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NAVAER 00-25Q-13

MODEL DESIGNATION
OF
NAVAL AIRCRAFT

23 Oct 50

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APRIL 1950

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

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MODEL DESIGNATION OF NAVAL AIRCRAFT

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MODEL DESIGNATION OF NAVAL

AIRCRAFT

INTRODUCTION

1. Aviation Circular Letter No. 65-48 dated 22 July 1948, and CNO Restricted letter CP-57B/ejg, Serial No. 103P57 dated 15 April 1948 divide Naval aircraft into types designated as follows:

<u>TYPE</u>	<u>DESIGNATION</u>
(a) Heavier-than-air (fixed Wing)	V
(b) Heavier-than-air (Rotary Wing)	H
(c) Pilotless aircraft	K
(d) Guided Missiles	M
(e) Lighter-than-air	Z

2. The above types are further subdivided into classes in accordance with their basic mission as follows:

<u>Class</u>	<u>Mission</u>	<u>Designation</u>
(a) Heavier-than-air (fixed wing) V		
(1) Attack	Surface and ground attack	VA
(2) Fighter	Air defense and escort	VF
(3) Glider		VG
(4) Observation	Gunfire and artillery spotting	VO
(5) Patrol	ASW reconnaissance and attack	VP*
(6) Transport	Air logistic support	VR*
(7) Training	Basic and fleet training	VT
(8) Utility	Fleet utility support	VU
(b) Heavier-than-air (rotary wing) H		
(1) Air-sea rescue		HH
(2) Observation		HO
(3) Patrol (ASW reconnaissance and attack)		HP
(4) Transport		HR
(5) Training		HT
(6) Utility		HU
(c) Pilotless aircraft K		
(1) Target aircraft		KD
(d) Guided Missiles M		
(1) Air to air		AAM
(2) Air to surface		ASM
(3) Air to underwater		AUM
(4) Surface to air		SAM

*Note: For administrative purposes Class VP and VR aircraft are further classified into four-engine landplane, two-engine landplane, four-engine seaplane and two-engine seaplane and are further identified by adding the letters (HL), (ML), (ES) and (MS) respectively to the basic class designation.

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(d) Guided Missiles (Continued)

(5) Surface to surface	SSM
(6) Surface to underwater	SUM
(7) Underwater to air	UAN
(8) Underwater to surface	USM
(9) Test vehicle	TV

(e) Lighter-than-air

Z

(1) Search and rescue	ZH
(2) Patrol and escort	ZP
(3) Training	ZT
(4) Utility	ZU

3. Manufacturer's identification letters have been established to simplify the designation of naval aircraft and to identify the manufacturer of the aircraft. The identification letters assigned to manufacturers of naval aircraft are grouped according to types of aircraft produced. Airplane manufacturers not currently engaged in the active manufacture or development of airplanes for the U.S. Navy, are listed as "inactive".

IDENTI-
FICATION
LETTER

AIRCRAFT MANUFACTURERS

(a) Heavier-than-air (fixed wing) Type "Y"

C	Curtiss-Wright Corporation, Columbus, Ohio
D	Douglas Aircraft Co., Inc., Santa Monica Plant, Santa Monica, Calif.
	Douglas Aircraft Co. Inc. El Segundo Plant, El Segundo, Calif.
F	Grumman Aircraft Engineering Corp., Bethpage, L.I., N.Y.
H	McDonnell Aircraft Corporation, St. Louis, Missouri (formerly "D")
J	North American Aviation Inc., Los Angeles, Calif.
M	Glenn L. Martin Company, Baltimore, Maryland
O	Lockheed Aircraft Corp., (Factory "B") Burbank, Calif.
Q	Fairchild Engine & Airplane Corp., (Fairchild Aircraft Div.) Hagerstown, Md.
U	Chance Vought Aircraft, Division of United Aircraft Corp., Dallas, Texas
V	Lockheed Aircraft Corp. (Factory "A") (formerly Vega), Burbank, Calif.
Y	Consolidated-Vultee Aircraft Corp., (San Diego Div.) San Diego, Calif.

INACTIVE

B	Beech Aircraft Company, Wichita, Kansas
B	Boeing Aircraft Company, Seattle, Washington
B	Boeing Aircraft of Canada Ltd., Vancouver, B.C.
C	Culver Aircraft Corp. Wichita, Kansas
F	Fairchild Aircraft Ltd., Longueuil, Quebec
G	Goodyear Aircraft Corp., Akron, Ohio
L	Columbia Aircraft Corp., Valley Stream, L.I., N.Y.
M	General Motors Corp., (Eastern Aircraft, Trenton Div.) Trenton, N.J.
M	General Motors Corp., (Eastern Aircraft, Linden Div.) Linden, N.J.
N	Naval Aircraft Factory, NAMC, Philadelphia, Pa.
R	Interstate Aircraft & Engineering Corp., El Segundo, Calif.
S	Boeing Airplane Co., Wichita Div. (formerly Stearman) Wichita, Kansas
S	Schweizer Aircraft Corp., Elmira, N.Y.
W	Canadian Car & Foundry Company, Montreal, Quebec
Y	Consolidated-Vultee Aircraft Corp., (Stinson Div.) Wayne, Michigan

