

## **Chairman Cody Opening Statement to HASC Readiness Subcommittee**

03 December, 2020

Good Morning. Chairman Garamendi, Ranking Member Lamborn, and distinguished Members of the Subcommittee. It is an honor to be here today with the Commission's Vice Chairman Dick Healing to deliver the National Commission on Military Aviation Safety's findings and recommendations.

I would like to start by thanking the Department of Defense and each of the Services for granting the Commission unlimited access to units, personnel, and safety data. We are thankful to all of our Soldiers, Sailors, Marines and Airmen for their "can do" attitudes and unwavering commitment to duty. We want you to know that we continue to have the finest servicemembers in the world.

In the FY19 NDAA, Congress directed the Commission to complete five specific tasks that we will address today. The Commission analyzed more than 6,000 mishap reports, consulted volumes of secondary research, conducted our own primary research and analysis, and – most importantly – conducted 80 site visits to more than 200 aviation units and organizations.

We were asked to specifically focus on the years 2013 to 2018, during which time there occurred 6,079 mishaps, resulting in the loss of 198 personnel, the destruction of 157 aircraft, and a cost of \$9.41 billion.

Overall, the Commission found that pilots are not flying enough, and maintainers need better training and are distracted with excessive administrative duties. We found that safety is not adequately prioritized in the Department, and that the lack of consistent, reliable funding impacts safety as the single biggest degrader of readiness. Finally, the relentless OPTEMPO is leading to chronic fatigue and contributing to unsafe conditions.

The first specific task in our charter was to assess the rate of recent military aviation mishaps compared to historic mishap rates. The Commission compared the mishap rates for the time periods of 2007-2012 and 2013-2018. In comparison, the overall 2013-2018 mishap rates in the Air Force, Navy and Marine Corps all increased, largely due to an increase in Class C mishaps. The Navy and Marine Corps both experienced increases in the most serious Class A rate average. The Air Force experienced a small decrease in Class A rate average, and a larger decrease in Class B averages; however, they saw a significant increase in the less severe Class C mishaps. The Army experienced decreases in all mishap classes, with the greatest rates of reduction in Class A and B averages.

The Commission's second task was to assess the underlying causes contributing to unexplained physiological effects. The Commission applauds the work of the Navy and the Air Force in their efforts to understand and prevent physiological episodes. The Commission found there is no single cause of physiological episodes, and that most "unexplained episodes" actually have identifiable causes. That said, the Commission found that there remains inadequate in-flight

biometric monitoring to aid in identification and mitigation of unreported physiological episodes. The Commission also found human system integration and safety technologies need to be incorporated earlier in the acquisition process for new aircraft. Aircraft acquisition and development programs remain heavily focused on aircraft capabilities, often at the expense of the requirements of those who fly them.

The Commission found tasks three and four to be closely related: why an increase in mishap rates, and the causes of aviation maintenance delays. In studying both of these tasks, the Commission found a multitude of intertwined factors.

First, the Commission found few new causes of mishaps, but rather the same mistakes being repeated. Furthermore, the Commission found that the majority of aviation mishaps are preventable, and not attributable to an inherent risk in military aviation. Two critical shortcomings that the Commission identified are the lack of senior leadership involvement in safety, and the absence of an effective, centralized organization with the authority to coordinate, monitor, and implement safety measures across the aviation community. Safety unquestionably needs to be more consistently prioritized across the DoD and the Services.

Flight hours are the lifeblood of military aviation. Decreased flight hours, inexperience, and failure to sustain currency and achieve proficiency are all proven contributors in aviation mishaps. The Commission found minimum requirements are routinely not being met. The Services are relying heavily on pilot waivers and deferred maintenance in order to continue operations. All of the Services have increased their reliance on simulators in lieu of actual flying, but simulators are frequently outdated, out of service, or simply unavailable.

The Commission also found that the Services are failing to protect their costly investments in the training and advancement of pilots. Assignments away from the cockpit are diminishing proficiency and increasing risk, and are a major distraction from the development of highly-skilled aviators. Sustaining aircrew experience by increasing retention not only improves safety and readiness, but also yields a substantial return on investment.

Initial maintenance training is also lacking, relying more heavily on augmented training – including computer-based learning, simulators, and virtual reality – to overcome resource and personnel shortages. This shift in training has resulted in graduates lacking basic tactile skills, and not being ready for flight line operations. Experienced maintainers are caught between competing demands: improving unit readiness by generating aircraft safe to operate today, or training new maintainers for tomorrow.

Current personnel practices make it extremely difficult to retain highly skilled aviation mechanics, resulting in decreased experience levels – especially in crucial mid-grade levels. The current enlisted talent management and promotion system doesn't sufficiently recognize and reward technical expertise. When highly trained maintenance professionals are assigned to non-aviation duties, their operational units lose access to their skills and experience as both

maintainers and instructors. This impact on staffing levels is a major factor in reduced aircraft availability.

When the Commission looked specifically at the connection between maintenance practices and aircraft availability, we found that the aircraft sustainment system – from the supply of parts to depot level maintenance – is failing to support the needs of operational flying units, and leading to an increasing amount of aircraft cannibalization. This failure leads to greater workloads, increased risk, lowered morale, and exacerbated readiness problems. In addition, deteriorating maintenance facilities, and poor transition planning from legacy to new aircraft platforms, also contribute to maintenance delays and aircraft availability issues, and reduce operational efficiency.

On top of decreased flight hours, declining experience, and maintenance and supply issues, we saw observable effects of high OPTEMPO. The aviation community is a high-demand, low density force that is currently overstressed, which results in training deficiencies, chronic fatigue, burnout, and decreased readiness.

The Commission found that Congress has an important role in eliminating one of the biggest threats to aviation safety. Inconsistent funding impacts multiple areas of military aviation, including exercises and training, flight hours for both currency and proficiency, and parts acquisition. During cuts to the budget, Service O&M accounts are frequently the first to be targeted. The lack of predictable funding increases risks and costs, and damages readiness. Funds that are not received in time to meet specific needs must often be spent inefficiently, or be lost completely. Military aviation suffers disproportionately from inconsistent DoD funding, due to the highly technical and perishable skills it requires.

Finally, DoD lacks the comprehensive data collection methods, and thorough data analysis capabilities, to effectively utilize analytical tools that can reduce risk and improve military aviation safety. The Services lack standardized procedures and consistent processes for mishap reporting, which in turn diminishes the value of the data collected to determine causal factors of mishaps. The lack of artificial intelligence tools, machine learning, and advanced analytics is obscuring leadership's sense of current and future trends, and limiting the predictability and mitigation of unsafe practices.

To address the Commission's findings, we've developed a series of recommendations which Vice Chairman Healing will cover in his opening statement. I thank each of you for your continued support of the outstanding men and women in uniform, and for your insight in recognizing the need for this study. We are confident that full implementation of these recommendations will improve military aviation safety across the Services. I appreciate the opportunity to testify today, and look forward to your questions.

Thank you.