Unclassified/For Official Use Only March 2014

mishap LESSONS LEARNED

MISHAP SUMMARY

Mishap
Material Handling Equipment

Damage
N/A

Injury
One (1) Fatality

Operation
CONUS, Defensive Operations

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MCT Causes Marine Death

SUMMARY

During CONUS training, an Infantry Battalion completed an attack at approximately 1500 and transitioned into the defense in preparation for a simulated enemy counter-attack the following day. Attached heavy equipment (HE) operators were involved in preparing obstacles for the defense. At approximately 1900, two HE operators were dropped off and instructed to construct an anti-tank ditch and berm using medium crawler tractors (MCT). Approximately two hours later, the MCTs were tasked to move to a link-up position to the west in order to work on another project. During this movement, the lead MCT operator became disoriented and traveled approximately 2.5 kilometers south, towards friendly defensive positions. At approximately 2305 the lead MCT ran over a Marine, ultimately resulting in the Marine's death.

Staff Sgt. Christian J. Keyser observes as a tractor rubber articulated steering multi-purpose vehicle tears down a wall Aug. 9 at Camp Hansen. The buildings being torn down presented a hazard to base personnel as well as the equipment being stored inside of them due to deterioration from severe weather. Keyser is a heavy equipment operator with 9th Engineer Support Battalion, 3rd Marine Logistics Group, III Marine Expeditionary Force. Photo By: Lance Cpl. Anne K. Henry

DISCUSSION

- **Disorientation.** The MCT Operator was lost. Multiple factors contributed to this:

  – *Task Over-Saturation.* The MCT operators were guided to their initial work site, but not to the follow-on location. Last minute changes in the obstacle plan oversaturated the Engineer Detachment's leadership, which caused them to take shortcuts in order to meet the adjusted timeline.

- *Poor visibility.* There was zero illumination during the night of the mishap. Additionally, the lights of the MCT are only designed to illuminate the area immediately in front of the blade. There are multiple blind spots inside the cab of an up-armored MCT. All of this was exacerbated by dust kicked up during normal operation of an MCT.

- *Lack of supervision.* There was a lack of positive command and control between battlespace owners and all units operating in the area. The mishap unit and the MCT operators were generally aware of each other's position, but no contact was established between the two entities in order to ensure they were on the same page.

- **Ineffective Communication.** The Marines on the defensive line had been briefed earlier in the evening that MCTs would be coming to dig in the AAVs and thought nothing of the two MCTs approaching their defensive line, in spite of the fact that MCTs were several hours early. When the Marines on the defense realized that the MCTs did not see them, ineffective means of communication were used to signal the MCT operators to stop.

- **Over confidence.** The lead MCT operator mistakenly identified the link up position based on convoy lights he saw in the distance and he obtained permission to proceed. The MCT operator had no land navigation tools at his disposal to make this determination; and his supervisors, who were impressed with his capabilities, allowed him to proceed prior to ensuring he was correct.

LESSONS LEARNED

Periods of transition are inherently more hazardous; leaders must strategically position supervision at those points of friction. When integrating mounted assets and dismounted troops, units need to implement effective command and control measures to facilitate communication, movement, and link-up. Special consideration should be given to vehicles with limited operator visibility and/or vehicles without navigation capability. Key personnel should be involved in the mission analysis to ensure effective control measures are derived from a thorough analysis of all factors and considerations, including the capabilities and limitations of the equipment (METT-SL). Examples of these measures may include:

1. Maintaining direct and positive control of all movements within an area of operation by the battalion/company combat operation center.

2. Providing escort/security vehicles with communication and navigation tools.

3. Establishing check points, engagement areas, and unit boundaries within an assigned battlespace, and ensuring all units maintain positive communication.

4. Providing over-watch / security / guides.

5. Establishing a lost vehicle plan that includes the notification of adjacent units.