various collapsible rubberized fabric tanks, and some number were procured from Goodyear for use in the combat arena. Tank capabilities varied from one to ten thousand gallons, and seemed to have settled on roughly the 10,000 gallon size.

## *First Requirement Statement*

Although the Commandant stated generally a requirement for a “better way,” the first basic statement of requirements can be best gleaned from the “phased study” submitted by Goodyear dated 5 November 1952, revised 18 August 1953. It makes interesting reading today: “Under contract, Goodyear Tire & Rubber Company is required to submit an analysis, from a hydraulic, petroleum, and safety engineering viewpoint, of the tank farm as it now (Nov ’52) exists at the Marine Corps Base, Quantico, Va. We are also to consider the technical feasibility of the larger proposed system (what becomes the Amphibious Assault Fuel System (AAFS)).

## *AAFS to TAFDS then HERS*

On 30 November 1955, the Commandant tasked the Development Center with developing and testing the concept of using the (AAFS like) bulk fuel system for refueling tactical aircraft, possibly with the addition of various fuel filtering devices. Thus the Tactical Airfield Fuel Dispensing System (TAFDS) was born. The delivery of 70 Sealdbin (500 gallon collapsible drums) containers 7 Feb ’58, with subsequent testing resulted in adopting the drums for use as expeditionary fuel containers, for use in the LVTP5s and on tactical trucks to deliver fuel to forward areas. This was the birth of what is sometimes called the expedient refueling system or ERS. MCDEC’s first Helicopter Expedient Refueling System (HERS) schematic, in pencil, in a lined notebook appears in early 1959.

## *1980-1986 Progress*

A “get well” program was ordered, based on a 12 Feb 1980 review that found a multitude of deficiencies in all areas of bulk fuel. The second Bulk Fuel Company in each MAF became a reality on paper, and was fleshed out to a degree. Big buys of 20K gallon tanks, and 6-inch hose, improved equipment shortfalls, and bulk fuel organizational structure and manning issues were addressed -- and the Fort Lee POL School contributed immensely.

## *End History; Begin Future*

On 15 Sept ’86, the Corps stated the new tactical fuel system goals; doing so in a Justification for System New Start (JSNS) for a Tactical Fuel System (TFS). The idea was to not forget what transpired in the past, and to make changes for the future in the best way possible. And to not only cover the war of the distant future, but to make sure the near term was covered as well.

## *So What?*

Like the 1949-1952 effort, the 1986 (+) effort will have an effect upon us all. (*Ed. Note! Watch for “the rest of the story” in future MCEA Newsletters.*)

That’s the end of this article, but we need to have an update covering the last 20 years of challenges & changes. Please submit all articles and pictures to Frantz for inclusion in our Archives & publication on our website.

# EOD



## EOD HISTORY

Bomb disposal in the United States dates back to April of 1941. The United States was not yet at war, but we were actively preparing for that eventuality. Embassy personnel and military observers were reporting on the actions of warring nations and as these reports were evaluated by the War Department, Intelligence Sections, recommendations were made concerning actions that should be taken by the United States. One area stood out.

Delayed-explosion bombs were creating havoc in Europe, taking a heavy toll on lives and industry. It was expected that if the United States entered the war, we would experience bombing of our cities and industries. As a result,

the need for a bomb disposal program in this country received immediate attention.

In the beginning, it was thought that bomb disposal would be under the Office of Civilian Defense. In April 1941, the School of Civilian Defense was organized at the Chemical Warfare School, Edgewood Arsenal, Maryland, and part of the training was to be bomb disposal.

The Commandant of the Chemical Warfare School requested assistance from the War Department to set up the Bomb Disposal School. The request was approved and forwarded to General Julian S. Hatcher, who was the Commanding General of the Ordnance Training Center, Aberdeen Proving Ground, Maryland. General Hatcher selected Major Thomas J. Kane to provide assistance.

