

Operational Engineer



4 December 2008

Engineers,

As we get ready to enter the New Year, our community is as busy as ever. We will inevitably begin the drawdown from OIF and shift focus to OEF. Fortunately, our ranks are brimming with combat experienced Marines of all ranks and MOSs. Assuming we do indeed transition forces from Iraq to Afghanistan, our expeditionary engineer skills will be put to the test due to the absence of infrastructure and contractor support. The school and center of excellence stand ready to provide assistance in planning, training, or any other area we can support.

I encourage all of you to keep our issues and needs on the forefront by submitting articles to the Gazette, Leatherneck, or this newsletter. We are heavily involved in working route reconnaissance and clearing, engineer and EOD mobility support roles, IED-Defeat, explosive breaching, engineer equipment, and a litany of other issues that are pertinent across the MAGTF. Your input and opinions are important.

I wish all of you a great holiday season and success in the New Year...

Semper Fi,

Col Heesacker
Director,
Engineer Center of Excellence and
Commanding Officer,
Marine Corps Engineer School



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Volume 2, Issue 1

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Jan 2009

Mine Detection Made Simple With The Army-Navy Portable Search System 14

By David Holbrook Senior Analyst, BRTRC



Background. Mine Detection has always been a significant required capability for our Nation's military and has become increasingly pressing over the past few decades. There are various mine types worldwide, ranging from plastic to cast steel, from sheet metal to nonmetallic, from protective rubber to protective fiberglass. Each day the Men

and Women of our military face the task of uncovering these mines to prevent military and civilian casualties. Until now, we have had limited capabilities in detecting many mine types, specifically low and nonmetal mines. The Army-Navy/Portable Search System 14 (AN/PSS-14) has expanded the range of mine types we can detect and increased hand-held mine detection efficiency.

The AN/PSS-14 Mine Detector is the first "true" Mine Detector because of its ability to detect objects with mine like characteristics. The system's ability to accomplish this remarkable task is due to the dual technology of GPR and Metal Detection embedded in the system. The unique capability of this system is only as good as the operator behind it. Becoming proficient in the use of the AN/PSS-14 requires precise training and intense concentration. Mine detection is serious business. A missed mine by an operator could have catastrophic consequences for the unit or individual counting on them to "clear the way".

Unlike previous countermine devices, the AN/PSS-14's detection function penetrates walls. When placed on one side of the wall, the device's GPR detects movement on the other side of the wall, which

"is especially valuable when the user is guarding against enemies in new or urban territory. Unlike larger, bulky machinery, the AN/PSS-14 functions on rugged and uneven terrain or through thick vegetation. The device is operated by a single user, instead of a crew, making it the prominent device used for off-road path mine detection.

Training. Research has shown that an operators skill on this system diminish in as little as 60 days from receiving initial training on this system. Because of the mental strain the AN/PSS-14 use renders on the operator, they are trained to only operate the device in rotating increments of 20 minutes to prevent loss of concentration and exhaustion. With that in mind, the United States Army Engineer School (USAES) along with the Program Manager for the AN/PSS-14 has established a training program to ensure the mine detectors they issue are placed in the best trained hands. In addition to an operator training program a Unit Master Training Program was established to enable commanders and leaders to sustain their own operators and ensure they remain proficient at all times. As you will find in the following paragraphs the Operator and Unit Master Training, training programs put in place by the Program Manager and the USAES are now and will be the system fielding model to follow in the future. This model ensures all Soldiers are properly trained before they are issued a system and provides commanders with a sustainment program similar to the Master Driver Program currently in place in the Army.

Operator Training. Effective operator training is the result of careful planning and thorough instruction. Before instruction begins, a careful and complete estimate of operator training requirements must be made. Next, plans and schedules must be developed, UMTs must be trained and adequate facilities and equipment must be located. Students should be aware of all relevant regulations during the first phase of training. To accommodate this, units should have a current file of all Army, installation, and unit publications and policies that pertain to operator training.

