Subject: Summer Operations

Area of Concern: All Aviation Activities

Distribution: All Aviation Users

Discussion: Ahh.... the wonderful days of summer. Can’t you just see yourself in this picture? Okay, back to reality. Believe it or not, summer is half over. Or stated differently, half of it still remains.

Long days translate in to ample opportunities to continue operations for lengthy periods (especially in northern latitudes like Alaska where daylight predominates). Managing your ops tempo and fatigue is a shared responsibility between your managers, coworkers and YOU! Nobody truly knows your limits better than the original owner of the equipment. Communicating your limits and establishing expectations is the first step in mitigating fatigue related mishaps and allows planners to effectively manage operations and resources.

Like most summers, this one has also been very busy. From the oil spill crisis in the Gulf to battling fires in Alaska, aviation operations have been non-stop. So far, we have experienced very few mishaps which is an accomplishment worth acknowledging. Unfortunately, danger still looms as the race through the busy summer season is a marathon and not a sprint. The second half of the summer is usually where fatigue and complacency meet.

Due to weather conditions and ops tempo, heat stress and fatigue is a constant threat to pilots and aviation personnel. The added heat associated with fire suppression missions can seriously limit an aircrew’s ability to accomplish complex tasks (see DOI Aviation Accident Prevention Bulletin 09-02). Heat stress affects support personnel as well. Managers at every level should ensure adequate precautions are taken and that proper risk management is used to mitigate the risk of heat stress.

Everyone associated with aviation operations should be aware of the insidious effects of fatigue (see Interagency Safety Alert 08-02). The National Transportation Board (NTSB) has cited fatigue (in both operations and maintenance) as a significant contributing factor in aviation accidents and has included it on their Most Wanted List of actions needed by federal agencies. Again, managers at every level should ensure precautions are taken to reduce exposure but they won’t know you’re at or near your limit unless YOU communicate it!
Summertime aviation operations may take place at any altitude, and be accompanied with high temperatures and humidity. Pilots should account for the effects of hot, high, and heavy conditions on aircraft performance, especially when it comes to risk assessment and performance planning for each phase of the mission. Discuss aircrew coordination measures to deal with the exposure to the peak summer conditions and ensure thorough understanding of performance planning data and discuss power restrictions with each aircrew member prior to mission execution.

As more months of summer still remain, it’s imperative we remain vigilant in our approach to safely managing aviation operations. Fatigue, heat stress, and ops tempo can lead to shortcuts, complacency, and mistakes resulting in mishaps. It takes all of us to keep aviation operations safe. Don’t let your guard down, there’s still a lot of summer left!

Stay alert! The Dog Days of Summer are coming!

/s/ Keith C. Raley  
Chief, Aviation Safety and Program Evaluation

/s/ Ron Hanks  
Chief, Aviation Risk Management and Training Systems