It was decided that both military and civilian bomb disposal personnel would be trained by the Army. All responsibility for bomb disposal was placed under the U.S. Army Ordnance Department. The Office of Civilian Defense would be responsible for bomb reconnaissance and the disposal of incendiaries in the United States. The location of the Bomb Disposal School was changed from Edgewood Arsenal to the Ordnance Training Center, Aberdeen Proving Ground, Maryland. Newly promoted Colonel Kane was selected to be the school's commandant.

In the interim the Navy, under a directive from the Chief of Naval Operations, instituted a Mine Disposal School in May of 1941. The school was located in Washington, D.C. and was tasked with the training of Navy personnel in the disposal of U.S. and foreign mines and other underwater ordnance. In December of 1941, the Chief of Naval Personnel issued another directive for the formation of the Navy Bomb Disposal School.

In 1947, the Navy was assigned Joint Service responsibility for basic EOD training and in 1971, the Navy was designated as the Single Service Manager for all common EOD training. This training continues to be provided by the Naval School, Explosive Ordnance Disposal School located at Eglin Air Force Base, Florida.

## EOD MEMORIAL HISTORY (pictures above)

On 14 February 1969, the EOD Memorial Committee was formed and consisted of the senior Army, Navy, Marine Corps, and Air Force officers of the EOD School. The Committee's intent was to design and have a memorial constructed at the Navy EOD School to honor those EOD men and women who gave their lives in the performance of duty.

Drawings of the proposed memorial were made and a \$1,500 construction estimate was obtained. Land on the Naval Ordnance Station, Indian Head, Maryland, (now Indian Head Division, Naval Surface Warfare Center, Indian Head, Maryland) was donated for this purpose and construction commenced immediately. The basic structure consists of four white cenotaphs, one for each branch of service.

Attached to each cenotaph is a bronze tablet with the inscribed names. The Memorial became a reality through the efforts of volunteer EOD personnel.

In 1999, after consolidation of the EOD School from Indian Head to Eglin Air Force Base in Florida, a new Memorial was constructed and now stands across from the main EOD School building on Range Road.

Men and women whose names are placed on the memorial must be graduates of an approved EOD School who have died on active duty as a result of an EOD mission since the declaration of World War II. The EOD Memorial Committee uses the following criteria to establish eligibility:

DEATH AS A RESULT OF HOSTILE OR COVERT ACTION WHILE ASSIGNED OR ATTACHED TO PERFORM EOD DUTIES.

DEATH AS A RESULT OF PREPARING TO PERFORM OR PERFORMING A RENDER SAFE PROCEDURE DURING A DULY AUTHORIZED EOD MISSION.

DEATH AS A RESULT OF DISPOSAL, TEST EVALUATION OR RANGE CLEARANCE OPERATIONS, AFTER ASSIGNMENT AS AN EOD MISSION.

DEATH AS A RESULT OF TRAINING REQUIRED IN SUPPORT OF, OR IN PREPARATION FOR, AN ASSIGNED EOD MISSION.

Sixty-nine names were placed on the Memorial during the 12 June 1970 dedication ceremony. The names of those who sacrificed now total 201.



### *THE MEANING OF THE EOD BADGE*

The wreath symbolizes the achievements and laurels earned in minimizing accident potentials through ingenuity and devotion to duty. It memorializes those EOD Technicians who gave - or will give - their lives while performing EOD duties.

The bomb, copied from the design of the World War II Bomb Disposal Badge, represents the historic and primary objective of the EOD attack - the unexploded bomb. The three fins represent the EOD focus on conventional, nuclear, and chemical/biological ordnance.

Lightning bolts symbolize the potential destructive power of the bomb and the courage and professionalism of EOD people in their endeavors to reduce hazards as well as to render explosive ordnance harmless.

The shield represents the basic EOD mission, to prevent a detonation and to protect life, limb, and property to the utmost.