(b) Heavier-than-air (rotary wing) type "H"

H	McDonnell Aircraft Corp., St. Louis, Mo. (Formerly "D")
K	Kaman Aircraft Corp. Windsor Locks, Conn.
L	Bell Aircraft Corp., Buffalo, N.Y.
P	Piasecki Helicopter Corp., Morton, Pa.
S	Sikorsky Aircraft, Div. of United Aircraft Corp., Bridgeport, Conn.
U	United Helicopters, Inc., Palo Alto, California

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(c) Pilotless aircraft, Type "K"

C Curtiss-Wright Corp., Columbus, Ohio
F Grumman Aircraft Engineering Corp., Bethpage, L.I., N.Y.
G Globe Corp., (Aircraft Division) Joliet, Ill.
H McDonnell Aircraft Corp., St. Louis, Mo. (Formerly "D")
M Glenn L. Martin Co., Baltimore, Maryland
N Naval Air Development Center, Johnsville, Pa.
Q Fairchild Engine & Airplane Corp., (Guided Missiles Div.) Farmingdale, L.I., N.Y.
R Radioplane Company, Van Nuys, Calif. (Formerly "D")
S Sperry Gyroscope Co., Inc., Great Neck, L.I., N.Y.
U Chance Vought Aircraft, Division of United Aircraft Corp., Dallas, Texas
W Willys-Overland Co., Toledo, Ohio

(d) Guided Missiles Type "M"
and
Test Vehicles Type "TV"

Manufacturer's letter is not used in designation of guided missiles or test vehicles.

(e) Lighter-than-air Type "Z"

Goodyear Aircraft Corp., Akron, Ohio (Manufacturer's letter is not used in designation of airships).

4. The manufacturer's letter in model designations shall be assigned only to companies designing aircraft. Aircraft manufactured by companies other than the designer shall carry the designation of the original designer.

ENGINE MANUFACTURERS

Aerojet Engineering Corp., Azusa, California
Aircooled Motors Inc., Syracuse, N.Y.
Allison Division, General Motors, Corp., Indianapolis, Ind.
Continental Motors Corp., Muskegon, Michigan
Ford Motor Company, Dearborn, Michigan
General Electric Co., Aircraft Gas Turbine Div., West Lynn, Mass.
Jacobs Aircraft Engine Co., Pottstown, Pa.
Kiekhaefer Mfg. Co., Milwaukee, Wis.
Lycoming Division, The AVCO Mfg. Corp., Williamsport, Pa.
Marquardt Aircraft Co., Venice, California
McDonnell Aircraft Corp., St. Louis, Mo.
McCulloch Motors Corp., 6101 W. Century Blvd., Los Angeles, Calif.
Naval Engineering Experimental Station, Annapolis, Md.
Pratt & Whitney Aircraft, Div. of United Aircraft Corp., East Hartford, Conn.
Ranger Aircraft Engines, Div. of Fairchild Engine & Airplane Corp., Farmingdale, L.I., N.Y.
Reaction Motors Inc., Dover, N.J.
Rolls Royce Ltd., Derby, Derbyshire, England (Taylor Turbine Co., New York, N.Y.)
Warner Aircraft Corp., Detroit, Michigan
Westinghouse Electric Corp., Aviation Gas Turbine Div., Philadelphia, Pa.
Wright Aeronautical Corp., Div. of Curtiss-Wright Corp., Wood-Ridge, N.J.

PROPELLER MANUFACTURERS

Aeroproducts Division, General Motors Corp., Dayton, Ohio
Curtiss-Wright Corp., Propeller Div., Caldwell, N.J.
Hamilton Standard Propellers, Div. of United Aircraft Corp., East Hartford, Conn.
Koppers Co., Bartlett Hayward Div., Baltimore, Md.
McCauley Corp., Dayton, Ohio
Sensenich Brothers, Lancaster, Pa.
U. S. Propellers Inc., Pasadena, Calif.

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FLOAT MANUFACTURER

Edo Aircraft Corporation, College Point, L.I., N.Y.

5. Prefix letter - A prefix letter shall be used to denote the development status of a given aircraft. The letter "X" is used to denote that the aircraft is experimental. This letter is dropped from the designation when the aircraft is placed in a production status.

6. Suffix letter - A suffix letter shall be used only when an aircraft is modified for an additional or special mission. Suffix letters shall be assigned only from the list below and for the purpose listed. This letter indicates that the modifications are of a permanent nature and limit or augment the primary mission accordingly. Exceptions to this rule will be found among the models designated prior to CNO Aviation Circular Letter #13-46. In each such case the exception is identified in this publication by an asterisk(*), however the asterisk(*) shall not be used in correspondence, reports, etc.

