

DEPARTMENT OF THE AIR FORCE  
PRESENTATION TO THE SUBCOMMITTEE ON READINESS  
COMMITTEE ON ARMED SERVICES  
UNITED STATES HOUSE OF REPRESENTATIVES

SUBJECT: AVIATION MISHAPS AND A CULTURE OF SAFETY

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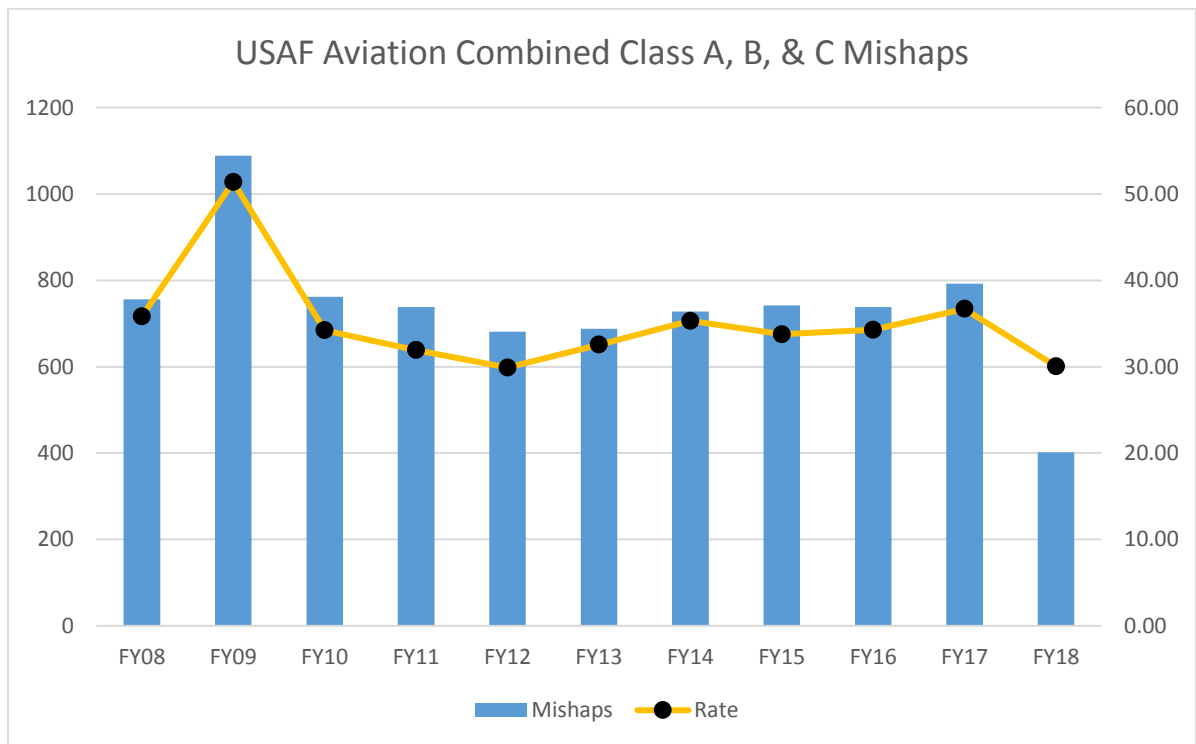
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## INTRODUCTION

Chairman Wilson, Ranking Member Bordallo and distinguished members of the subcommittee, thank you for the opportunity to appear before you today on this very important topic. Safety remains a top priority for our service to ensure the preservation of all our personnel, equipment and in the end our combat capability and readiness. While risk will always be present in our missions, especially in the aviation domain, our goal is to understand the associated hazards, and to eliminate or mitigate them to the greatest extent possible.

