

Maintenance Situational “UNAWARENESS”

By MAJ Jeff Warren (Ret.)



Maintenance is an essential task the Army must conduct to be able to execute its mission in peace and war. Maintenance is an intensive effort, especially Army aviation maintenance. Without it, our aircraft and their supporting role in combined arms maneuver will be essentially null and void.

SITUATIONAL UNAWARENESS

The Federal Aviation Administration (FAA) describes situational aware-

ness as...“the accurate perception and understanding of all the factors and conditions within the four fundamental risk elements that affect safety before, during, and after the flight” (FAA, n.d.). Meanwhile, unawareness fits the definition as complacent based on Webster’s dictionary definition as a feeling of “Self-satisfaction especially when accompanied by unawareness of actual dangers or deficiencies; an

instance of usually unaware or uninformed self-satisfaction” (Merriam-Webster, 2019).

So, what exactly is maintenance situational unawareness? This is when leadership from the lowest levels to the highest seem to be unaware of or have lost the experience and training to understand what is going on with their maintainers and their maintenance programs. They have,

U.S. Army Soldiers with the Missouri, Georgia, and Illinois National Guard stage CH-47 Chinook helicopters in Kuwait, Dec. 29, 2018. U.S. Army National Guard photo by SGT Emily Finn

in effect, become complacent and no longer see the errors, or they don't have the experience to know what the errors are. The results of maintenance situational unawareness result in aviation units failing to maintain their equipment to standard and promulgate the next accident.

HOW DID WE GET HERE?

The road to complacency is rather long, and there are several detours along the way. As units spun up after 9/11, the Army prepared and headed off to war. Combat in multiple theaters and the boots on the ground limitations are where the trip started. As the Army continued, combat operations over numerous years and the leadership still had to overcome personnel limitations within theaters, the detours began. As commanders faced reduced "seats" for green suiters, they had to make decisions and come up with options to deploy without the full complement of aviation Soldiers and still execute their aviation missions, so they had to utilize contract maintainers to make up for shortages.

While technically, the use of contract maintainers filled the necessary slots for conducting unit and

higher level maintenance in theater, it precipitated a lack of experience and knowledge across Army aviation maintenance units. No longer were aviation maintainers turning wrenches on aircraft, noncommissioned officers (NCO) supervising maintainers, or NCOs conducting quality control operations. Additionally, while the parent units were deployed, these maintainers lost their chain of commands and senior supervisors who are directly counted on within the Army to train and supervise, counsel, and mentor young officers, NCOs, and Soldiers.

IMPACTS OF UNAWARENESS

Situational unawareness or complacency, given time, is a mission and personnel killer. As we look at units and their maintenance posture, the Army shouldn't be surprised at the status of maintenance and the complacency of leaders and Soldiers. Due, in fact, to the multiple aforementioned detours, there has been a void over the years of supervisory and hands-on experience.

Many of today's NCOs and officers didn't get that needed developmental training, hands-

on training, and mentoring early on in their careers. So now we have mid-level and upper-level Soldiers who are supposed to have learned the initial and intermediate maintenance skills and acquired the knowledge and experience, but they actually don't have it. So with this void in tacit and explicit knowledge of maintenance comes the situational unawareness of just how poorly maintenance is being conducted.

HOW DO WE FIX IT?

To overcome the situational unawareness of our aviation maintenance operations requires a retooling of our junior and mid-level leadership. This isn't an easy task with our high operations tempo yet, it is a task that must be taken on if we are to be prepared to execute cross-domain maneuver during combat operations against a peer or near-peer enemy.

Retooling our junior and mid-level officers and NCOs in maintenance to standard may require units to execute maintenance boot camps or maintenance-specific training events. These should be directed from higher (brigade level) and sift downward to the platoon level. Just as each Soldier went through initial basic training and conducted regimented base task training, the maintenance boot camp should follow suit.



U.S. Army Soldiers with the Missouri, Georgia, and Illinois National Guard stage CH-47 Chinook helicopters in Kuwait, Dec. 29, 2018. The U.S. Air Force brought in the helicopters and the crew began maintenance, preparing them to support ongoing aviation operations in Iraq. These units support the Coalition Aviation Advisory and Training Team, enhancing the Iraqi Security Force's aviation capabilities. U.S. Army National Guard photo by SGT Emily Finn

The boot camp can be a 2-week intense course or once weekly meeting for intense training sessions with hands-on actions and counseling/mentoring sessions from senior maintainers on what they should be doing, how to do it, and techniques that can be used to maximize the utilization of their limited maintainer resources. Training events should be directed to those specific skill level tasks of the Soldiers. An example would be dedicating several hours a day to train Soldiers and leaders while teams are conducting phase maintenance. This provides integration of training and maintenance mission execution. Think sergeant's time training for maintainers and leaders who didn't get that base training due to deployments over the course of almost 20 years.

The guide on how to execute Army aviation maintenance is just that, Army Training Publication (ATP) 3-04.7, "Army Aviation Maintenance" (Department of the Army [DA], 2017). This is the maintenance system bible for maintainers, maintenance NCOs and officers, and commanders at all levels. But to learn and use it to accomplish the aviation mission, you have to read it! This ATP has all the necessary information and references to build your program, train and manage training, and standardize aviation maintenance across the force. As the ATP states, "This ATP ties regulatory guidance to practice, and serves as the primary reference for effectively managing aviation maintenance" (DA, 2017). As an Army aviation commander, leader, technician, and maintainer, this ATP is mandatory reading.

Key topics must include production control, quality control, and technical supply. Without an understanding of how all these pieces fit together to make maintenance run efficiently and safely, the personnel being trained will not be able to manage the corporate process, nor be situationally aware of maintenance as they take on greater levels of responsibility.

CONCLUSION

Situational unawareness or complacency in maintenance can be overcome. It requires direct leadership by the upper command to make sure it is designed, programmed into the training calendar, and executed to standard. This training, whether in the form of a maintenance boot camp, sergeant's time, or other training mechanism, can bring our junior and mid-level officers and NCOs up to speed and give them the situational awareness they require to conduct operations currently and in the future at higher levels of responsibility. Success in your maintenance program requires that the maintenance team members read ATP 3-04.7 and use it as the primary reference for your aviation maintenance program.

The Army depends on Army aviation as a combat multiplier, and Army aviation depends on its maintainers to provide safe and fully mission-capable aircraft. It's time we get complacency out of maintenance and

bring our maintainers to the fully mission-capable status. ✈️

Jeff is a retired Army Master aviator with over 20 years of service. He conducted operations as a maintenance test pilot, maintenance manager, and instructor pilot in the UH-60. He served in air cavalry, assault helicopter, and MEDEVAC units throughout his career. He served division assignments with the 7th ID (LIGHT), 2ND ID, the 101st Airborne Division (AIR ASSAULT), and the Aeromedical Research Laboratory. He has worked with the Directorate of Training and Doctrine producing doctrinal publications, producing tactical classified manuals, MEDEVAC proponency as a subject matter expert, and the Combat Readiness Center as an aviation technical writer. Additionally, Jeff holds a master's degree in management.

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SGT Johnathan Kessel, an aviation component repairer (right) and SPC James Chaffins, an aviation electrician both with the Kentucky Army National Guard's 2nd Battalion, 147th Aviation Regiment, currently assigned to D Company, 8th Battalion, 229th Aviation Regiment, 244th Combat Aviation Brigade, troubleshoot a suspected malfunctioning UH-60 Black Hawk helicopter warning light, June 26, 2019, at Camp Buehring, Kuwait. U.S. Army photo by SSG Luis Delgadillo