CHILL OUT! IT'S JUST SNOW...

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Photo by: MCC Shannon Renfroe

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While operating in the cold weather environment, maintenance support personnel, aircrews and aircraft will all face numerous hazards due to their direct exposure to the elements. If managed correctly, operations can be executed without significant impact on the mission while keeping maintenance support personnel and flight crews safe and aircraft fully mission capable. However, occasionally Mother Nature will prevent missions from launching, as NATOPS restrictions are in place for a reason. Proper identification of "no go" criteria and adhering to policies in place for cold weather operations will further assist in preventing a mishap. How squadrons prepare to meet these challenges will ultimately determine their success or failure when challenged to meet mission requirements while balancing personnel safety.

Proper command preparation can begin with early identification of the intent to operate in a cold-weather environment. Too often, commands are reactive to tasking, placing them behind where they need to be to succeed and operate safely and effectively. Once the requirement to work in the cold weather environment is identified, initial or refresher training should be conducted to ensure all hands are familiar with applicable cold weather operations policies and practices that may be utilized. Conducting practical drills or scenario-based walk-throughs are great opportunities to validate training and help shift the mindset of how the command will operate.

Conducting an accurate inventory of gear and equipment is very important. Generally, the supply chain does not always allow commands to equip themselves promptly, so the sooner you know what you need to operate in cold weather, the better.This preparation can range from aircraft components to support De-ice, Engine Anti-Ice and Environmental Control Systems (ECS) to climate-appropriate flight clothing for aviators and flight line clothing for maintenance personnel. Often, cold weather clothing is passed down and not always readily available. Identifying the serviceability of current gear and the requirement for new equipment will help ensure everyone can operate effectively and stay safe in flight and on the flight line. Additionally, Wing level financial support or augments can take the burden off of the operational squadrons having to prioritize funding to support these requirements at the sacrifice of other needs.

Environmental impacts on flight operations can cause a lot of unknown risks. Flight crews must receive accurate weather briefs with updated forecasting information to mission plan appropriately. Establishing a "no go" criteria that is reached before the NATOPS limitation will provide aircrews with a margin of safety when weather forecast change. In non-climate-controlled aircraft, aircrews are directly exposed to the elements. Even with the best cold weather gear, aircrew can reach the point of incapacitation, and often, because of perceived

pressure, they may not speak up. If this point is reached, there should be no hesitation or fear of reprisal, as continuing could jeopardize the entire crew's safety. Establishing a culture that allows for the ability to speak up without reservation is critical to the safety and success of the crew and mission.

While operating in a cold weather environment, the presence of icing and snow is pervasive. When these conditions present themselves, squadrons must be prepared to execute required maintenance to aircraft. This maintenance can include ensuring De-Ice, Anti-Ice and ECS are operable, along with any other required aircraft systems. Additionally, before preflight, all ice and snow must to be cleared off the aircraft fuselage and flight control surfaces. When clearing off ice and snow, there are specific requirements to be followed, which may vary by T/M/S. Also, slip hazards are extremely dangerous, and very predominant in these conditions. Both flight crews and maintenance personnel should be highly cautious while walking on and around the aircraft. Ensure applicable fluids are serviced with cold weather additives if temperatures require. Lastly, if hangar space is available for use, aircraft should be stored in a hangar if possible to help preserve it, but this will also lighten the workload on maintenance crews and reduce their exposure to the elements.

While squadron leadership owns much of the risk management process, it falls on all hands to support a climate of safety. To remain operationally effective in cold weather environments, aircrews must protect themselves by proper planning. By ensuring appropriate training is conducted, gear and equipment are available and serviceable, accurate mission planning is performed and maintenance procedures are followed, units will significantly help mitigate the risks associated with operating in cold weather environments.

Photo by: Capt. Katrina Herrera