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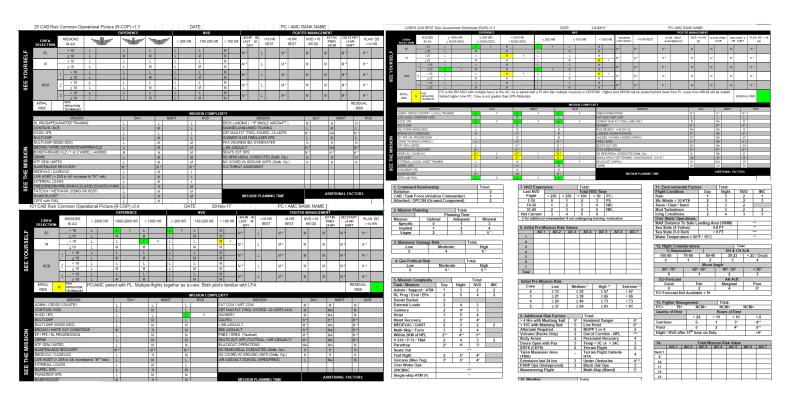
When Standardization isn't the Standard—Confusion

Current Operations

The risk assessment for aviation does not represent risk accurately and creates confusion for aviators, mission briefing officers and commanders. This paper presents a comparison of the various versions of the risk assessment worksheets (RAW) utilized throughout Army aviation. Developing one standardized RAW throughout Army aviation will alleviate confusion when aviators, mission briefing officers and commanders change units or operate with other combat aviation brigade assets. The RAW should be a digital form that can be reviewed and updated as the mission dictates. Incorporating a chapter in Army Techniques Publication (ATP) 5-19, Risk Management, with instructions of the new RAW would eradicate confusion. Additional local information should be added to the unit's safety standard operating procedure (SOP).

Risk is defined as probability and severity of loss linked to hazards.1

Using ATP 5-19, Risk Management, as an outline, commanders are responsible for the development of local briefing checklists and RAWs. This allows the commander to assign risk levels to a particular mission set or task. Risk levels are used to elevate certain mission sets or tasks to higher levels of approval or visibility.² This allows each aviation unit to have a unique RAW. Not only are the worksheets unique, but the naming convention of the worksheets are also unique. Units have created RAWs, Electronic Risk Assessment Work Sheets (ERAWs³) and Risk Common Operating Pictures (R-COPs⁴). The worksheets are developed using Microsoft Excel or Microsoft Office. These worksheets sometimes use enumeration to annotate risk, while others incorporate colors. Some are in landscape, others in a portrait orientation. The sections of each worksheet is similar, each having a "See Yourself," "See the Mission" and "See the Environment" section. If one places all the risk assessments side by side, many differences are apparent. Each have the same end result, to identify risk and mitigate the risks if possible. Below are few examples:



Note: All example R-COPs were current at the time of the writing of this article.

The forms appear similar, but each designates risk levels for certain items differently.

According to Army Regulation (AR) 95-1, Flight Regulations, Appendix B-1:

"Accident data shows that there are a number of critical elements called crew-error accelerator profiles such as when lunar illumination is less than 23% and less than 30° above the horizon, visibility is obscured, total flight time is less than 500 or more than 2,500 hours or aircrew duty day is longer than 12 hours with four hours of flight time."

Each worksheet does evaluate risk for individuals on the aircrew. However, the risk worksheets do not evaluate risk the same. This area should not be an area-specific section. This area should be a section in which historical accident data is the basis. The data across Army aviation should be the same when evaluating the aircrew for a mission.

Reviewing each R-COP "See Yourself" section, it shows that risk is evaluated for each aircrew member but each R-COP values flight hour experience differently. A pilot in command (PC) and a nonrated crewmember (NCM) both with 499 hours and greater than 25 hours in the AO would be a **moderate** on one R-COP and a low on another. Moving through the "See Yourself" on the R-COP, the night vision device (NVD) section is also evaluated on the R-COPs differently.