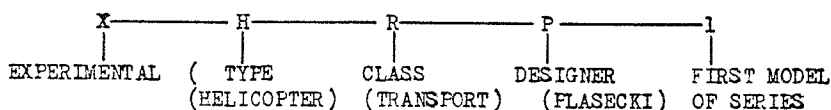
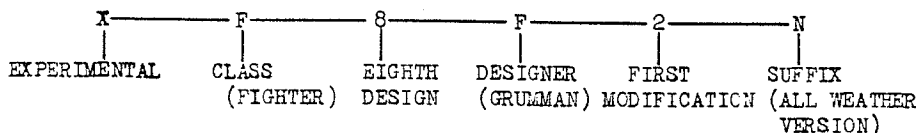
<u>SUFFIX</u>	<u>PURPOSE</u>
A	Amphibious version
B	Special Armament version
C	Carrier operation version (of non-carrier aircraft)
D	Drone control version
E	Special electronic version
G	Search and rescue version
H	Hospital version
J	Target towing version
K	Target drone version
L	Searchlight version
N	All weather operating version
P	Photographic version
Q	Countermeasures version
R	Support/transport version
S	Anti-submarine version
T	Training version
U	Utility version
W	Air warning version
Z	Administrative version

7. Model Designations for piloted and target aircraft, and guided missiles shall be made up as follows:

- (a) Prefix letter
(1) "X" is used to denote experimental model when applicable.
- (b) Type letter
(1) "V" is omitted for fixed wing heavier-than-air craft
(2) "H", "K", and "Z" are used as applicable.
- (c) Class letter
Only one class (mission) letter shall be used for each model designation.
- (d) Design number
The numeral following the class letter indicates the order number of the designer's aircraft in the same class, except that for the first design, the numeral "1" shall be omitted.
- (e) Designer's letter
The letter assigned to the designer is taken from the authorized list contained herein.
- (f) Modification number
The numeral following the dash after the designer's letter indicates the modification of the model. The numeral "1" indicates the first model of the series and succeeding numerals indicate the first modification, second modification, etc.

- (g) Suffix letter
A suffix letter selected from the authorized list herein indicates added or special mission
- (h) Suffix number
A suffix number may be added after the suffix letter when an aircraft configuration is modernized with different equipment without changing its special mission. The numeral "1" indicates the first configuration and succeeding numerals indicate second, third configuration, etc.

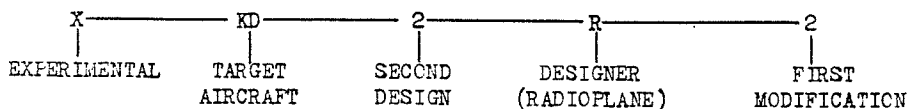
8. The following are typical examples of designations of piloted aircraft in accordance with the above:



9. Target Aircraft (non-man-carrying) are aircraft in which no provision has been made for a human pilot.

10. Target Aircraft Drones (man-carrying) are conventional aircraft specially equipped for operation by remote control and intended for use as targets.

11. The following is an example of a designation of a target aircraft.



12. Model Designations for guided missiles shall be made up as follows (Practice for piloted and target aircraft is given above).

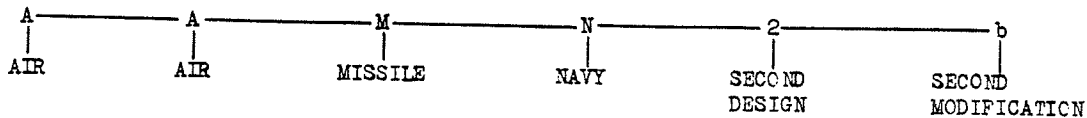
- (a) Prefix letter
(1) "X" is used to denote experimental models.
(2) "Y" is used to denote service test models.
(3) "Z" is used to denote obsolete models.
- (b) Class letters
Two-letter combinations of three letters - A(air), S(surface) and U(underwater) in which the first letter denotes the origin and the second letter denotes the objective of the missile.
- (c) Type letter
"M" after the class letters indicates "Missile".
- (d) Service letter
Each basic designation shall be followed by a letter to indicate cognizant Service - "A" Air Force, "G" Army, "N" Navy.
Note: After approval for joint use, the service letter shall be dropped and the designation preceded by "ANG".
- (e) Design Number
The service letter shall be followed by a number to indicate the design number.
- (f) Modification letter
The model number shall be followed by a modification letter. "a" indicates first modification, "b" indicates second modification, etc.

(g) Designer's letter
Not used in designation of guided missiles.

(h) Prefix letters
"M" prefixed to a conventional aircraft designation indicates "missile aircraft".
"D" prefixed to a conventional aircraft designation indicates "Director Aircraft".
*Note: When conventional aircraft are changed to guided missiles or missile "director control", the letter shall be prefixed instead of suffixed.

(i) Popular name
A popular name may be assigned to a guided missile when the missile enters the development phase prior to the assignment of a designation.