The star in the middle of the bomb represents a Technician who has attained Senior EOD competency. The star in the middle of the badge, coupled with the miniature wreath and star at the top of the badge represent an EOD Technician who has attained Master EOD competency.





LTCOL JAY RODNE  
CO



SGTMAJ SHAWN WILSON



LTCOL RICHARD SMITH  
I&I



## 4TH LANDING SUPPORT BATTALION

*The Landing Support Battalion provides the command, control, administration, and operational personnel required to form a nucleus for task organized support of landing support operations during either surface or helicopter amphibious and subsequent operations ashore.*

### *Landing Support Companies*

The Landing Support Company, augmented as required by elements of other Marine units and by elements of the Naval Beach Group, can be task organized into a Landing Force Support Party, two Landing Support Teams or two Helicopter Support Teams. This task organization provides for the operation of two separate numbered beaches, one colored beach or two helicopter landing zones.

The functioning and capabilities of the landing support organizations are dedicated to the management of personnel and materials in the initial phases of the assault and subsequent inland movement. The Marine element of the Landing Force Support Party will prepare, mark and control the landing beach or zone; locate and establish interim multi-class dumps; unload supplies from landing craft, ships and helicopters; provide emergency maintenance; and evacuate casualties and prisoners of war.

The Landing Force Support Party will operate in the beach support area in a progressively diminishing degree as the scope of logistic operations extend inland. Elements of the Landing Force Support Party are attached to the assault forces embarkation and landing. As the logistic support system develops ashore the Landing Force Support Party will be modified.

When no longer required for landing support functions, attachments will revert to parent control, or otherwise be assigned as appropriate. Upon establishment ashore of the Combat Service Support Element, selected command and control elements of the Landing Force Support Party will pass to operational control of the Combat Service Support Element for continuation of landing support as required.

## BEACH AND PORT COMPANIES

The Beach and Port Company directs port, railroad, and airhead operations when control of these functions has passed to the Force Service Support Group (FSSG). It provides aerial delivery support, and when augmented by other elements of the FSSG, an air terminal can be provided for the MAF.

Headquarters and Service Company: The Headquarters and Service Company provides command, control, administrative, internal supply functions, equipment and maintenance support for the battalion. This includes communications, material handling equipment, motor transport, messing and organic medical support necessary for internal operation and support of task organized shore parties. The company also provides engineer equipment and heavy material handling equipment support to meet FSSG and MEB or MEF requirements.

## 4th LANDING SUPPORT BATTALION HISTORY

The 4th Landing Support Battalion was first formed in Seattle, Washington in 1924 as the 11th Infantry Company, United States Marine Corps Reserve. In 1931 the unit was re-designated as the 11th Infantry Battalion, United States Marine Corps Reserve Organized. With the outbreak of worldwide hostilities in 1940 the Battalion was mobilized and joined the 1st Battalion, 6th Regiment for duty in Iceland.

On 24 August, 1943 the unit was re-designated and activated as the 2nd Battalion, 20th Marines, (Engineers), 4th Marine Division. 28 February 1944 saw the battalion in action at Kwajalein and Majure Atoll in the Marianas Islands. As 1943 progressed the unit participated in the capture and occupations of both Saipan and Tinian. For their service, the battalion was awarded the Presidential Unit Citation.

The battalion was again re-designated on 1 September, 1944 as the 4th Pioneer Battalion, 4th Marine Division. Early 1945 again found the battalion in the midst of combat during the assault and occupation of Iwo Jima, and again the battalion was awarded the Presidential Unit Citation. On 31 March, 1945 the 4th Pioneer battalion re-deployed to San Diego, California. The battalion was awarded the Asiatic Pacific Campaign Streamer with four bronze stars and the World War II Victory Streamer for service throughout World War II.