Continuing across, the fighter management section is next on the R-COP. Fighter management is understood by each aviation unit differently. There are many interpretations of what fighter management is and how it applies to risk.

Moving down the R-COP, the next section is "See the Mission." Each unit describes a certain task that is going to be performed during that particular mission. If the mission requires live hoist, depending on which R-COP used, the risk level changes on paper. The differences do not only apply to hoist. Throughout the various R-COPs, risk levels change depending on the unit. Each unit includes the basic tasks every

rotary-wing aviator will conduct while training or completing an air mission request (AMR). However they assign risks that are sometimes drastically different from one another. In 2016 and 2017, the Army aviation community was involved in two Class A hoist accidents. **Using a digital R-COP**, the form could have been updated to incorporate a higher risk value or ensure the Safety of Flight messages were read and understood by the crew.

The stress of replacing a unit while in Afghanistan or working with another aviation unit can be reduced by creating one digital aviation risk assessment worksheet (dARAW). During the 2015 deployment, C/6-101st MEDEVAC Company arrived six weeks earlier than the rest of the 101st Combat Aviation Brigade (CAB). The MEDEVAC company fell under the 82nd CAB. The 82nd CAB utilized one version of an R-COP, but it was different than the version used by the 101st CAB.

Another example is when stationed in Honduras, an Army National Guard (ARNG) unit was assigned to conduct operations in Belize. This ARNG unit had their own risk assessment at home station. While conducting operations however, this unit would use the 1-228th Aviation Regiment's R-COP for the duration of their operations. This meant the aviators would have to learn a new form, format and instructions prior to flying. Why not remove a variable and create one version of an R-COP?

Implementing a dARAW used by every aviation unit would remove confusion. After an aviation accident, the aviation branch safety office or U.S. Army Combat Readiness Center could update the dARAW version and risk levels. In the hoist example, post-accident findings could have increased risk to a higher level, ensuring the aircrew understood the SOF⁵ message. ATP 5-19 should also include the instructions for the dARAW, mirroring the chapter for Deliberate Risk Assessments. The unit's safety SOP would then supplement the ATP with local policies.

The argument might be made that standardizing the aviation RAW will inhibit commanders. I believe standardization of the

risk assessment and creating a dARAW will enable commanders. This will allow them to accurately assess risk. The risk levels assigned to each crewmember in relation to total flight hours should be the same no matter where that aviator is operating. Historical accident data should dictate the risk levels. While most unit R-COPs assign a low or moderate risk when performing a live hoist, the two Class A accidents involving a hoist within an 18-month span could be cause to increase the probability from seldom to occasional.

Another argument against an Army-made product might be that flight hours can be tied into locally made products. Pre-loading the flight hours of each crewmember is an excellent idea, but this relies on someone updating the product on a regular basis. These products are usually password protected, and if that person has transitioned out of the unit, the password is normally transitioned with them. In this case, the data on the local product becomes inaccurate and needs to be corrected once printed out.

Standardize the Army aviation RAW:

- The instructions for all risks assessments should be removed from unit standardization SOP and placed in an appendix in ATP 5-19.
- Create a digital risk assessment, update quarterly and following post-accident analysis, applying higher risk levels to identified accident causal factors.
- Incorporate SOF messages into the dARAW to ensure the widest dissemination of the information.

Standardization will allow commanders, aircrews and mission briefing officers to accurately assess the risk for each flight, utilizing a standardized system which additionally allows real-time modification of risk level based on current mishap factors-related data. The Army runs on standardized

operations, which give the overmatch necessary to defeat the threat. It is time to standardize the RAW, which will minimize confusion for aviators and mission briefing officers and provide field commanders with the most accurate risk management for their aviation units conducting training and combat operations.

¹ATP 5-19, page Glossary - 3, 2014

²AR 95-1, page 9, 2014

³ERAW - Electronic Risk Assessment Worksheet

⁴R-COP - Risk Common Operating Picture

⁵SOF - Safety of Flight

Works Cited

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