13. The following is a typical sample of designation of a guided missile in accordance with the above.



14. When a guided missile is used as a Test Vehicle, it shall be designated "TV", followed by service letter, design number, and modification letter used with guided missiles with the following prefix letters indicating the type of testing:

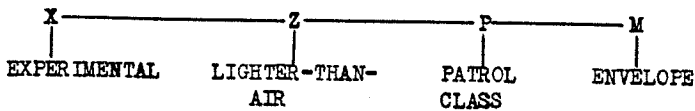
- (a) Prefix letters
- (1) "C" - control
 - (2) "L" - launching
 - (3) "P" - Propulsion
 - (4) "R" - Research (includes high altitude rockets)



15. Model designations for lighter-than-air craft are made up as follows:

- (a) Prefix letter
"X" is used to denote experimental model
- (b) Type letter
"Z" is used to denote lighter-than-air
- (c) Class (Mission) letter
Only one mission letter shall be used in each designation.
- (d) Design letter
A letter following the class letter indicates the order number of the designer's airship in the same class

16. The following is an example of a designation of a lighter-than-air craft in accordance with the above.



17. The following abbreviations are used in the list of characteristics of Naval aircraft.

M	Monoplane	Date	Delivery of first airplane
TB	-Tractor biplane	Land	Landplane
TM	-Tractor monoplane	Carrier	Equipped with arresting gear
Conv't	-Convertible	Catapult	Equipped for catapulting

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18. Engine designations are specified in accordance with Bureau of Aeronautics publication "Type Designations and Characteristics of Service Naval Aircraft Engines dated 13 March 1948 (NAVAER 00-45RC-500)".

19. The following descriptive list contains all experimental and production Naval Aircraft under contract, construction or in service as 1 April, 1950, except that aircraft classified as "Confidential" or "Obsolete" are not shown herein. Names are added in the column headed "Model" by which certain aircraft are popularly known. For manufacturers having more than one plant the name of the specific plant where the aircraft was produced is shown under the heading "Manufacturers".

20. Heavier-than-Air (Fixed Wing) (V) and Heavier-than-Air (Rotary Wing) (H) aircraft, within mission categories, have been alphabetically arranged by identification letter of manufacturer, which is the letter immediately preceding the dash in the designation.

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HEAVIER-THAN-AIR (FIXED WING) (V) AIRPLANES

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VA CLASS

ATTACK

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
SB2C-4E "Helldiver"	Curtiss 1944	2 Crew TM Land	Wright R-2600-20	Same as SB2C-4 except equipped with AN/APB-4 radar.
SB2C-5 "Helldiver"	Curtiss 1944	2 Crew TM Land	Wright R-2600-20	Similar to SB2C-4 except improved cockpit, increased fuel capacity, strengthened fuselage. Curtiss prop.
SB2C-5D "Helldiver"	Curtiss 1944	2 Crew TM Land	Wright R-2600-20	Same as SB2C-5 except for use as a control plane for P/A.
XBT2D-1	Douglas El Segundo 1945	1 Crew TM Land	Wright R-3350-24	Prototype of AD-1. Single engine, single seat low wing. Fuselage dive brakes. Carrier-catapult.
XAD-1W	Douglas 1947	3 Crew TM Land	Wright R-3350-24	XBT2D-1 with airborne early warning equipment. AD-3W prototype.
AD-1 "Skyraider"	Douglas El Segundo 1946	1 Crew TM Land	Wright R3350-24WA	Production version of XBT2D-1. (Formerly BT2D-1.) AN/APB-4 radar Aero Products Prop.
AD-1Q "Skyraider"	Douglas El Segundo 1947	2 Crew TM Land	Wright R-3350-24WA	Production version of XBT2D-1Q. After fuselage modified for RCM operator and equipment. Aero Prod. Propeller.
AD-2 "Skyraider"	Douglas El Segundo 1947	1 Crew TM Land	Wright R3350-26WA	Similar to AD-1. Improved cockpit lighting and landing gear doors. Aero Prod. Propeller.
AD-2Q "Skyraider"	Douglas El Segundo 1948	2 Crew TM Land	Wright R-3350-26WA	AD-2 with radar countermeasure.
AD-3 "Skyraider"	Douglas El Segundo 1948	1 Crew TM Land	Wright R-3350-26WA	AD-2 with redesigned windshield, increased strength for carrier landings, Aero Prod. Propeller.
AD-3E "Skyraider"	Douglas 1949	3 Crew TM Land	Wright R-3350-26W	AD-3W modified for anti-submarine search. Aero Prod. Propeller.
AD-3N "Skyraider"	Douglas El Segundo 1949	3 Crew TM Land	Wright R-3350-26WA	AD-3 equipped for all-weather operation.
AD-3Q	Douglas El Segundo 1949	2 Crew TM Land	Wright R-3350-26WA	AD-3 with radar countermeasures. After fuselage modified for RCM operator and equipment.

