EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION

C-17A, S/N 00-174

KANDAHAR, AFGHANISTAN

8 JANUARY 2002

On 8 January 2002, at 1935L, C-17A, S/N 00-174, impacted the ground approximately 2,000 feet short of runway 05, Kandahar, Afghanistan. There were no injuries to personnel, but the aircraft sustained significant damage. The C-17A was assigned to the 8th Airlift Squadron, 62nd Airlift Wing, McChord Air Force Base, Washington and was delivering cargo from Incirlik Air Base (AB) Turkey to Kandahar in support of Operation ENDURING FREEDOM.

The mishap aircraft departed Incirlik AB on a high priority channel mission. The mishap aircrew was qualified and current in C-17A operations, and had received intelligence and tactics briefings prior to departing Incirlik AB. There were no significant intelligence inputs received at this briefing, however the tactics officer failed to correctly identify Kandahar's active runway and anticipated landing zone. This failure led to cockpit confusion when the mishap aircraft arrived overhead the Kandahar airport. Additionally, the mishap pilot elected to perform a night assault landing in order to minimize aircraft ground/taxi speed near some recently repaired craters. Although current in C-17A operations, the mishap pilot had not performed a night assault landing at this gross weight in several months, and had minimal short field/tactical experience. Despite the initial confusion over the active runway touchdown zone, the mishap aircraft commander maneuvered the aircraft to a descent point of 1,000 feet above ground level (AGL), approximately 2.2 nautical miles (NM) from the runway threshold. The pilot began his descent approximately 34 knots faster than computed approach speed and pulled power to idle to establish a downward vector towards the runway and reduce airspeed. At approximately 1 NM from the runway threshold, the pilot's airspeed was approximately 5 knots too fast, but he had corrected to proper glide slope while his descent rate exceeded 1,500 feet per minute. The pilot ultimately reduced the mishap aircraft's airspeed to 8 knots below computed approach speed while still maintaining a high sink rate in excess of 1,300 feet per minute. Despite automated tools in the C-17A, the pilot allowed the flight path vector to fall below the visual intersection of the computed Approach Path Indicator (API) and the desired landing point by raising the nose approximately 2 degrees at 100 feet AGL with excessively low power settings. Lateral alignment throughout final approach (at least 5 NM) was never greater than 10 degrees off of runway heading, although the pilot made several roll inputs, including a significant input to the left (roll of 7 degrees) followed by right stick deflection (4 degrees) at approximately 100 feet AGL. Prior to impacting the ground, the copilot directed a go-around and the impact occurred during this procedure, approximately 2,000 feet short of runway 05's threshold. The aircraft impacted the ground in excess of 1,300 feet per minute and the mission computer registered a "hard landing" message. Following the go-around, the crew entered a defined holding pattern to determine if any significant damage had occurred to the landing gear. The aircrew subsequently