People are the Air Force's most valuable asset and caring for our Airmen is our solemn duty. Every member of the Air Force makes a valuable contribution to the defense of our nation. While the Air Force has continued its 10-year downward trend of Class A and B mishap rates, our manned aviation flight mishap rate has seen an increase since the beginning of the fiscal year. Our aviation mishap rates, calculated by mishaps per 100,000 flying hours, are as follows (as of 23 May 2018):



-- Last decade (since FY2008): the aviation Class A through C rate, including both manned and unmanned aircraft, has decreased by 16%. Specifically, our Class A mishap rate has decreased 35%, the Class B mishap rate has decreased 50%, and the Class C mishap rate has decreased 9%.

-- Last two years (since FY2016) – the Class A mishap rate decreased 12%, the Class B mishap rate increased 5%, and the Class C mishap rate decreased 14%.

-- In FY2018 (as of 23 May 2018), the overall Air Force aviation Class A mishap rate has decreased 5%, the Class B rate increased 38%, and the Class C rate decreased 18% when compared to FY2017. Unmanned aviation Class A mishap rate has decreased 100% compared to FY2017, however manned aviation mishaps rate for the Class A category has increased by 53%. Unfortunately, we have lost 18 Airmen in FY2018.

Because of the increase in manned aviation mishaps in FY2018, the Air Force Chief of Staff, General David Goldfein, directed all wing commanders, and operational and maintenance leaders to conduct a one-day non-flying Operational Safety Review Day. This was completed for all Active Duty Units by May, 2018 and will be completed for all Air Force Reserve and Air National Guard Units by the end of June, 2018. During this safety review day, units reviewed past mishaps, evaluated flight line supervision, assessed planning processes, examined flight line operations to identify gaps or seams and ensured decisions regarding acceptable risks are being made at the appropriate levels. All feedback will be used to inform Air Force-wide safety efforts at all levels and improve our operations.

The Air Force Safety Center has a process in place to investigate safety mishaps and implement resolutions. However, as the Chief Operating Officer for the Air Force, I want to focus on what we are doing to prevent future mishaps and how we are addressing shortfalls across training, equipment and personnel that impact safety.

## **RISK MANAGEMENT**

We serve in an inherently dangerous business, but we must make sure we have the right risk calculus to protect our most valuable asset, our people. One way we have this is thru the Air Force's Operational Risk Management (ORM) program. This program was implemented in 1996 and by 2002 was institutionalized across all Air Force MAJCOMs. Today, all MAJCOMs implement an ORM program that is tailored to the missions they conduct and completed during flight mission planning. Aircrews cover and discuss all phases of the mission and identify risk. Then they develop a mitigation plan for each risk and which is approved by the appropriate command level prior to the start of the mission. Our Airmen have a culture of constantly reevaluating risk and continuously balancing risk with readiness.

Every unit conducting or supporting flight operations has an aviation safety program. In addition, every flying wing has a Flight Safety Officer who is an experienced rated officer and has completed multiple safety courses. He or she helps develop and review appropriate emergency response plans and coordinates on any additional installation plans involving flight safety or aircraft emergencies. These can range from how to deal with airfield wildlife to airfield operations and collision avoidance.

Successful risk management programs are not just about having a robust process in place. In order for them to be effective, personnel must have the right experience and training that gives them the knowledge needed to effectively identify and mitigate risks.

## **TRAINING**

Training is a critical prerequisite to safety. This requires the Air Force to have the right equipment for training and time to do the training. The operations tempo the Air Force has maintained for the last decade has limited the time personnel have to train and the lack of time has

impacted the readiness of our Air Force. To address this, the Air Force is working to reduce deployments and provide personnel more time to train. For example, this summer, U.S. Air Forces Central Command is reducing the number of rated 365-day deployments by 29% and eliminating, converting, or transferring 125 deployed overseas positions. Another example is in our strategic airlift forces. U.S. Transportation Command worked with Air Mobility Command to reduce requirements and create time for units to properly train. This has allowed Airmen to gain proficiency in Chemical, Biological, Radiological and Nuclear (CBRN) training for the first time in their careers.

