EXECUTIVE SUMMARY
ACCIDENT INVESTIGATION
F-16B, S/N 81-0821, 25 September 2003
162d Fighter Wing, Arizona Air National Guard, Tucson IAP, Arizona

On 25 September 2003 at 1341 local time (2041 Zulu), while in controlled flight, an F-16B, S/N 81-0821, impacted power line guide wires near Libby Army Air Field, Fort Huachuca, Arizona. The mishap aircraft (MA), assigned to the 148th Fighter Squadron, 162d Fighter Wing, Arizona Air National Guard, Tucson International Airport (IAP), was part of a single ship, syllabus directed, transition training mission. The mishap student pilot (MSP) and the mishap instructor pilot (MIP) were unharmed and the MA recovered safely to Tucson IAP. The MA damaged 10 electrical power poles and three sets of power line guide wires belonging to two private power companies. The windshield of one privately owned vehicle and the rear section of another privately owned vehicle were also damaged. The MA sustained damage to the engine air inlet, left strake, left wing spar, ram air diverter, nose landing gear, leading edge flap, wing underside, flaperon, left horizontal stabilator, and left speedbrake. No individuals were injured.

Shortly before flying into the guide wires, the MA was performing a straight-in simulated flame out (SFO) approach to runway 26. The MSP occupied the front cockpit and was flying the aircraft. The MIP provided instructional techniques from the rear cockpit. During the round-out phase (transition to a normal landing approach angle) of the SFO approach, the aircraft descended to approximately 4,605 feet Mean Sea Level and was 2,250 feet from the threshold of the runway. At this point, the aircraft flew through three guide wires suspended approximately 48 feet above the ground. The MIP took control of the aircraft, climbed to a safe altitude, accomplished a damage assessment and controllability check, and landed uneventfully at Tucson IAP.

The AIB President found clear and convincing evidence the cause of this mishap was the MIP's failure to maintain situational awareness (SA) throughout the SFO approach. At the beginning of the SFO, the MIP directed the MSP to place the flight path marker (FPM) on the runway threshold. However, the MSP placed it well short of the threshold. The MIP channelized his attention on the rear cockpit Heads Up Display repeater and failed to cross check the aircraft's flight path and the misplaced FPM in relation to the intended landing area. The misplaced FPM resulted in an approach significantly shorter than desired. During the round-out phase of the approach, the MIP failed to cross check outside references, allowing the approach to continue longer than was safe. The mishap SFO approach was the MSP's first in the F-16.

In addition, the AIB President found substantial evidence to conclude three factors substantially contributed to the mishap. One, the MIP briefed a straight-in SFO approach technique that was inappropriate for the situation. Two, flying publications lack specific guidance concerning straight-in SFO approaches and the terminal phases of SFO approaches, including round-out and transition to landing. Lastly, the MSP's SA was degraded due to his lack of proficiency, his motivation to comply with the MIP's instructions, and the repetitive communications from the MIP which diverted the focus of his attention.