Excellence In Airmanship

From Left to Right: Capt. Robert E. Tillema, Capt. Frank S. Kersten, MSgt. Michael M. Stoyle, SSgt. Lowell H. Tash, Jr.

Capt. Robert E. Tillema and Crew, 41 ARRS, McClellan AFB, California, displayed outstanding airmanship during a 30 Oct 1986 night sortie while practicing night aerial refueling over rugged terrain. After several dry contacts, Captain Tillema, the aircraft commander, performed one more dry contact on the right hose of the HC-130. The HC-130 AC directed a practice breakaway, and the helicopter returned to the right observation position. Just after moving the aircraft into right observation position, MSgt. Michael M. Stoyle, the flight engineer, initiated fuel transfer. Captain Tillema,sitting in the right seat, felt a slight flight control input (not a normal occurrence in the HH-53) followed immediately by relay chatter. With that, the helicopter's lights began flickering on and off. Captain Tillema had his hands full, because with each flicker, his Automatic Flight Control System cycled on and off giving him major flight control inputs. He began an emergency transmission to the HC-130, but before he could say anything, both generators failed, the aircraft experienced complete electrical failure, and was plunged into darkness. The three crewmembers in front, Captains Tillema and Kersten and Sergeant Stoyle, began yelling to each other for coordination while entering a power-on-descent. There was a momentary flicker of electrical power, then a return to darkness. SSgt. Lowell H. Tash, Jr., FE, began reading from the Dash One and advised the crew to land as soon as possible. The aircraft approached 1,000 ft MSL without a landing area in sight. The crew reasoned if they *did* find a suitable landing area, the only possibility for a safe landing would be a high hover with Sergeant Tash attempting to identify landing obstacles with his flashlight. Captain Kersten suggested they start the auxiliary power plant (APP). This was just a "stab in the dark," because the number 2 generator can be run either by the main rotor gearbox or the APP, but they had not been able to reset the generator. However, Captain Tillema gave approval, and Sergeant Tash started the APP. They made one attempt to reset the number 2 generator, and it worked! The crew found a suitable area, and made an uneventful landing. Had they not restored power, the landing might have had a different result. Maintenance personnel found a bad supervisory panel (the panel controls the output of the generators) and a disconnected cannon plug on the number 1 generator. When the cannon plug disconnected in flight, the supervisory panel evidently could not handle the overload and failed the number 2 generator. This is the first total electrical failure at night in the HH-53. There is no guidance in the Dash One other than to land as soon as possible (day) or bail out (night IMC). The elapsed time from initial failure to landing was only four minutes. This crew's outstanding handling of a dangerous situation prevented the possible loss of human lives and that of a valuable aircraft. *TMF* staff extends its congratulations for a job well done.