The operator course will involve classroom instruction, practical exercises, and one-on-one training for each individual student. The instructor-to-student ratio for the operator course will be no more than one to five. The AN/PSS-14 is a very complex system to learn and operate. A typical student will experience initial frustration, but with patience, they will learn the necessary skills and gain confidence in the detector and their own ability. The students

(Continued on page 11 see Mine Clearing)



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CONGRATULATIONS

* Solicitation of nominations for 2009 National Womens History Month Science, Technology, Engineering, and Math Recognition Award: Due 15 Jan., see MARADMIN 651/08

* Solicitation of Nominations for the 2009 League of United Latin American Citizens (LULAC) Excellence in Military Service Awards: Due 13 Mar 09, see MARADMIN 687/08

* Solicitation of nominees for the 2009 Department of Defense (DoD) African American History Month (AAHM) Recognition Award: Due 15 Jan 09, see MARADMIN 648/082009, Quantico, VA

UPCOMNG EVENTS

* MAR 9 - 12, 2009 USMC Engineer Commander's Summit will be held at the Drexler Conference Center, Naval Amphibious Base, Little Creek Virginia. The intent of this working conference is to map out future engineering roles and missions, doctrine, orgaization, structure and equipment to meet the needs of the MAGTF 2020 and beyond. Targeted audience is commanding officers from CEBs, ESBs, MWSSs, and field grade reps from I&L, PP&O, Aviation, MCCDC, and MCSC. Look for more info in future message traffic.

* T&R Manual working group- 12-16 Jan 2009, ECOE, Camp Lejeune, NC.

* Marine Wing Support Group OAG 16 - 20 March 2009, Quantico, VA

Promotion results-

Chief Warrant Officer:

See ALNAV 074/08

NAME	SSN/MCC/MOS
CWO5 Schwartz, KR	9667/1C2/1120
CWO4 Ali,, S	1929/1C1/1120
Davis, DF	5630/024/1390
Morris, MS	4767/151/1120
CWO3 Atherholt, WD	2746/151/1390
Chavez, BT	9182/1C2/1310
Corona, JC	7361/160/1310
Gonzales, CC	0649/1EC/1120
Murphy, MA	3456/193/1120
Newton II, JR	6820/169/1310
Penner, SM	2845/1PF/1120
Plumb, SA	1964/1QC/1120
Reiter, AJ	1697/169/1310

MGySgt Selections:

See MARADMIN 615/08

Basso, KD	1615/142/1371
Campbell, PM	5694/1CG/1391
Ewalt, WL	4621/SUP/1391
Fowler, AL	0117/15H/1169
French, TE	4149/1PK/1169
Griffin, JT	7104/QAM/1371
Hammond, SB	0151/1MW/1349
Johns, RM	7225/K46/1349
Wilber, JH	6234/QBF/1349
Wilson, MC	4414/1G7/1349

MSgt Selections:

See MARADMIN 708/08

Ayala, CR	6425/1G7/1169
Brown, ES	3786/B90/1371
Cooper, VS	8146/1C2/1169
Criswell, AK	6028/1L2/1169
Dickens, DW	8658/1CQ/1371
Harry, TM	8827/092/1169
Hatchett, JM	3852/1C1/1349
Hernandez, A	8889/146/1169
Hickman, SM	3334/093/1169
Houdobre, ME	1125/1FZ/1349
Jordan, DT	4047/1XH/1391
Lacour, BL	8566/1CL/1349
Leisure II, MR	2769/J33/1371

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ROC-IED... A Tool to Help Combat the IED Threat

By Tim Bennett, ECOE

With the War on Terrorism going on its seventh year, Improvised Explosive Devices (IEDs) remain the enemy's weapon of choice because they are cheap and extremely effective. To combat this threat, effective technology and training are necessary to assist our forces in mitigating the danger posed by IEDs. Among the training tools developed for our military over the past several years is a unique and valuable computer-based training (CBT) product known as Recognition of Combatants–Improvised Explosive Device (ROC-IED). ROC-IED was developed by the United States Army, Research, Development, and Engineer Command (RDECOM) and the Night Vision and Electronic Sensors Directorate, but has recently become a joint venture among the services, with most of the input coming from the Army and Marine Corps.

The current version of ROC-IED (version 2.1) is due for circulation in January 2009 and includes modules designed to instruct warfighters

how to recognize various battlefield hazards such as IEDs and Person-Borne IEDs (PBIED) and also how to employ preventive measures against an IED attack. The modules address individual and collective tasks in accordance with USMC and Army standards and are self-paced training videos that require user interaction through detection exercises and quizzes. Each module has a pre and a post test so the warfighter and commands can track progress and account for the number of personnel who complete training. ROC-IED is not intended to replace hands-on training led by instructors, but it is a valuable tool that can help Marines retain critical information because it uses a different medium to reinforce knowledge that Marines learned during previous training.

