

## **WARNING**

- The minimum altitude obtained from EJECTION SEAT PERFORMANCE charts, Section I, does not include any allowance for pilot decision making, changing flight conditions, or hand movement from the stick and/or throttle to the ejection handle. Therefore, minimum altitude for ejection decision could be significantly higher.
- When in a spin/deep stall or other uncontrolled flight, eject at least 6000 feet AGL whenever possible. This is the minimum altitude to initiate ejection with minimal risk of injury under the most adverse conditions. The decision to eject must have been made prior to this altitude. Delaying ejection below this altitude may result in serious injury or death.
- Under controlled flight conditions, eject at least 2000 feet AGL whenever possible. If below 2000 feet AGL, attempt to gain altitude if airspeed permits. Do not delay ejection below 2000 feet AGL for any reason which may commit you to unsafe ejection.
- Failure to monitor sink rate and height above terrain while performing an airstart or applying low thrust recovery procedures can result in an ejection outside the ejection seat performance envelope.

**EJECTION** Refer to figure 3-4.1. Ejection should be accomplished at the lowest practical airspeed.

## **WARNING**

- The ACES II ejection seat was designed for body weights in the 140 to 211 pound range. There are additional ejection injury risks associated with body weights outside this range.
- For body weights less than 140 pounds, limb flailing, less seat stability, and more severe drogue chute opening shock (ejection modes 2 and 3) are concerns. The risk of injury associated with limb flailing and drogue chute opening shock increases for ejection above 420 knots. This injury risk also increases as body weight decreases below 140 pounds.
- For body weights greater than 211 pounds, limb flailing, seat structural failure, and parachute landings are concerns. The risk of injury from limb flailing is high for ejection above 400 knots. The seat leg braces frequently deform during ejections above 500 knots; this deformation has led to seat side panel failures (and unsuccessful ejections) during 600 knot ejection tests. The risk of injury during parachute landing is three times the average. These injury risks also increase as body weight increases above 211 pounds.

- Wind blast exerts medium force on the body up to 400 knots, severe forces causing flailing and skin injuries between 400-600 knots, and excessive force above 600 knots.
- During high altitude ejections (mode 3), automatic pilot/seat separation and recovery parachute deployment occur between 16,000-14,500 feet MSL. If high terrain is a factor, manual seat separation procedures must be used to bypass the automatic sequence.

To eject, grasp ejection handle using a two-handed grip with thumb and at least two fingers of each hand. Pull up on handle and continue holding until pilot/seat separation. The ejection handle does not separate from the seat.

Refer to figure 3-5 for manual seat separation and manual survival equipment deployment.

## **WARNING**

Failure to remove night vision goggles (NVG) prior to ejection may cause serious injury. If unable to remove NVG, a proper ejection body position (head back against the seat headrest) reduces the chance of injury from the NVG.

# F-16 ACES II Ejection Injury Risk Chart

Figure 3-4.1 1F-16X-1-4023X ©