The battalion remained in San Diego until 31 October 1945 when it was deactivated. On 7 August, 1945 the 4th Shore Party battalion was reactivated in Seattle, Washington and stationed at 7500 Sand Point Way, NE aboard the Naval Support Activity. During the next 31 years the battalion saw many small detachments deploy world-wide to include service in Korea and the Republic of Vietnam. On 17 December, 1978 the unit remained in place in Seattle, Washington. In 1990, the 4th Landing Support Battalion was again called for service in Operations Desert Shield/Storm, and was awarded the Meritorious Unit Citation.



In October 1993, the battalion grew in size as the Landing Support Equipment Company at Vienna, Ohio was re-designated and assigned to the battalion. The 4th Landing Support Battalion moved to its present location at Ft. Lewis Washington in January 1995. The Naval and Marine Corps Training Center was officially dedicated during a ceremony on 3 March, 1995.

*Marine Color Guard from the 4TH LSB at Quest Field at an event ceremony. (Photo by 4th LSB)*



## ***SHIPS STORE ITEMS***

<i>Merchandise for Sale</i>	<i>Cost</i>	<i>Postage</i>
<i>MCEA Logo Coin 1 ½" dia, color</i>	<i>\$5.00</i>	<i>\$1.35</i>
<i>MCEA Logo Lapel Pin 7/8" dia, color</i>	<i>\$3.50</i>	<i>\$0.85</i>
<i>Embroidered MCEA Logo Cloth Match 3" dia, color</i>	<i>\$2.75</i>	<i>\$0.60</i>
<i>MCEA Windshield Decal 4 ¼" dia, color</i>	<i>\$2.50</i>	<i>\$0.60</i>

19 – 28 May World War I  
USMC & AEF Battlefields  
Paris – Belleau Wood  
Soissons - Blanc Mont  
Meuse Argonne - Verdun

30 May - 6 June 65<sup>th</sup> Commemoration  
Battle of Midway  
Midway Island - Pearl Harbor

10 – 24 June Vietnam  
I Corps & 40<sup>th</sup> Anniv. Op Buffalo  
Dong Ha – DMZ – Khe Sanh

29 June – 8 July D-Day  
Normandy to Paris  
Omaha Beach/American Cemetery  
St. Mere Eglise – Pegasus Bridge

29 July – 10 August Vietnam  
Helo Ops, Recon, COVANS & LRRPs  
Chu Lai – Da Nang - DMZ

3 – 14 September Germany/Poland  
“Americans in Enemy Hands”  
Munich – Berlin – Zagan, Poland

## **TRAVEL... WHERE HISTORY COMES ALIVE!**

9 – 23 September Vietnam  
I Corps & 40<sup>th</sup> Anniv. Hill Fights  
Leatherneck Square - Khe Sanh

1 – 13 October Vietnam  
I Corps & 77<sup>th</sup> Armors “Steel Tigers”  
DMZ – Da Nang – Dong Ha

2 – 10 October England  
“Airfields of the Eighth AF”  
London – Cambridge - Airfields

14 – 28 October Vietnam  
40<sup>th</sup> Anniversary Op. Junction City  
War Zone C – Iron Triangle – III Corps

14 – 28 October Vietnam I Corps  
Chu Lai to the DMZ - Leatherneck  
Square - Da Nang - Khe Sanh - Dong Ha

15-28 October “China Marines”  
Beijing - Tientsin - Tsingtao - Xian  
Post Tour: Shanghai

5-14 November Guadalcanal  
Edson’s Ridge - Henderson Field  
Ilu-Tenaru River - Tulagi - Gavutu

26 November - 9 December  
“Secret War” - Laos  
Vientiane - Udon - Pakse

### **Viking River Cruises**

6 – 17 October China  
“Imperial Jewels”

Beijing – Xian – Shanghai

9 – 21 October Russia  
“Waterways of the Czars”  
Moscow to St. Petersburg

20-28 October France  
“Paris to Normandy”  
Pre-Tour: Paris & Belleau Wood

3-11 November Romantic Danube  
“Nuremberg to Budapest”  
Passau - Linz - Vienna

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