EXECUTIVE SUMMARY

USAFA PARACHUTING MISHAP INVESTIGATION

USAFA, CO
25 JUNE 2010

On 25 June 2010, at approximately 1152 local time (1752 Zulu), a student jumper in the USAFA Airmanship 490 program impacted a wind sock in the drop zone severing his right leg and causing damage to his left leg.

The mishap jumper (MJ) is an ROTC student at Ohio University and, based on his #1 detachment ranking, he was selected to attend the USAFA Jump Program. He excelled in his ground training and looked forward to his jumps. His first jump was on 25 June 2010 which he completed successfully at approximately 0830L, at which time he returned to the 98 FTS for debrief. At 1030L, MJ went back to the "gear up" area to prepare for his second jump. At 1115L, MJ boarded the aircraft for his second jump. After two weather holds on the ground, the MJ aircraft took off with 9 other jumpers. At approximately 1143L, MJ exited the aircraft uneventfully and executed freefall maneuvers for approximately eight seconds, at which time he opened his chute to begin his landing pattern.

Upon chute deployment, MJ held his position in the northwest corner of the drop zone (DZ) until he reached an adequate altitude to begin his downwind leg (south to north). At the end of the downwind leg, MJ turned east to his base leg. At an appropriate position relative to the preferred landing point (X), MJ properly executed a right turn (due south) to enter his final leg for landing. At this time, winds were directly out of the west which put MJ in a crosswind position on final.

While approaching the X, MJ was moving south and his position was just west but too high to hit the X. The landing controller gave radio commands to "maintain position and correct to the west" but MJ did not respond. MJ continued due south to lose altitude in preparation for landing. At approximately 1151L, MJ experienced crabbing (wind from west pushing him east, but still going South) and windvaning (wind from west turning him slightly to east toward obstacles) from his crosswind position, putting him on a path toward the cluster of airfield antennas and the windsock. A few seconds later, MJ experienced an updraft causing the chute to go up and then immediately down and to the left, increasing the speed toward the obstacles. At this point, the MJ found himself in a downwind, left leaning attitude on a direct path toward the obstacles. Directly in front of the windsock, in an attempt to avoid the obstacles, MJ executed an aggressive toggle input leading to a 90 degree turn. At 1152L, in an aggressive 45 degree downwind bank, MJ impacted the windsock approximately four feet above the ground, amputating his right leg before the rest of his body hit the ground.

At 1153L, local emergency response was on scene administering trauma care. At 1154L, Fire Department was called and arrived at 1157L. At 1158L, Flight for Life was called and arrived at 1208L. At 1225L, MJ arrived at Penrose Hospital. The incredible emergency response, across the board, saved his life.

After a thorough investigation, there is clear and convincing evidence that the cause of this mishap was the MJ's failure to provide proper steering inputs to the west on his final leg, as directed, which would have prevented the crabbing and windvaning effects, starting the chain of events that led to impacting the wind sock.

Under 10 U.S.C. § 2254(d) the opinion of the accident investigator as to the cause of, or the factors contributing to, the accident set forth in the accident investigation report, if any, may not be considered as evidence in any civil or criminal proceeding arising from the accident, nor may such information be considered an admission of liability of the United States or by any person referred to in those conclusions or statements.