Version 3.0 of ROC-IED is in the early stages of development. Training modules in this version will address multiple new theaters so that warfighters will be better able to understand unique cultural differences and specific enemy IED tactics in different parts of the world. Enhanced interactivity and learning strategies will be injected by incorporating online interaction with instructors, enabling individuals to share experiences and lessons learned, and including video interviews that capture real stories. In addition to knowledge training, developers also plan to address lane training (mounted and dismounted) and focus on understanding and relating to local popula-

(Continued on next page)

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tions as the key to successful counterinsurgency operations.

If you would like a copy of the current version of ROC-IED, discs are available and can be requested by contacting Erik Post at the Marine Corps Engineer Center of Excellence (ECOE). Mr. Post can be reached at (910) 450-7145 or erik.post@usmc.mil. Additionally, IED-D training can always be requested from the Mobile Training Teams at the ECOE. Call (910) 450-7167 to receive information on all courses provided or to schedule unit training.

FROM THE ENGINEER OCCUPATIONAL FIELD SPONSOR...

OCCFIELD ISSUES



- MLG T/E review (different than CMC directed T/E review)- increase in ESB equipment, balancing of equipment across MLGs.
- MLG unit mission statements- All recently signed by CMC. TFSMS should reflect.
- CEB mission statements (MA Co)-
- EOD Co TOECR- recently approved by all stakeholders, anticipate TFSMS modification by Jan 09.
- Studies program- 3 I&L (LPE) sponsored studies underway: engineer equipment to maintainer ratio, explosive hazard support to the MAGTF (EOD organization and engineer training), and bulk fuel support to the MAGTF.
- Uncompensated Review Board- continue efforts to balance engineering forces and equipment in MAGTF.
- 202k end-strength increase- growth continues in all engineer MOSs through FY11.
- MWSG OAG- 16-20 Mar 09

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Lewis, MA	4124/15H/1169
Martin, SA	6902/1MT/1349
Martinez, G	6227/1CG/1349
Morefield, JM	2927/1EA/1349
Morrow, JJ	0462/165/1371
Perez, MA	1672/J78/1391
Plattsmier, B	9903/1QH/1169
Quinn, DE	1660/1L7/1169
Rapoport, MD	0763/922/1371
Roth, JA	4686/1YB/1349
Salazar, JL	9392/023/1391
Sanchezsot, JS	5033/1QE/1169
Smith, DM	5659/165/1169
Smith, KL	5157/1EH/1349
Spain, LJ	5759/233/1349
Stewart, RC	1180/H93/1349
Tucker, GA	1346/1YB/1371
Wyandt, MS	6422/1PG/1391
Zador, C	9061/151/1371

Board results-

Return to Active Duty:

Capt JW Bauch/1302 MARADMIN 686/08

MECEP Board: MARADMIN 681/08

NAME	RANK/SSN/MOS/MCC
Clampitt, K.H.	SGT/8723/1345/041
Dobbins, M.P.	CPL/9193/1345/151
Finnicum III, E.J.	SSGT/8321/1316/972
Geske, R.D.	SSGT/6542/1371/041
*Kamara, S.A.	SSGT/3350/1142/J33
Martin, T.E.	SGT/8072/1161/1C2
Shreepe, L.J.	SGT/0513/1371/060
*Simonds, T.B.	SGT/ 0711/1371/169
Trainer, C.C.	SGT/4633/1142/1G9

Warrant Officer Board:

MARADMIN 566/08

NAME	SSN/SMOS/MCC
Covington, T.L.	425/1310/146
Degastonguay IV, E.R.	7477/1120/169
Dominguez, J.C.	6922/1390/J78
Egleberry, W.J.	151/1120/1G9
Greulich, S.M.	840/1120/1C2
Hatcher, J.C.	3649/1390/169
Hentzel, C.M.	2562/1390/J33
Joyner, R.W.	1553/1310/169
Stare, R.D.	3123/1310/028
Tamm, W.	9897/1120/165

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Route Training Saves Lives

By Cpl. Jessica L. Martinez, Marine Corps Base

He sits alone in an immense, steel machine, focusing intently on the task at hand ...

