



# The Sadler Piranha: A-22 Light Air Support Aircraft (LASA)

<p><b>SADLER PIRANHA</b></p>  <p>FIGURE 1-1: Piranha without armament</p>	<p><b>PHYSICAL CHARACTERISTICS:</b></p> <p><b>Wingspan:</b> 22 ft (6.7M)  <b>Wing Chord:</b> (folded) 4 ft 2 in (1.27M)  <b>Length:</b> 18 ft (5.19M)  <b>Height:</b> 3 ft 9 in (1.14M)  <b>Empty Weight:</b> 1450 lb (658 Kg)  <b>Maximum Gross Weight:</b> 2800 lb (1270 Kg)  <b>Landing Gear:</b> wheels  <b>Takeoff ground roll:</b> 350 ft. with pilot and fuel, 500 ft with optimum 500 lb ordnance load 800 ft with 1000 lb ordnance load.  <b>Climb rates:</b>  4000 feet/minute with pilot and fuel, 2500 ft/min at 500 lb ordnance load and 1500 ft/min at 1000 lb ordnance load.  <b>Max Speed:</b> 457 Km/hr</p>
<p><b>Design and weapons</b></p>  <p>FIGURE 1-2: PIRANHA WING-FOLD SYSTEM</p>	<p><b>PAYLOAD OPTIONS:</b></p> <p>Rh202 20mm cannon + 200 rounds: 150kg  If the cannon is not carried, the Piranha has up to 4 hardpoints for weapons pods:  (nb: optimum weight 227 kg. Max 454kg)</p> <p>70mm Rocket pod (7 rockets): 195kg</p> <p>M60 MG pod + 500 rounds (35kg)</p> <p>SU-11B/A Minigun pod + 1500 rds: 150kg</p> <p>Low-Light Video Surveillance: 60kg</p> <p>Chaff/Flares Pod: 20 kg</p>
<p>The PIRANHA can carry most standard rack-mounted ordnance, as long as the ordnance weight is within the limits specified. Examples of ordnance that can be carried are: LAU-32 Rocket Pods, SUU-11 7.62mm Minigun Pod, MK81 General Purpose Low Drag Bombs, XM13 Grenade Launcher, LANTIRN targeting pod, MK122 Fireye Fire Bombs, M129E1/E2 Psychological Operations Leaflet Bombs etc.</p> <p>Design Details (continued)</p> <p>The A-22 can be transported by truck to any expedient airbase and can be ready for flight 10 minutes after arrival.</p> <p>The PIRANHA has the capability of providing excellent protection against return small arms fire. Protection against small arms fire is provided by a Kevlar/glass composite cockpit and windshield</p> <p>The original design of the A-22 was powered by a simple Chevy V-6 engine, which burned regular gasoline and used spare parts and lubricants available from any gas station. It's "loiter time" is 7 hours</p> <p>The recovery system consists of a ballistic parachute, which lowers the entire plane to the ground in the event of an emergency.</p> <p>Maximum level speeds are approximately 285 mph (457 Km/hr) with pilot and fuel, 230 mph (370 Km/hr) with two external hard points loaded and 200 mph (322 Km/hr) with four external hard points loaded. Maximum dive speed is approximately 325 mph (523 Km/hr).</p>	

