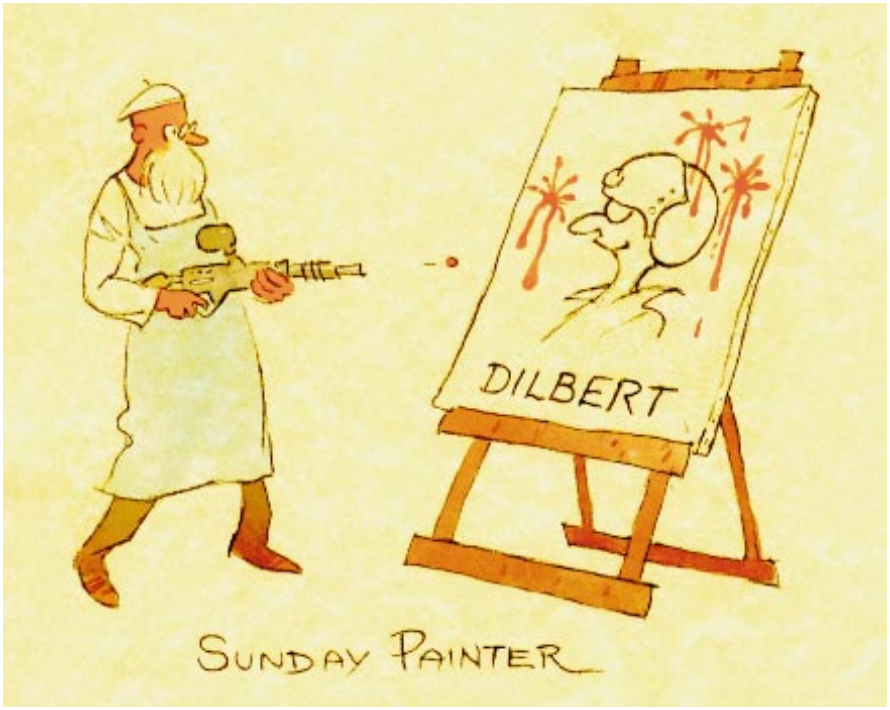
Illustrations by Ted Wilbur

Sad Night of the Intruder

A section of A-6E *Intruders* launched on a night strike training mission with opposing forces in the target area. As briefed, the lead aircraft pilot and bombardier navigator (BN) did not use night vision goggles (NVG), but the second aircraft crew did. In the strike zone, the lead aircraft was "constructively killed" and directed to depart the area while the second *Intruder* continued to the target and completed its attack.

Subsequently, the two A-6Es began the rendezvous sequence. After some maneuvering, which entailed an 85-degree bank level turn by the second *Intruder,* the aircraft formed one behind the other, some distance apart, with the number two aircraft at 14,000 feet, 308 knots airspeed and closing.

The lead *Intruder*, noting the wingman in stabilized NVG tactical position, secured all external light switches except for the green formation light and the tail light. In about one minute the second A-6E's airspeed increased to 348 knots as it neared the leader, who was traveling at 258 knots.



The second *Intruder* thus closed rapidly on the leader until its in-flight refueling probe/starboard cockpit area impacted the leader's port horizontal stabilizer. The lead aircraft experienced a forceful tail-up moment with a noticeable thump. The lead aircraft pilot and BN saw the wingman's aircraft pass underneath and to the right of them with 35 knots of opening speed, a noticeable orange glow in the cockpit area, and a rapidly descending and accelerating flight profile. The disabled *Intruder* continued to fall from the sky and crashed, killing both the pilot and BN. Neither had apparently tried to eject. The lead aircraft was damaged but the crew was able to land safely.

Grampaw Pettibone says:

Investigators learned that the tail light on the lead aircraft had failed in flight, which most certainly had something to do with this awful midair collision. However, procedures call for a maximum of 50 knots closing speed during such rendezvous, and the second aircraft clearly exceeded that.

The second *Intruder's* pilot and BN were very well qualified and had received proper NVG training. Had they been closing at 50 knots, the crew would have had twice the time to realize the rendezvous was not working and to possibly take corrective action. Also, it's feasible that they were suffering from a visual illusion created by the lighting pattern. As one of the investigators noted, the advantage of having two people in the aircraft is that one of them is "minding the store."

It all comes down to situational awareness, which simply defined is the extent to which your perception of reality matches the real world.

On all rendezvous—day or night, for everyone's sake—watch your airspeed and don't close on the leader until you're absolutely certain you're in the proper position to do so. Otherwise, clear away and try again.

Fatal Free Fall

A CH-53E *Super Stallion* was on a night, single-point, external load training flight with night vision goggles (NVG) in use. The passenger seats were left in the down position because of a pending troop lift. This reduced the space for walking around the single-point external hatch. A bag of cranial helmets, a dual-point cargo pendant and an aircraft boarding ladder were improperly stowed on the starboard side of the cabin, creating potential trip hazards.

After completing two external lifts, the crew chief and the aerial observer agreed to a position change. They unhooked their gunner's belts to swap positions. They did not tell the pilots they were moving and did not use available cabin lighting.

The aerial observer moved forward along the starboard side of the cabin and rehooked his gunner's belt after reaching the forward cabin. While the crew chief was moving aft along the starboard side of the cabin, the helicopter transitioned to forward flight and made a climbing turn toward the downwind leg.

During the turn, the pilots sighted a signal flare that had been fired by ground personnel in the landing zone at about the 10 o'clock position from the helo. The flare temporarily "washed out" the pilots' NVGs. At approximately the same time, the crew chief fell through the open cargo hook access hatch. As the aircraft turned to final, the aerial observer discovered the crew chief was no longer in the aircraft. He advised the pilots, who immediately began to search for the crew chief. He was found the next day, dead from the fall, still wearing his fully functional gunner's belt.

Grampaw Pettibone says:

Same old sorry story. We get to hurryin', take short cuts and, whammo, suffer the penalty. Nowadays, Gramps sees these promotional films about how Naval Aviation "owns the night." Our equipment and carefully honed skills, technical and human, supposedly give us the edge over any opponent. Maybe so, but not when we lose one of our own.

The crew chief failed to properly keep his gunner's belt attached to the *Super Stallion* while moving about in the cabin. This cost him his life. But there were some other problems with this mission. Overhead cabin lighting was available but not used. The crew chief could have used his flashlight (with blue lens) or directed the aerial observer to shine his flashlight toward the cabin. Also, why not inform the pilots what you're doing in the back?

The improperly secured gear made things worse. Even though this sortie involved a hot seat change of crew—negating the requirement for a full preflight by the new crew—the trip hazards were clearly evident during the crew swap. Shoulda fixed that before leaving the ground.

In the end, though, it was the unhitched gunner's belt that led to the fatal fall. Flight gear is designed for your protection. Don't let the hustle and bustle of the mission—ESPECIALLY IN PEACETIME—force you to forget that!