Picture 1: AV-8B Current Location on Flight Line

Picture 2: AV-8B Front View

Picture 3: AV-8B Installation

Picture 4: AV-8B Lift (Overhead Power Lines)

Picture 5: AV-8B Weaon Station 1

Picture 6: AV-8B Weapon Station 2

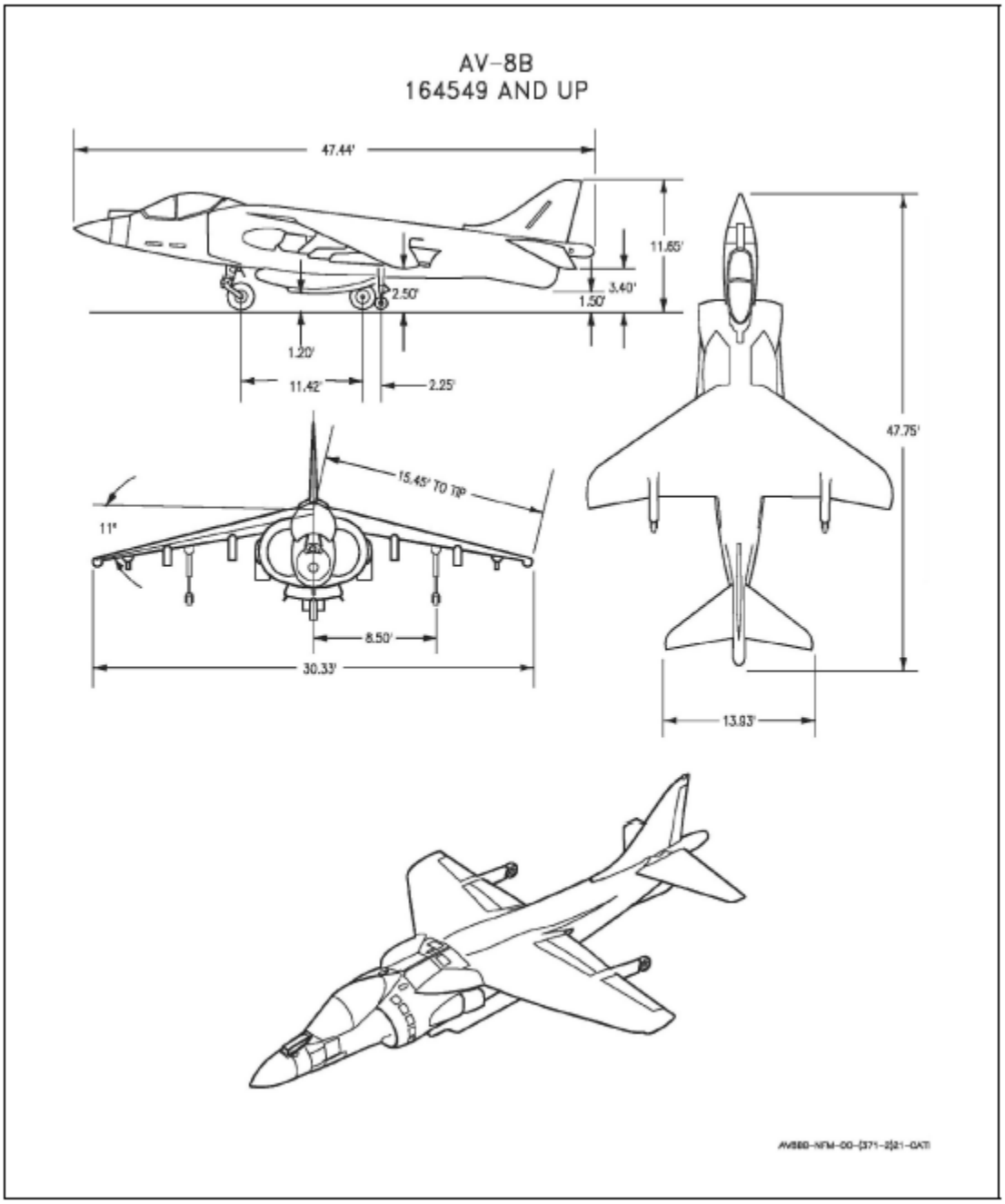
Picture 7: AV-8B Weapon Station 3

Picture 8: AV-8B Weapon Station 4

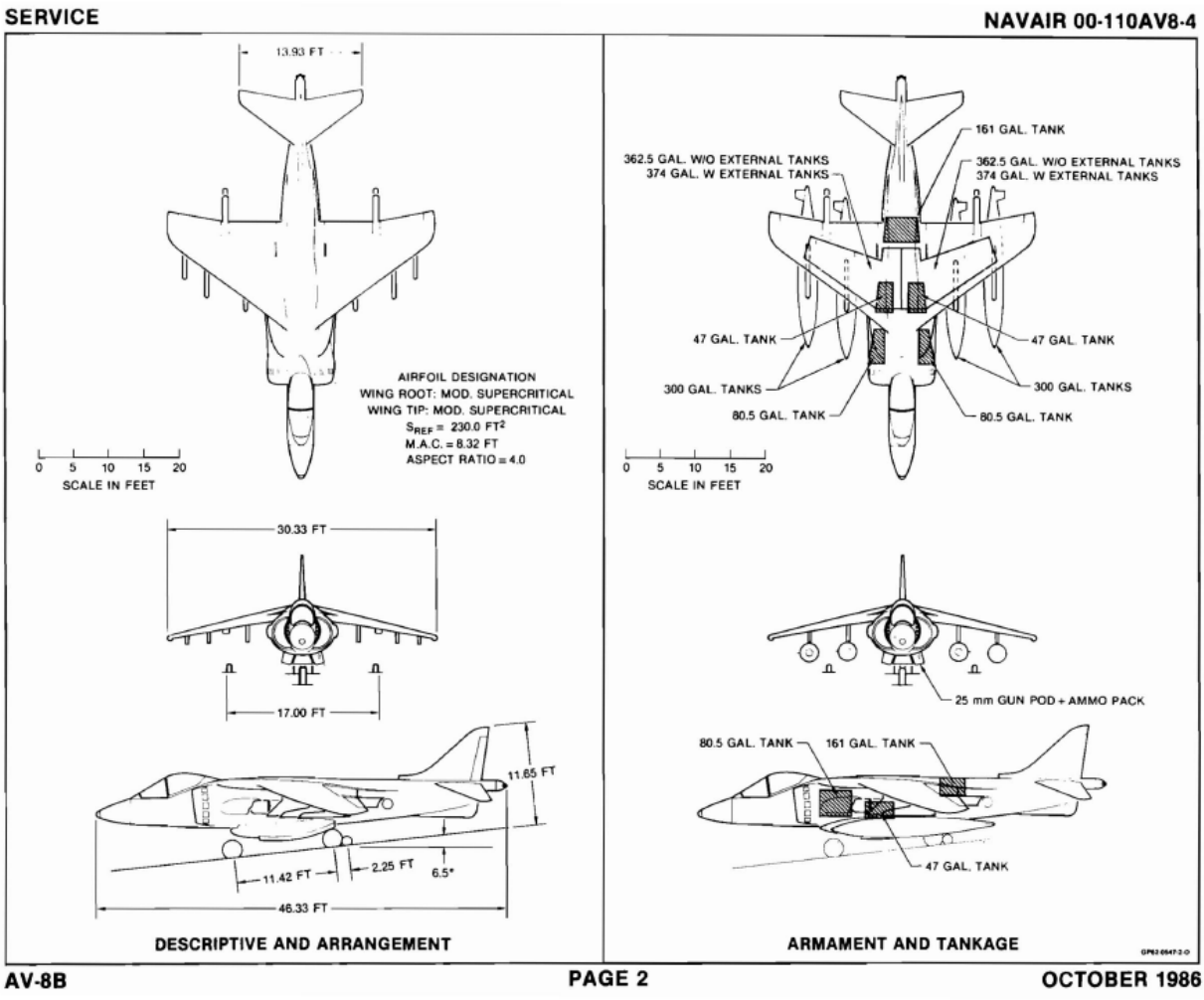
Picture 9: AV-8B Weapon Station 5

Picture 10: AV-8B Weapon Station 6

Picture 11: AV-8B Radar Dimensions



Picture 12: AV-8B Principal Dimensions



AV-8B Hoisting Weights, Radar-Reman Weight Report BOEING 2001H0007 11-09-01 (7 pgs)

	AV-8B Weight Evaluation for FRC East												
	(NAVAIR AIR 4.1.7 Mass Properties Division, K. Barr, 07-07-15)												
	Item										**Subcomponent Weights**		**Major**
													Assembly
													Weight
										(lbs.)	**(lbs.)**	**(lbs.)**	**(lbs.)**
	Engine Installation												**3,739.7**
		Engine									3,706.1		
		Engine Oil									24.0		
		Engine Inlet Temperature Probes									2.4		
		Ignition Unit									7.2		
	Hoisted Wing Assembly												**3,002.0**
		Wing Assembly										1,536.4	
			Wing Basic Structure								1,092.8		
			Secondary Structure (Doors, Fairings, Seals, Finish)								76.4		
			LERX								40.8		
			Ailerons								71.8		
			Trailing Edge Flaps								174.2		
			Trailing Edge Flap Supports (Hinges, etc.)								36.7		
			Slot Door & Supports								43.7		
		Alighting Gear										284.3	
			Outrigger Landing Gear Wheels, Tires, Brakes								20.9		
			Outrigger Landing Gear Strut, Axle, Fittings & Supports								168.1		
			Outrigger Landing Gear Fairings								71.9		
			Outrigger Landing Gear Mechanism, Controls & Supports								23.4		
		Water Injection System (Center Wing Box)										118.2	
			Tanks								56.5		
			Pumps, Plumbing & Controls								61.6		
		Fuel System										86.9	
			Fuel Dump System								15.7		
			External Fuel System								2.3		