... searching for staged improvised explosive devices.

The space in the vehicle limits him to how freely he can maneuver and power the vehicle. He is trying to follow a specific path-way

which could not only save his life but the lives of his fellow Marines.

This is just one task Camp Pendleton Marines were faced with while they attended the Engineer Center of Excellence on Marine Corps Base Camp Lejeune to learn how to operate and maneuver combat vehicles during the Route Clearance Operators Course.

The mentally demanding course is two weeks long. The first week students spend concentrated time in the classroom learning about the three vehicles on which they'll be trained. During the second week, the class is broken into two groups, and the students begin their hands-on training where they apply what they learned in the classroom setting.

During the second stage, the class practiced steering, controlling and



Buffalo, Route Clearance Vehicle



Husky Mine Detection Vehicle

driving the wild beasts of mine detection and protection on "hardball" roads. This also gave Marines mileage toward their Category One, Two and Three licenses.

Students who attended the course were either combat engineers or training to become one. The three beast-like vehicles used were the Husky mine detector vehicle, and the Buffalo and Cougar, which are both mine resistant, ambush protected vehicles.

"This is a great opportunity for Marines," said 2nd Lt. Stephen F. Strieby, with Mobility Assault Company, 1st Combat Engineer Battalion, 1st Marine Division. "They're able to learn the baseline of conducting route clearance. The course provides time for Marines to familiarize themselves with equipment, controls of the vehicles and how the vehicles handle. Everything is in one place and the staff



Buffalo, Route Clearance Vehicle has firsthand experience in what they are teaching the students."

Continued on Page 10 See Route Clearing

CONGRATULATIONS

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The Marine Corps Engineer Association 2008 Awards

This year's MCEA Reunion and Awards Banquet was held in Oceanside, California on 15-17 October, 2008. Award recipients and their family members came from all over the world to receive their justly deserved recognition from the 160 in attendance. Major General T. D. Waldhauser, Commanding General of the 1st Marine Division was the Guest of Honor and awards presenter.

2008 MCEA AWARD RECIPIENTS

Combat Engineer Field

Officer

1st LT George Saenz, 2d CEB, Camp Lejeune, NC

Staff NCO

SSgt John King, 1st CEB, Camp Pendleton, CA

NCO

Sgt Nathan Uttech, 3rd CAB, Okinawa, Japan

Marine

LCpl Edgar Diaz, 8th ESB, Camp Lejeune, NC

Engineer Equipment Field

Officer

CWO 3 John Kyler, 2d CEB, Camp Lejeune, NC

Staff NCO

GySgt Armando Quintanilla, 1st CEB, Camp Pendleton, CA

NCO

Sgt James Young, 9th ESB, Okinawa, Japan

Marine

LCpl Matthew Clanton, 2d CEB, Camp Lejeune, NC

Utilities Field

Officer

CWO 2 Marcos Jaime, MWSS 272, MCAS New River, NC

Staff NCO

GySgt Paul Wilcox, MWSS 272, MCAS New River, NC

NCO

Sgt Charles Trainer, 9th Comm Bn, Camp Pendleton, CA

Marine

LCpl Michael Stillfried, 9th Comm Bn, Camp Pendleton, CA

Bulk Fuel Field

Officer

CWO 3 Michael Neill, 9th ESB, Okinawa, Japan

Staff NCO

SSgt Jason Sargent, 9th ESB, Okinawa, Japan

NCO

Sgt Dwaine Carlino, 8th ESB, Camp Lejeune, NC

Marine

LCpl Andrew Pals, 9th ESB, Okinawa, Japan

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Type II CLS (ECCC) selections- MARADMIN 705/08

ENGINEER CAPTAINS CAREER COURSE (ECCC)

NAME	SSN	MOS
Brown, DP	5226	1302
Grissett, GP	8614	1302
Penn, NA	5483	1302
Roberts, NM	0769	1302

TLS Board is in session.
See MARADMIN 567/08.

ILS Board is in session.
See MARADMIN 568/08.