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MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
AD-3S "Skyraider"	Douglas 1949	3 Crew TM Land	Wright R-3350-26W	AD-3N modified for submarine attack. Aero Prod. Propeller.
AD-3W "Skyraider"	Douglas El Segundo 1948	3 Crew TM Land	Wright R-3350-26WA	AD-3 with airborne early warning equip- ment. Delete Armament and Dive Brakes.
AD-4 "Skyraider"	Douglas El Segundo 1949	1 Crew TM Land	Wright R-3350-26WA	Similar to AD-3 with miscellaneous improvements, windshield, cockpit encl., radar, etc. Aero Prod, Prop.
AD-4N "Skyraider"	Douglas El Segundo 1949	3 Crew TM Land	Wright R-3350-26WA	Improved for all-weather operation version and submarine attack missions.
AD-4Q "Skyraider"	Douglas El Segundo 1949	2 Crew TM Land	Wright R-3350-26WA	Radar countermeasures - target towing.
AD-4W "Skyraider"	Douglas El Segundo 1949	3 Crew TM Land	Wright R-3350-26WA	Improved early warning and ASW version. Submarine search version.
XTB3F-1	Grumman 1946	2 Crew TM Land	P & W R-2800-46W	High performance torpedo bomber. Hamilton Std. Prop.
XTB3F-1S	Grumman 1948	4 Crew TM Land	P & W R-2800-46W	High performance land and carried based; submarine search and radar scouting missions. Hamilton Std. Prop.
AF-2S "Guardian"	Grumman 1949	3 Crew TM Land	P & W R-2800-48W	Production development of XTB3F-2S. Carrier or land based for submarine attack. Hamilton Std. Prop.
AF-2W "Guardian"	Grumman 1949	4 Crew TM Land	P & W R-2800-48W	Production development of XTB3F-1S. Carrier or land based for submarine & radar scouting missions. Hamilton Std. Prop.
XAJ-1	No. American 1948	3 Crew TM Land	2 P & W R-2800-44 1 Allison J33-A-23	Carrier based high performance horizon- tal bomber. Hamilton Std. Prop.
AJ-1	No. American 1949	3 Crew TM Land	2 P & W R-2800-44W 1 Allison J33-A-23	Production version of XAJ-1 Hamilton Std. Prop.
AM-1 "Mauler"	Martin 1946	1 Crew TM Land	P & W R-4360-4W	Production version of XBTM-1. Curtiss Prop. (Formerly BTM-1)
AM-1Q "Mauler"	Martin 1947	2 Crew TM Land	P & W R-4360-4W	AM-1 except for electronic counter- measure.

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MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
TBM-3N "Avenger"	Gen. Motors 1945	3 Crew TM Land	Wright R-2600-20	TBM-3 equipped for all-weather operation
TMB-3P "Avenger"	Gen. Motors 1947	3 Crew TM Land	Wright R-2600-20	TBM-3 equipped for photographic reconnaissance.
TBM-3Q "Avenger"	Gen. Motors 1945	3 Crew TM Land	Wright R-2600-20	TBM-3 equipped for electronic counter-measures.
TBM-3S "Avenger"	Gen Motors 1947	3 Crew TM Land	Wright R-2600-20	Anti-submarine version of TBM-3E.
TBM-3W	Gen. Motors 1946	3 Crew TM Land	Wright R-2600-20	TBM-3 special radar search airplane.
XTBM-4	Gen. Motors 1945	3 Crew TM Land	Wright R-2600-20	TBM-3 strength increased to 5G, but restricted to flight maneuvers of TBM-3.

VF CLASS

FIGHTER

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
XF3D-1	Douglas 1947	2 Crew M Land	2 Westinghouse 24C-4B	Carrier based high performance, Jet propelled night fighter.
F3D-1 "SkyKnight"	Douglas 1949	2 Crew M Land	2 Westinghouse J34-WE-38	Carrier based high performance, Jet propelled night fighter.
F3D-2 "SkyKnight"	Douglas 1950	2 Crew M Land	2 Westinghouse J34-WE-38	Similar F3D-1 except engine, and control surfaces.
F6F-5 "Hellcat"	Grumman 1944	1 Crew TM Land	P & W R-2800-10/10W	Improved F6F-3 Hamilton Std. Prop.
F6F-5D "Hellcat"	Grumman 1944	1 Crew TM Land	P & W R-2800-10/10W	Same as F6F-5, except equipped for use as a control plane for P/A.
F6F-5E "Hellcat"	Grumman 1944	1 Crew TM Land	P & W R-2800-10/10W	Same as F6F-5, except equipped with special radar.
F6F-5N "Hellcat"	Grumman 1944	1 Crew TM Land	P & W R-2800-10/10W	Same as F6F-5, except for all weather operation.
F6F-5P "Hellcat"	Grumman 1944	1 Crew TM Land	P & W R-2800-10/10W	Same as F6F-5, except for reconnaissance photographic equipment.
F7F-1N "Tigercat"	Grumman 1944	1 Crew TM Land	2 P & W R-2800-22W/34W	Carrier-catapult. Folding midwing. Tricycle landing gear, Ham.Std.Prop.
F7F-2D "Tigercat"	Grumman 1947	2 Crew TM Land	2 P & W R-2800-22W/34W	Similar to F7F-2N, equipped for use as a control plant for P/A. 2-cockpits.
F7F-2N "Tigercat"	Grumman 1944	2 Crew TM Land	2 P & W R-2800-22W-34W	F7F-1N with rear seat added for radar operator, Ham. Std. Prop.
F7F-3 "Tigercat"	Grumman 1945	1 Crew TM Land	2 P & W R-2800-22W/34W	Similar to F7F-2N, except extra gas tank in place of radar operator and structure strengthened.