			Fuel Filling System (Estimated)								12.5		
			Fuel Pressurization System (Estimated)								22.9		
			Fuel Transfer System (Estimated)								33.5		
		Flight Controls										261.3	
			Hover Reaction Controls								104.3		
				Reaction Control - Ducting						51.6			
				Reaction Control - Actuators, Nozzles & Mechanism						20.8			
				Reaction Control - Heat Shields						27.6			
				Reaction Control - Supports & Insulation						4.3			
			Aileron Controls								78.7		
				Hydraulic Plumbing and Fluid						18.0			
				Actuators						39.5			
				Mechanisms and Supports						21.2			
			Wing Trailing Edge Flap Controls								69.8		
				Hydraulic Plumbing and Fluid						6.6			
				Actuators						32.4			
				Selector						16.3			
				Mechanisms and Supports						14.5			
			Flight Controls Wiring, Plugs, etc. (Estimate)								8.6		
		Electrical Systems										9.6	
			Power Distr. Wiring, Connectors & Supports (Estimated)								3.2		
			Lights - Exterior (Estimated)								5.0		
			Equipment Supports								1.3		
		Armament										117.4	
			Wiring and Installation (Estimate)								76.3		
			Pylon Exp Weapons Provisions (Inbd, Intermediate, Outbd.)								41.1		
		Wing Pylons (not including bomb racks or adapters)										588.0	
			Inboard (2)								234.0		
			Intermediate (2)								210.0		
			Outboard (2)								144.0		
	Hoisted Fuselage & Tail Assembly												**8,805.2**
		Tail Assembly										398.3	
			Horizontal Tail Basic Structure								208.1		
			H-Tail Secondary Structure (Doors, Fairings, Seals, Finish)								11.4		

			Vertical Tail Basic Structure								116.2		
			V-Tail Secondary Structure (Doors, Fairings, Seals, Finish)								5.0		
			Rudder & Supports								31.7		
			Ventral Fin Basic Structure								25.9		
		Fuselage Assembly										2,310.3	
			Fuselage Basic Structure								1,401.7		
			Canopy (Including Mechanism)								107.1		
			Windshield								77.6		
			Radome (Including Mechanism)								42.9		
			Afterbody (Tail)								45.4		
			LERX & Flooring Supports								14.5		
			Stores & Armament Supports								64.9		
			Nozzle & Engine Mount Structure								34.0		
			Speed Brakes & Supports								37.1		
			LIDS								17.1		
			Main Landing Gear Doors (Incl. Mechanism & Controls)								39.9		
			Nose Landing Gear Doors (Incl. Actuator, Mech. & Controls)								36.6		
			Access Doors and Panels								181.3		
			Ladder (Including Mechanism)								3.3		
			Fairings								154.2		
			Finish (Primer, Paint & Sealant)								52.9		
		Alighting Gear										732.0	
			Main Landing Gear Wheels, Tires, Brakes, Anti-Skid								161.9		
			Main Landing Gear Strut, Axle, Fittings & Supports								163.3		
			Main Landing Gear Mechanism, Controls & Supports								68.1		
			Nose Landing Gear Wheels, Tires, Brakes								48.9		
			Nose Landing Gear Strut, Fittings & Supports								255.1		
			Nose Landing Gear Mechanism, Controls & Supports								34.9		
		Engine Section										147.3	
			Engine Support Structure								18.3		
			Shrouds - Fire Protection								129.1		
		Air Induction System										242.6	
			Inlet Lips								14.8		
			Inlet Structure								154.9		
			Auxiliary Air Intake Doors and Seals								17.3		
			Engine Bay Ventilation								27.2		
			Boundary Duct and Doors								28.4		