Type I CLS (EWS) selections- MARADMIN 705/08 for the following:

NAME	SSN	MOS
Barnes, SL	6346	1302
Berthinet, MD	6737	1302
Biggs, TM	2106	1302
Curtis, JA	2965	1302
Cuscina JR, JF	2187	1302
Dewey, SE	9905	1302
Fisher, AF	9673	1302
Galloway, DL	3662	1302
Hunter, JD	4938	1302
Klusmann, BL	8467	1302
Montedoro, JR	9263	1302
Neely, WC	6856	1302
Neely, MJ	3909	1302

All board results provided by LtCol Wylie
USMC Engineer Occ Field Sponsor

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MARINE CORPS ENGINEER ASSOCIATION



**FOR INFORMATION AND
MEMBERSHIP APPLICATION
PLEASE VISIT:
WWW.MARCORENGASN.ORG**

**OR CONTACT MCEA AT:
P.O. BOX 322, ASHVILLE,
NY 14710
PHONE: 716-763-5655
EMAIL: FRANTZKD@ALLTEL.NET**

ANNUAL NEWSLETTER: Covers all the events over the last year and the many updates on our different projects. View or download the 52 page colorful document at: <http://www.marcorengasn.org/id6.html>.

WEB SITE: Request any suggestions or feedback on how to improve our site be provided to the MCEA webmaster.

MCEA *MEMBERSHIP* BENEFITS

- *Very affordable dues for yearly, multi-year & lifetime membership*
- Access to members' roster and capability to locate and reconnect with Marines and Sailors from former units
- *Annual reunion with opportunity to interact with veterans as well as active/reserve duty personnel, corporate members and "best of the best" award recipients*
- Availability of the MCEA Financial Assistance Fund
- *Subscription to MCEA newsletter*
- *Notification of employment opportunities especially in the DoD and civilian engineering community*
- *Capability to interact daily with other members via email & receive updates from MCEA*
- *Unlimited access to web site*
- *Access to history, lineage and other information about USMC engineer units*
- Availability of unique Ship's store items
- *Discounts on Military Historical Tours, Inc*
- Special partner association pricing on Marine Corps Association membership.

HELPING THOSE IN NEED

The Marine Corps Engineer Association Assistance Fund has provided monetary assistance to three of our Marine engineer families to date. It is inspiring to know that, with your help, we have the potential to help so many more in the future.

- The Fund was created as a result of the long-time desires of the Marine Corps Engineer community. A vote of the MCEA general membership at the Annual Meeting in Myrtle Beach, North Carolina in October 2005 caused the creation of The Marine Corps Engineer Assistance Fund. This is your dream!

- Your donation is tax deductible. The Marine Corps Engineer Association Assistance Fund is a subsidiary of the MCEA and is incorporated in the state of North Carolina. As such, it is a charitable organization exempt from federal income taxes under 501(c) (19) of the Internal Revenue Code.

- 100% of your donation goes directly to support eligible members of the Association and their families-not one cent pays for salaries, wages or overhead expenses. The MCEA is a totally volunteer organization and any expenses incurred relate directly to the functioning of the Association. You can be assured that every penny of your donation will be used to provide financial support to assist eligible, needy and well-deserving recipients.

- All of our financial support goes to support eligible applicants. The eligibility requirements are posted on our web site at www.MarCorEngAsn.org. The Assistance Fund was founded to assist those in need as identified by you, our members.

- The Assistance Fund awards are announced at the MCEA Annual Meeting each year.

We can do so much more to help less fortunate members of our community throughout the year. I hope you will choose to contribute to the MCEA Assistance Fund. The Fund was created by you because you know the need and we desperately need your help to sustain this initiative.

Semper Fi and God Bless, Hank Rudge, Col USMC (Ret), Vice President

(Please detach and return the bottom portion with your donation)

The MCEA Assistance Fund, PO Box 322, Ashville, NY 14710

YES!! I want to assist our engineer brethren in need. Enclosed, please find my tax-deductible contribution, payable to the MCEA Assistance Fund for:

\$25 \$50 \$100 Other \$ _____

Check Enclosed (payable to the MCEA Assistance Fund) Please do not send cash!

My Name: _____

My address: _____

My e-mail: _____

My phone: _____

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Route Clearing continued from page 6

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The training enables Marines to use the Husky's mine detector to hunt for improvised explosive devices. Marines learn how to maneuver forward and backward, without power steering, while solely relying on the vehicle's mirrors to stay in their imprinted tire tracks on a zigzag course. Marines drive the same tracks to prevent them from rolling over IEDs in areas they haven't already covered.