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MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
F7F-3D "Tigetoat"	Grumman 1945	1 Crew TM Land	2 P & W R-2800-22W/34W	Similar to F7F-3, except for use as a control plane for P/A.
F7F-3N "Tigercoat"	Grumman 1945	2 Crew TM Land	2 P & W R-2800-22W/34W	All weather version of F7F-3 with radar operator in place of extra gas tank.
F7F-3P "Tigercoat"	Grumman 1945	1 Crew TM Land	2 P & W R-2800-22W/34W	Same as F7F-3, except fitted for photography.
XF7F-4N	Grumman 1946	2 Crew TM Land	2 P & W R-2800-22W/34W	Radar interceptor Strength insufficient for carrier operations.
F7F-4N "Tigercoat"	Grumman 1946	2 Crew TM Land	2 P & W R-2800-22W/34W	Similar to F7F-3N. GR-1 auto pilot, APS-16. Space for APA-48.
XF8F-1	Grumman 1944	1 Crew TM Land	P & W R-2800-22W/34W	High performance carrier fighter.
F8F-1 "Bearcat"	Grumman 1945	1 Crew TM Land	P & W R-2800-34W	Production version of XF8F-1. Aero Products prop.
F8F-1B "Bearcat"	Grumman 1945	1 Crew TM Land	P & W R-2800-34W	F8F-1 with 20 mm wing gun installation. Aero Products Prop.
F8F-1D "Bearcat"	Grumman 1946	1 Crew TM Land	P & W R-2800-34W	F8F-1 equipped for use as a control plane for P/A.
F8F-1N "Bearcat"	Grumman 1946	1 Crew TM Land	P & W R-2800-34W	Same as F8F-1, except fitted for all weather operation.
F8F-1P "Bearcat"	Grumman 1946	1 Crew TM Land	P & W R-2800-34W	Same as F8F-1, except equipped for photographic reconnaissance.
XF8F-2	Grumman 1946	1 Crew TM Land	P & W YR-2800-30W	Same as F8F-1, except engine with automatic supercharger control.
F8F-2 "Bearcat"	Grumman 1947	1 Crew TM Land	P & W R-2800-30W	Production development of XF8F-2, except equipped with 20 mm wing guns.
F8F-2N "Bearcat"	Grumman 1947	1 Crew TM Land	P & W R-2800-30W	Same as F8F-2 except all weather operation
F8F-2P "Bearcat"	Grumman 1947	1 Crew TM Land	P & W R-2800-30W	Same as F8F-2 except equipped for photographic reconnaissance.
XF9F-2	Grumman 1947	1 Crew M Land	Rolls Royce Nene 1	High performance day fighter.
F9F-2 "Panther"	Grumman 1949	1 Crew M Land	1 P & W J42-P-4 or -6 or Allison J33-A-8	Production Development of XF9F-2 High performance day fighter.
F9F-3 "Panther"	Grumman 1949	1 Crew M Land	Allison J33-4-8	Similar F9F-2 except engine.

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MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
FG-1D "Corsair"	Goodyear 1943	1 Crew TM Land	P & W R-2800-8/8W	Same as F4U-1D. Ham. Std. Prop.
FH-1 "Phantom"	McDonnell 1946	1 Crew M Land	2 Westinghouse 19XB-2B or P & W J-30	Production Development of XFH-1. (Formerly FD-1)
XF2H-1	McDonnell 1945	1 Crew M Land	2 Westinghouse XJ34-WE-16	Carrier-catapult, high performance. (Formerly XF2D-1)
F2H-1 "Banshee"	McDonnell 1948	1 Crew M Land	2 Westinghouse J34-WE-22A-30	Production development of XF2H-1.
F2H-2 "Banshee"	McDonnell 1949	1 Crew M Land	2 Westinghouse J-34-WE-34	Similar F2H-1 except engines & external aux. fuel tanks.
F2H-2N "Banshee"	McDonnell 1949	1 Crew M Land	2 Westinghouse J-34-WE-34	Same as F2H-2 except equipped for all weather operation.
F2H-2P "Banshee"	McDonnell 1950	1 Crew Land	2 Westinghouse J-34-WE-34	Same as F2H-2 except equipped for photography.
XFJ-1	North American 1946	1 Crew M Land	G. E. J-35-C-3	Low wing, carrier, catapult. Drop tanks on wing tips.
FJ-1 "Fury"	North American 1947	1 Crew M Land	G. E. J-35-A-2/4	Production development of XFJ-1.
F4U-4 "Corsair"	Chance Vought 1944	1 Crew TM Land	P & W R-2800-18W	Production development of XF4U-4.
F4U-4B "Corsair"	Chance Vought 1945	1 Crew TM Land	P & W R-2800-18W/-42W	Same as F4U-4 except equipped with 20 mm guns.
F4U-4P "Corsair"	Chance Vought 1945	1 Crew TM Land	P & W R-2800-18W	Same as F4U-4 except equipped for photographic reconnaissance.
XF4U-5	Chance Vought 1946	1 Crew TM Land	P & W R-2800-32W	Same as F4U-4 except 2-stage engine with automatic supercharger control.
F4U-5 "Corsair"	Chance Vought 1947	1 Crew TM Land	P & W R-2800-32W	Production development of XF4U-5. Ham. Std. Prop.
F4U-5N "Corsair"	Chance Vought 1947	1 Crew TM Land	P & W R-2800-32W	Same as F4U-5 except equipped for all weather operations.
F4U-5P "Corsair"	Chance Vought 1947	1 Crew TM Land	P & W R-2800-32W	Same as F4U-5 except equipped for photographic reconnaissance.
XF6U-1	Chance Vought 1946	1 Crew M Land	West. J34-WE-22	Low wing, carrier-catapult. Drop tanks on wing tips.
F6U-1 "Pirate"	Chance Vought 1948	1 Crew M Land	West. J34-WE-30A	Production development of XF6U-1.
XF7U-1	Chance Vought 1948	1 Crew M Land	2 West. J-34-WE-22	High performance, jet-propelled landplane fighter.
F7U-1 "Cutlass"	Chance Vought 1950	1 Crew M Land	2 West. J-34-WE-32	Production development of XF7U-1.
D-558-1	Douglas El Segundo 1947	1 Crew M Land	G.E. J35-A-11	High speed research only.

