



DEBRIEFING

Flight Safety is Everybody's Business

PERSONAL PROTECTIVE EQUIPMENT: Where fashion and flight safety meet.

It is not often that flight safety folks talk about high fashion, but I guess what personnel wear when they take to the sky is literally "high" fashion. Dual layers of clothing, long underwear, natural fibers, no synthetics, gloves, helmets, visors, boots, G-suits and all the rest are individual pieces of personal protective equipment (PPE) that help safeguard CF members from some of the dangers inherent in aviation.

Of course, flight safety not only applies to those airborne but also to those on the ground whose work contributes to the maintenance (medical, food service, etc) of the individuals who take to the sky or to the maintenance and support (engineering, met, avionics, ATC, etc) of the crew and their aircraft.

A couple of recent occurrences have made DFS staff really start thinking and talking about aviation fashion.

Note that both of the accidents discussed below are still classified as on-going investigations. The information provided is factual and specific to the topic of PPE. Upon completion the full report for each accident including findings, causes and preventative measures will appear on the DFS website.

http://airforce.mil.ca/dfs/index_e.

BE PREPARED FOR A BLAST!

The first accident occurred in Moose Jaw on 14 June 2004. A CT-155 *Hawk* jet fighter trainer with

a crew of two sustained a birdstrike. The crew ejected at 690 feet AGL and the aircraft was destroyed upon impact with the ground seven seconds later.



As members of the crash response team, the locally based Escape Systems (ES) technicians proceeded to de-arm the seats. After pinning the seats, the breach firing units of the seat explosive devices were removed.



The residual pressure in the lines and breaches poses a serious blast hazard to personnel as in this case when some of the breaches shot out. Additionally, the off-gas emitted on releases of these cartridges can be toxic. Again, neither the ES technicians, nor the OSCER (On-scene Controller Emergency Response) personnel, nor any of the other emergency response personnel were aware of the hazards and so the appropriate PPE including gloves, protective goggles, helmets and respirators were not worn.

This is a prime example of having it all blow up in your face!

IT'S BLOWING IN THE WIND!

The second accident occurred in Afganistan on 6 May 2006. A *Sperwer* CU-161 uninhabited aerial vehicle (UAV) crashed during the recovery phase of flight when the parachute failed to deploy. The air vehicle descended rapidly and exploded on impact with the ground. It was consumed by post-impact fire and destroyed.



Following the crash, recovery and salvage personnel from the contingent in Kandahar deployed to the site.

Utilizing the guidance provided in the Downed Air Vehicle Recovery Plan (DARP) they proceeded with the recovery and cleanup of the crash site. Unfortunately, the DARP did not identify the threat posed by burnt carbon fibre, nor contain direction for the protection of individuals responsible to respond to and handle such material. Without the knowledge and the PPE the recovery team

members were exposed to some potentially dangerous matter.



Wearing PPE is the only way to get on the best dressed list!

Conclusion:

The responsibility for crash response preparedness is a shared one. From the A-GA-135 - *Flight Safety for the CF* –

“At most accident sites, there will be dust, chemicals, and/or fumes that can be toxic or very hazardous to health. Therefore it is essential to protect all personnel working at the accident site. Equipment must protect the lungs and skin against particle and fume ingestion. The CF has a legal obligation to ensure the safety of any agency or civilian contractor involved in work at the accident site or the salvage operation. Accident Response Plans must ensure that any information regarding dangerous material is passed to these support agencies.”

With that said, ultimately, individuals feeling unprepared and unprotected must identify this to leadership so that the appropriate information and protective equipment is provided to those manning the front lines in crash investigations and recovery and salvage operations.

Recognizing the need for committed and professional guidance in this field, the CF has established a Recovery and Salvage Support team that operates out of 8 Wing Trenton. For advice they can be reached 24 hours a day at: 1-866-298-7355. They also maintain an informative website at:

http://atess.mil.ca/client/aerospace/rec_salvage/index_e.cfm

Be Smart – Be Safe!