		Propulsion System (Without Engine)										884.0	
			Front Nozzles								222.7		
			Rear Nozzles								134.5		
			Intermediate Ducts								22.0		
			Nozzle Drive Mechanism								150.2		
			Engine Controls								48.6		
			Nozzle Drive System Controls								148.6		
			Engine Starting System								128.2		
			Oil Breathing System								4.3		
			Electrical Installation								24.9		
		Fuel System - Fuselage										430.9	
			Integral Fuel Tanks (Including Sealant)								256.8		
			Engine Drains								2.2		
			Fuel Pumps								23.6		
			Fuel Control System								5.2		
			Defuel System								3.2		
			Vent System								16.2		
			Fuel Proportioner								24.5		
			Fuel Filling System (Estimated)								12.5		
			Fuel Filling System - Inflight								7.9		
			Fuel Distribution System								22.7		
			Fuel Pressurization System (Estimated)								22.9		
			Fuel Transfer System (Estimated)								33.5		
		Flight Controls										448.3	
			Cockpit Controls								25.0		
			Autopilot								39.1		
			Hover Reaction Controls								171.3		
				Reaction Control - Ducting						70.0			
				Reaction Control - Actuators, Nozzles & Mechanism						55.7			
				Reaction Control - Heat Shields						6.5			
				Reaction Control - Supports & Insulation						39.2			
			Aileron Controls								27.1		
				Aileron Controls						20.5			
				Mechanisms and Supports						6.6			
			Wing Trailing Edge Flap Controls								20.1		
				Wing Trailing Edge Flap Controls						20.1			
				Mechanisms and Supports						0.1			

			Horizontal Tail Controls							73.3		
				Controls					18.2			
				Hydraulic Plumbing and Actuators					41.6			
				Mechanisms and Supports					13.5			
			Vertical Tail (Rudder) Controls							41.7		
				Controls					21.3			
				Hydraulic Plumbing and Actuators					12.4			
				Mechanisms and Supports					7.9			
			Speed Brake Controls							16.4		
				Hydraulic Plumbing and Actuators					15.5			
				Mechanisms and Supports					0.9			
			"Q" Feel Controls							14.3		
				Controls					2.9			
				Hydraulic Plumbing and Actuators					7.8			
				Mechanisms and Supports					3.5			
			LIDS Controls							11.4		
				Hydraulic Plumbing and Actuators					6.9			
				Mechanisms and Supports					4.6			
			Flight Controls Wiring, Plugs, etc. (Estimate)							8.6		
		Instruments									98.7	
		Electrical Systems									492.8	
			Generator							64.6		
			Emergency Generator							28.9		
			Generator Cooling							15.7		
			Battery & Container, Back-up Batteries							65.2		
			Inverters, Converters, Rectifiers							27.4		
			Power Distr. Meters, Switches, Relays, Contactors, etc.							68.9		
			Power Distr. Wiring, Connectors & Supports							118.7		
			Lights - Interior & Landing/Taxi							21.0		
			Lights - Exterior (Estimated)							33.7		
			Equipment Supports							48.7		
		Hydraulic Systems									151.2	
		Pneumatic Systems									25.7	
		Avionics									1,545.8	
			Integrated Communication/Navigation							165.4		
				Radio & Antenna Installation					46.3			

				IFF Installation				20.5				
				CNI Data Converter & Aux. CNI Panel				20.8				
				TACAN & Antennas Installation				12.9				
				All Weather Landing Set				6.1				
				Altimeter & Antenna Installation				7.5				
				Radar Beacon Antenna				0.2				
				Inertial Navigation Installation				51.0				
			Global Positioning System Installation						13.1			
			Airborne Weapons System Stores Management Set Install						32.7			
			Data Processing System						41.9			
			Air Data Systems (Computer, Azimuth Detect, AoA, Temp)						37.0			
			Electr. Warfare Sys. (ALR-45&-67, ALE-39, Blanker, ECM Panel)						98.2			
			Control & Display System						153.9			
			Boresight						2.8			
			Avionics Wiring & Plugs Installation						243.6			
			Avionics Shelves & Supports						129.9			
			TACTS AISI Shelf						1.4			
			Night Attack (Opt Recvr, Processor, MPCD, Digital Map, NVG)						139.5			
			Radar Set Installation (AN/APG-65)						466.4			
			Auto Target Handoff Systems Installation						20.1			
		Armament									59.9	
			25mm Gun Pneumatic Piping						8.4			
			Expendable Weapons, SMS Controls, Relays, Mounting						12.9			
			Centerline Store Hoist						0.5			
			Wiring and Installation (Estimate)						38.1			
		Furnishings & Equipment									315.3	
			Pilot Seat Installation						120.6			
			Parachute						32.6			
			Survival Kit						31.6			
			Anti-G Suit Provisions						3.6			
			Oxygen System						80.9			
			Cockpit Display - Consoles						28.4			
			Fire Detection System						8.1			
			Other Miscellaneous Furnishings & Equipment						9.7			
		Air Conditioning System									448.4	
			Cockpit						184.7			
			Radar Liquid Cooling System						48.0			
			Equipment Cooling						215.7			

		Load and Handling (Tie Down, Jack Fittings, Hoist Fittings)										14.2	
		Manufacturing Variation										2.5	
		Centerline Pylon (not including bomb racks or adapters)										57.0	
	AV-8B FY99 Radar Reman Aircraft Weight Empty												**14,901.9**
	AV-8B FY99 Radar Reman Aircraft Weight Empty with Pylons												**15,546.9**