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MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
D-558-2	Douglas El Segundo 1949	1 Crew TM Land	West. 24C-4B & Reaction A6000C4	High speed research only.

VO CLASS

OBSERVATION

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
SC-1 "Seahawk"	Curtiss 1944	1 Crew TM Conv't	Wright R-1820-62	Development of XSC-1 structurally reinforced. Curtiss Prop.
SC-2 "Seahawk"	Curtiss 1945	1 Crew TM Conv't	Wright R-1820-76	Similar to SC-1 except engine, modernized cockpit, one piece canopy and jump seat for search and rescue.
OY-1 "Sentinel"	ConVair Stinson 1943	2 Crew TM Conv't	Lycoming O-435-1	Similar to Stinson "V-76". For artillery observation, 12V elec. sys.
OY-2 "Sentinel"	ConVair Stinson	2 Crew TM Conv't	Lycoming O-435-1	Same as OY-1 except for 24V elec. system.

VP(HL) CLASS

4 ENGINE LANDPLANE

PATROL

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
PB-1W "Fortress"	Boeing Seattle 1945	13 Crew TM Land	4 Wright R-1820-97	Patrol plane (no bomb bays) special radar, AF Mod. "B-17G". Ham.Std. Prop.
XPLM-1	Martin 1946	8 Crew TM Land	2 P & W R-4360-20 & 2 GE I-40	Midwing long range patrol or mine layer. Curtiss or Aero Products Prop.
PLM-1 "Mercator"	Martin 1947	9 Crew TM Land	2 P & W R4360-20 Prod. 2 Allison J-33- A-10	Development of XPLM-1. Aero Products Prop.
PO-1W	Lockheed 1949	22 Crew TM Land	4 Wright R-3350-75	Special Search airplane. Modification of "Constellation". Ham.Std.Prop.
PB4Y-1P "Liberator"	ConVair San Diego 1944	10 Crew TM Land	4 P & W R-1820-43/65	PB4Y-1 equipped for photographic reconnaissance.
PB4Y-2 "Privateer"	ConVair San Diego 1944	11 Crew TM Land	4 P & W R-1830-94	Develop. of PB4Y-1 with longer fuselage. Additional Armament. Single tail. Ham. Std. Prop.
PB4Y-2B "Privateer"	ConVair San Diego 1948	11 Crew TM Land	4 P & W R-1830-94	PB4Y-2 modified to carry, launch and control ASM-2.
PB4Y-2S "Privateer"	ConVair San Diego 1947	11 Crew TM Land	4 P & W R-1830-94	Anti-submarine version of PB4Y-2.

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VP (ML) CLASS 2 ENGINE LANDPLANE PATROL

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
PV-2 "Harpoon"	Lockheed "A" 1944	5 Crew TM Land	2 P & W R-2800-31	PV-1 with increased fuel capacity, span & control surface areas. Ham. Std. Prop.
XP2V-1	Lockheed "A" 1945	8 Crew TM Land	2 Wright R-3350-8	High performance, long range land-based patrol plane.
P2V-1 "Neptune"	Lockheed "A" 1945	8 Crew TM Land	2 Wright R-3350-8A	Production Development of XP2V-1. "Truculent Turtle"
XP2V-2	Lockheed "A" 1945	7 Crew TM Land	2 Wright R-3350-24	Similar to P2V-1 except for engines and nose.
P2V-2 "Neptune"	Lockheed "A" 1946	7 Crew TM Land	2 Wright R-3350-24WA	Production development of XP2V-2. Ham. Std. Prop.
P2V-3 "Neptune"	Lockheed "A" 1948	7 Crew TM Land	2 Wright R-3350-2W	Similar to P2V-2. Different engine.
P2V-3C "Neptune"	Lockheed "A" 1948	4 Crew TM Land	2 Wright R-3350-26W	Carrier launched version of P2V-3.
P2V-3W "Neptune"	Lockheed "A" 1950	9 Crew TM Land	2 Wright R-3350-26W	P2V-3 equipped with Radar search.
P2V-3Z "Neptune"	Lockheed "A" 1950	5 Crew TM Land	2 Wright R-3350-26W	Combat transport version of P2V-3.
P2V-4 "Neptune"	Lockheed "A" 1949	7 Crew TM Land	2 Wright R-3350-26W	Similar to P2V-3. Different engine. (Some will have R-3350-30W compound engine).
P2V-5 "Neptune"	Lockheed "A" 1951	8 Crew TM Land	2 Wright R-3350-30W	Similar to P2V-4 with additional armament and crew.