Cougar
Mine Resistant Ambush Protected (MRAP) Vehicle

While one student was concentrating on his driving techniques in the enormous metal machine, another student, only 30 meters away, was focused on a different hunt.

When students train on the Buffalo, they learn how to perform arm interrogations while looking for IEDs. Arm interrogations are performed by using the vehicle's long claw-like arm to dig and sift through the dirt, like a wild animal looking for its kill, looking for simulated IEDs and connected components. The arm has a camera attached to it which allows the Marines controlling it inside the vehicle to peer onto the ground for indications of its prey.

The instructors teaching the course are prior military and share their experiences with the students not only in the classroom, but as they put into action what they are taught.

"The instructors are awesome," said Cpl. Seth G. Perrin, combat engineer, with the company. "They're very knowledgeable on each machine, on route clearance and give tips to the students."

The class size is kept small to allow more instructor to student interaction as well as to allow more hands on training for each Marine. This class had 12 students, but the course can take up to 16.

"This is the first time we've had a route clearance course on Camp Lejeune," said Nick Naquin, instructor and SAIC/EMA contractor with the Engineer Center of Excellence, Route Clearance Team Lead, Explosive Hazards Branch, Route Clearance Mobile Training Cadre. "We are a mobile training unit, which allows us to go to units who request the training."

Near the conclusion of the course, Marines set out on areas they need to improve. "I like the course," said LCpl. Kasey J. Blais, combat engineer, with the company. "We are taught so much here, and the hands-on training is where we can really learn. It's the best part of the course."

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(Mine Clearing, Continued from page 2)

will be taught to detect an object, investigate it, determine if it is a potential mine, identify its type, (anti-personnel or anti-tank, metallic, or low metal mine) and pinpoint its location. Students must mark every object they suspect is a mine. For the first two lanes, the student must mark all objects they detect. As they progress, they will learn to distinguish mines from other objects (clutter) in the ground. As the student gains skill and confidence, they may choose not to mark an object they are sure is not a mine. The student will not be coached or influenced by the instructor whether to mark the object or not. No penalty will be applied to students who identify clutter as a mine during training or testing. However, if the student does not mark a mine as a mine, with satisfactory accuracy, it is considered a missed mine, not 100% Probability of Detection (PD), and if during testing, it will be cause for failure.



AN/PSS-14 operators provide the unit's mine detection capability. To become a qualified AN/PSS-14 operator, students must attend the operator course and receive a written evaluation by an instructor on



at least seven standard training lanes during the class. Before testing, the student must sweep three lanes with 100% PD. To pass the course and qualify, students must pass a written examination with a score of 80 percent or better. The purpose of the written exam is to ensure the student understood classroom presentations and lessons in the practical exercises. After the exam, the instructor will review the questions and explain the correct answers. After the writ-

ten test, the students must demonstrate proficiency by sweeping one standard training lane with 100 percent PD. The lane selected for the proficiency test must be different from any the student swept with 100 percent PD previously.

Unit Master Training. The primary mission of the UMT is to train and validate AN/PSS-14 operators and manage the individual unit's AN/PSS-14 training and licensing program. UMTs help commanders at all echelons to plan, develop, execute, and evaluate all AN/PSS-14 training, and they may be appointed by their commanders at battalion-, brigade-, or installation-level to train and validate operators for subordinate and associated units.

Directed by the commander in his specific responsibilities, the UMT—

- Validates or certifies newly assigned and current operators.
- Sets up and conducts standard and tactical AN/PSS-14 training.
- Assists all elements concerning operator training in the unit.
- Forecasts all resources for operator training.
- Tracks operator proficiency and reports proficiency to USAES.
- Coordinates and controls training device use.

To qualify as a UMT, Soldiers must demonstrate skills and knowledge above those of an operator. Additional UMT skills include the ability to—

- Understand, explain, and demonstrate the skills needed to detect buried mines.
- Understand how the system responds to good versus bad sweep techniques.
- Diagnose and resolve difficulties encountered by operators.
- Set up, operate, and employ the SMS.
- Set up and conduct AN/PSS-14 operator training.
- Administer the training program for the unit commander.

