

AVIATION CIRCULAR LETTERS

A2-11/EN11

Aer-PP-42

NAVY DEPARTMENT
BUREAU OF AERONAUTICS
WASHINGTON 25, D.C.

CONFIDENTIAL

27 May 1948

AVIATION CIRCULAR LETTER NO. 61-48

From: Chief, Bureau of Aeronautics
To: All Ships, Stations, and Units Concerned with Naval Aircraft
Subject: Navy Aircraft Engines - Air Force-Navy Model Designations for.
Reference: (a) ACL No. 86-47 dtd 12 Sep 1947.

1. Newly established Air Force-Navy designations have been assigned to naval aircraft engines as follows:

(a) Reciprocating and Compound Engines -

<u>Air Force-Navy Designation</u>	<u>Manufacturer's Designation</u>	<u>Description</u>	<u>Use</u>
R-4360-24	Pratt & Whitney Wasp Major	Similar to R-4360-4 but with .375:1 propeller reduction gear ratio. (Restricted security classification)	JRM-2
R-3350-30	Wright Turbo-Cyclone C18C11	A 3250 H.P. compound engine comprising an R-3350 engine with three exhaust driven blowdown turbines coupled to the crankshaft through fluid couplings. (Restricted security classification)	P2V-4

(b) Turbo-Jet Engines -

J33-A-10	Allison J33-C5	Similar to J33-A-23 but without liquid injection system. (Restricted security classification)	AJ-1 P4M-1
J34-WE-30	Westinghouse 24C-4C	Similar to J34-WE-22 engine but with higher thrust ratings. (Restricted security classification)	F6U-1 F2H-1
XJ34-WE-32	Westinghouse X24C8	Improved version of J34-WE-30 engine incorporating a variable area jet nozzle and afterburner, and with higher thrust ratings. (Restricted security classification)	F3D-1 F7U-1
J35-A-2	Allison TG-180-A-1	The J35-A-5 engine as modified for the FJ-1 airplane. (Restricted security classification)	FJ-1
J35-A-4	Allison TG-180-C2	The J35-A-11 engine as modified for the FJ-1 airplane; very similar to the J35-A-2 engine. (Restricted security classification)	FJ-1

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<u>Air Force-Navy Designation</u>	<u>Manufacturer's Designation</u>	<u>Description</u>	<u>Use</u>
XJ40-WE-6	Westinghouse X40E2	A 7500 lb thrust engine with eleven stage axial flow compressor, single annulus combustion chamber, two stage reaction turbine, and variable area jet nozzle. (Confidential security classification)	--
J42-P-6	Pratt & Whitney Nene I	Similar to J42-P-4 but with improved Lucas Fuel Pumps. (Restricted security classification)	F9F-2
XJ44-R-2	Ranger 1J11A	A 1060 lb thrust engine with single stage mixed flow compressor, single annulus combustion chamber, and single stage turbine. (Restricted security classification)	Guided Missiles
XJ46-WE-2	Westinghouse X24C10	A 4200 lb thrust engine with twelve stage axial flow compressor, single annulus combustion chamber, two stage reaction turbine, variable area jet nozzle, and afterburner. (Restricted security classification)	--
J48-P-2	Pratt & Whitney JT7A	A 6250 lb thrust engine somewhat similar to the J42 series engines, with single stage double entry centrifugal flow compressor, nine can-type combustion chambers, single stage reaction turbine, and coolant injection system. (Restricted security classification)	--
(c) Turbo-Prop Engines -			
XT34-P-2	Pratt & Whitney PT-2	A 4570 H.P.* engine incorporating a single power unit with 11 stage axial flow compressor, 8 can-type burners, three stage turbine, and reduction gear box with single rotation propeller shaft. (Restricted security classification)	--
XT36-D-2	Chrysler A-86A	A 1400 H.P.* engine incorporating a single power unit with seventeen stage axial flow compressor, regenerator, ten can-type burners, two stage turbine, and reduction gear box with single rotation propeller shaft. (Restricted security classification)	--

* Equivalent Shaft Horsepower

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<u>Air Force-Navy Designation</u>	<u>Manufacturer's Designation</u>	<u>Description</u>	<u>Use</u>
XT38-A-2	Allison Model 501	A 2700 H.P.* engine incorporating a single power unit with seventeen stage axial flow compressor, eight can-type combustion chambers, four stage turbine, and reduction gear box with dual rotation propeller shafts. (Restricted security classification)	--
XT40-A-2	Allison Model 500	A 5500 H.P.* engine incorporating twin power units of the XT38 type coupled to a single gear box with dual rotation propeller shafts. (Restricted security classification)	XA2D-1
XT40-A-4	Allison Model 500	Similar to XT40-A-2 engine but with long extension shafts between each power section and the gear box. (Restricted security classification)	XP5Y-1
XT40-A-*	Allison Model 500	Similar to XT40-A-2 engine but with modified gear box accessory drives. (Restricted security classification)	XA2D-1

* Equivalent Shaft Horsepower

2. The turbo-jet engine designations listed herein supplement the designations promulgated through reference (a).



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