Another area required for effective training, is possessing the right equipment. We continue to modernize our Operational Training Infrastructure with a blend of live, virtual, and “synthetic” platforms with \$2.8 billion budgeted for FY2019. Synthetic capabilities provide opportunities to test and train against the world’s most advanced threats at a reduced cost and avoid unnecessary wear and tear on advanced platforms. Increased funding for simulators and other training equipment allows for quality training while in a safe environment. This equipment, along with providing time to train, are critical for aircrew to obtain the necessary training to increase their proficiency, experience and systems knowledge.

## **EXPERIENCE**

Additionally, the Air Force faces another challenge of having personnel with the right amount and level of experience. This is not only an issue with aircrews but with our maintenance crews as well. For FY2018 we are adding 2,300 active duty Airmen and raising Air Force levels to 325,100. Our plan calls for achievable, steady growth in the future.

Increasing manpower is only the first step. The next step is to retain experience and train new critical skills. For instance, the aircraft maintenance career field manning was short 4,000

Airmen at the end of FY2015. Over the last two years, we were able to grow that field to a shortfall of only 400 by the end of FY2017. The challenge for aircraft maintenance manning is shifting; manpower shortages have improved, but low experience levels continue to be an issue. It will take several years to develop these Airmen into seasoned professionals. This is a similar problem we have across other career fields in the Air Force. It is not just about overall manning levels, but ensuring we have the right amount of personnel with the right amount of experience.

The Air Force has successfully put programs in place to address these issues. The Remotely Piloted Aircraft (RPA) career field is a perfect example. All MQ-9 combat squadrons execute 24/7/365 combat operations, which makes it difficult to have sufficient time to train. To address this, the Air Force put together two programs, the Culture and Process Improvement Program and the Get Well Plan. These programs provide methodical steps to posture the MQ-9 force for sustained operations and increased lethality. The Get Well Plan objective was to increase manning in combat and training units, which was completed in FY2017. The Culture and Process Improvement Program established an in-garrison Combat-to-Dwell ration, which allows MQ-9 squadrons to reconstitute in the same fashion as manned flying squadrons that deploy and return from combat zones to focus on training and readiness. This will increase readiness by increasing the peacetime training opportunities for MQ-9 aircrew.

## **AGING FLEET**

Another challenge is the aging of our aircraft. The overall average age of the Air Force Fleet is 27 years; however, the average age of the B-52 strategic bomber and the KC-135 tanker both exceed 50 years. As aircraft age, they experience various degrees of challenges due to the

different environments they operate in and the stress of different missions. We work hard to identify this type of aging in pre-programmed inspections. These inspections allow us dedicated time to remove panels and components to identify corrosion or material deficiencies.

Every aircraft we fly, regardless of its age, meets exacting airworthiness standards. However, the older the aircraft get, the more difficult it becomes to replace or repair components. This is one reason why modernization across the Air Force is a top priority of the Secretary of the Air Force. Today's modernization is tomorrow's readiness. Modernization has been underfunded for over a decade and the Air Force must carefully manage a bow wave of modernization over the next ten years.

On the other end of the spectrum, newer aircraft often cost more when mishaps occur. Therefore, an incident with an older aircraft would have been classified as Class C could be Class B or A for newer aircraft based on dollar amounts. For example, an F-22 Foreign Object Debris propulsion mishap resulted in \$3.6M of damage (Class A mishap) however the same issue on an F-15 only resulted in \$1.2M of damage (Class B mishap).

## **SUMMARY**

Safety has been and remains a top priority in the Air Force. The Air Force has made significant strides in reducing mishaps over recent decades. However, we realize the need to continually adjust and focus efforts on emerging hazards. While risk will be ever-present in aviation, our goal is to ensure we identify all hazards to allow the elimination or mitigation of risk to the fullest extent possible. Air Force Chief of Staff, General David Goldfein, states "We cannot afford to lose a single Airman or weapons system due to a mishap that could have been prevented." On behalf of the 670,000 active, guard, reserve, and civilian Airmen and their selfless families,

thank you for opportunity to testify before you today. I look forward to your continued leadership and partnership in defense of this great nation.