

RAM-JET ENGINE CHARACTERISTICS

MODEL DESIGNATION (USAF & MFR) MANUFACTURER	AIRCRAFT INSTALLED IN	DESCRIPTION	ENGINE RATINGS				FUEL	LENGTH	DIAMETER	WEIGHT
			THRUST (LB)	S.F.C. (LB/HP-HR)	VELOCITY (MACH NO.)	ALTITUDE (FMT)	GRADE	(INCHES)	(INCHES)	(OZ/LB)
XRJ30-MA-1 (C-20-.85) Marquardt		A subsonic Ram-Jet unit designed to use thrust obtainable from the combustion of fuel. For possible use as an auxiliary power plant on present day fighters and as a power plant for expendable missiles.	1500	5.50	0.85	SL	AN-F-48	90.0	20.0	125
XRJ30-MA-3 (C-20-.85-D) Marquardt		Similar to -1 except for improved combustion efficiency and structural characteristics. Design for missile application.	1450	5.00	0.85	SL	"	87.3	"	137
XRJ30-MA-5 (C-20-.85-D2) Marquardt		Same as -3 except for a staggered flame holder and a short combustion chamber.	SAME AS ABOVE				"	75.3	"	135
XRJ30-MA-7 Marquardt		Similar to -3 except it contains a 45 percent solidity 2-ring V-gutter flame holder with annular fuel nozzle located in the diffuser section.	SAME AS ABOVE				"	87.3	"	137
XRJ30-MA-9 Marquardt		Similar to -3 except it contains a 45 percent solidity 2-ring V-gutter flame holder with spring loaded fuel nozzles located 20 inches ahead of the flame holder.	SAME AS ABOVE				"	"	"	"
XRJ30-MA-11 Marquardt		Similar to -3 except it contains a 80 percent solidity flame holder with fuel nozzles located in the forward face of the flame holder.	SAME AS ABOVE				"	"	"	"
XRJ31-MA-1 (C-30-1.0) Marquardt		A subsonic type Ram-jet. This engine is for possible use on present day fighter aircraft as an auxiliary power plant to improve performance. Also, as a main power plant for expendable missiles. Similar to XRJ30-MA-1 in design.	4900	4.29	1.00	SL	"	130.0	30.0	345
XRJ35-T-1 Continental		Ram-jet engine designed for best operation at high altitudes and at a high flight Mach Number. Project cancelled.	ALL DATA CONFIDENTIAL							
XRJ37-NM-1 (A-J-20) Menasco		Development objective was to provide an aircraft power plant which would operate effectively and economically at supersonic velocities. Project cancelled.	ALL DATA CONFIDENTIAL							
XRJ39-MA-1 (C-48) Marquardt		A subsonic 48-inch diameter jettisonable and expendable jet engine. Integral fuel tank, pumping and metering equipment located in a central "island" in the diffuser.	7200	5.42	0.85	SL	AN-F-48	128.0	48.0	590
XRJ41-W-1 Wright-Aero		This engine will have a fixed configuration single oblique shock diffuser. Incorporates a pilot burner system with three stage fuel injection.	ALL DATA CONFIDENTIAL							

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XRJ41-W-3 Wright-Aero		Same as -1 except for improved burner.	ALL DATA CONFIDENTIAL							
XRJ43-MA-1 Marquardt		A supersonic Ram-jet engine with fixed center body configuration to operate at a high Mach number at high altitude.	ALL DATA CONFIDENTIAL							
XRJ45-T-1 (R-20) Continental		Paper engine only, project cancelled. No data available.								
XRJ47-W-1 Wright-Aero		An engine of low weight and low specific fuel consumption capable of powering supersonic missiles or aircraft.	ALL DATA CONFIDENTIAL							
XRJ49-T-1 Continental		Paper engine only, project cancelled. No data available.								
XRJ51-W-1 Wright-Aero		Designed as power plant for MX-770 missile.	ALL DATA CONFIDENTIAL							