To become a certified AN/PSS-14 UMT, the candidate must be an E5 or higher, a qualified

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operator (passed the operator course or validated within 12 months), and pass the UMT course. To comply with AR 600-55, UMTs must also be licensed AN/PSS-14 operators. The USAES/DTT team will provide UMT training. The instructor-to-student ratio for the UMT course is 1:5. Candidates must pass a written examination with a score of 80 percent or better. The purpose of the written exam is to ensure the student understood in classroom presentations and practical exercises. After the exam, the instructor will review the questions and explain the correct answers.

Conclusion. In closing we all agree that our military deserves the best clearance systems our country can produce. In the AN/PSS-14, today that system is here. If you need any information on the AN/PSS-14 or setting up a similar training program for your unit please call Mr. David Holbrook at 573-528-7642 or email at david.holbrook@us.army.mil.

(Excerpts for this article taken from: The Army AL&T Magazine Jan-Mar 07 Edition by Kellyn D. Ritter Training Circular 3-34.14 "The AN/PSS-14 Training Program (Draft))

SAME events

Note that EVERY graduate of the Combat Engineer Officer Course and the Utilities Operations Chiefs Course receive a free 1 year membership to SAME.

<http://www.same.org/files/public/MEMBERIMApplication.pdf>

- National Conference 12-15 May 2009, Salt Lake City, UT.
- www.same.org/jetc <file://www.same.org/jetc>
- SAME Awards for USMC will be presented to Lt Saenz and
- SSgt King (partnership between MCEA and SAME).

Looking for additional training/PME/ or TAD trips? Check out:

<http://posts.same.org/ProfDevNewsletter>

**LOTS OF OPPURTUNITIES
TO GO ABOVE AND BEYOND!**

SUBMISSION POLICY

• *The Operational Engineer* will be published on a quarterly basis. The intent is to make this useful to the entire Engineer community. We want to get your thoughts, suggestions, and ideas. Our basic policy is to fulfill the stated purpose of *The Operational Engineer* by providing a forum for open discussion and a free exchange of ideas relating to the U.S. Marine Corps and military capabilities.

• **Commentary on published material:** Submit promptly. Comments normally appear as letters 3 months after published material. Be brief.

• **Feature articles:** Normally 750 to 1,000 words, dealing with topics of major significance. Ideas must be backed by hard facts. Evidence must be presented to support logical conclusions. In the case of articles that criticize, constructive suggestions are sought. Footnotes are not necessary, but a list of any source materials used is helpful. The Marine Corps Engineer School will call upon the operational units to provide specific commentary on issues that have relevance to the education of the occupational field.

• **Ideas and Issues:** Short articles, normally 200-300 words. This section can include the full gamut of professional topics so long as treatment of the subject is short and concise.

• **Letters:** Limit to 100 words or less. As in most newsletters, letters to the editors are an important clue as to how well or poorly ideas are being received. Letters are an excellent way to correct factual mistakes, reinforce ideas, outlining opposing points of view, identify problems, and suggest factors or important considerations that have been overlooked in previous articles. The best letters are sharply focused on one or two specific points.

• The best advice is to write the way you speak. Organize your thoughts. Cut out excess words. Short is better than long. Submissions may be sent via regular mail and should include a hard copy of the manuscript and a disk with the manuscript in Microsoft Word format. Photographs and illustrations must be in TIFE, JPG or EPS format (300dpi, 5x7 inches, color preferred) and must not be embedded in the article. Please attach photos and illustrations separately. You may include the text of the article where the photos are to be placed. Include the authors full name, mailing address, telephone number, and e-mail address. Email to: matt_fletcher@emainc.com and mail to: *The Operational Engineer*, Center of Excellence, PSC Box 20069, Camp Lejeune, NC 28542-0069. Any queries may be directed to the editorial staff by calling 910-450-5017.

****This is your voice to the community. The ECOE is looking for your input on all issues. If you have suggestions on content and format for *The Operational Engineer*, please send them to matt_fletcher@emainc.com. Our goal is four issues a year at the beginning of each quarter. If your command has a particular maintenance tip on how to repair or fix any and all commodities for Engineer Related Equipment, please forward a validated process for dissemination to the entire occupational field.****