VP (HS) CLASS 4 ENGINE SEAPLANE PATROL

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
XP5Y-1	ConVair 1950	11 Crew TM Boat	4 Allison XT40-A-4A XT40-A-4B	High wing long range patrol flying boat. Search & rescue. 4 counter-rotating props. Aero. Products.

VP (MS) CLASS 2 ENGINE SEAPLANE PATROL

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
PEM-5 "Mariner"	Martin 1944	9 Crew TM Boat	2 P & W R-2800-22-34	Same as PEM-3D, except engines, improved radio-radar, Curtiss Prop.
XP5M-5A	Martin 1945	9 Crew TM Amphib.	2 P & W R-2800-34	PEM-5 converted to an amphibian.

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MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
PBM-5A "Mariner"	Martin 1947	9 Crew TM Amphib	2 P & W R-2800-34	Production version of XPBM-5A
PBM-5S "Mariner"	Martin 1945	9 Crew TM Boat	2 P & W R-2800-22-34	Anti-submarine version of PBM-5
XP5M-1	Martin 1948	9 Crew TM Boat	2 Wright R-3350-26	Development of PBM-5, Single tail, improved hull and long afterbody.
P5M-1	Martin 1951	7 Crew TM Boat	2 Wright R-3350-30	Development of XP5M-1. Single tail, improved hull, long aft body and ASW search.
PBY-5 "Catalina"	ConVair San Diego 1940	8 Crew TM Boat	2 P & W R-1830-92/-92A	Medium range Patrol bomber. (British "Catalina IV"). Also operated by Coast Guard. Ham. Std. Prop.
PBY-5A "Catalina"	ConVair San Diego 1941	8 Crew TM Amphib.	2 P & W R-1830-92/-92A	Prod. Develop. of XPBY-5A, AF Mod. "OA-10". (British "Catalina I"). Also operated by Coast Guard. Ham. Std. Prop.
PBY-6A "Catalina"	ConVair San Diego 1945	8 Crew TM Amphib.	2 P & W R-1830-92/-92A	Develop. of PBY-5A, incorporating PBN-1 tail and revised radio-radar installation. Ham. Std. Prop.

VR(HL) CLASS 4 ENGINE LANDPLANE TRANSPORT

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
R5D-1Z "Skymaster"	Douglas Santa Monica 1942	6 Crew TM Land Cargo or 40-50 pass.	4 P & W R-2000-9/-9A	R5D-1 converted to Administrative airplane. Similar to Douglas "DC-4" and AF Mod. "C-54A", Ham. Std. Prop.
R5D-2 "Skymaster"	Douglas Santa Monica 1944	6 Crew TM Land Cargo or 40-50 pass.	4 P & W R-2000-9/-9A	Two cabin tanks of R5D-1 replaced with outer wing panel tanks. AN type end fittings for all rigid and flexible lines. AF Mod. "C-54B".
R5D-2Z "Skymaster"	Douglas Santa Monica 1944	6 Crew TM Land 22 pass.	4 P & W R-2000-9/-9A	R5D-2 converted to an administrative airplane. Ten berths.
R5D-3 "Skymaster"	Douglas Santa Monica 1944	6 Crew TM Land Cargo or 40-50 pass.	4 P & W R-2000-9/-9A	AF Model "C-54D". Ham. Std. Prop.
R5D-3Z "Skymaster"	Douglas Santa Monica 1944	6 Crew TM Land 22 pass.	4 P & W R-2000-9/-9A	R5D-3 converted to an administrative airplane. Ten berths.
R5D-4 "Skymaster"	Douglas Santa Monica 1945	6 Crew TM Land Cargo and 40 pass	4 P & W R-2000-9/-9A	Same as R5D-2 personnel transport with fuselage fuel tanks eliminated and two fuel tanks installed in inboard wing. AF Mod. "C-54E".

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MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
R60-1 "Constitution"	Lockheed "B" 1946	12 Crew TM Land Cargo or 168 pass.	4 P & W R-4360-22W	Supercharged cabin. Long range. Curtiss Prop.

VR(ML) CLASS 2 ENGINE LANDPLANE TRANSPORT

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
R5C-1 "Commando"	Curtiss 1943	2 Crew TM Land Cargo or 40 pass.	2 P & W R-2800-43/-51	Curtiss "CW-20". Similar to AF Mod. "C-46A". Curtiss Prop.
R4D-5 "Skytrain"	Douglas Long Beach 1943	3 Crew TM Land 28 pass. or cargo	2 P & W R-1830-92	Similar to R4D-1 with 24-volt electrical system. AF Mod. "C-47A".
R4D-5E "Skytrain"	Douglas Long Beach 1943	3 Crew TM Land 28 pass.	2 P & W R-1830-92	Trainer with nose and belly radomes and repeater scopes.
R4D-5R "Skytrain"	Douglas Long Beach 1943	3 Crew TM Land 21 pass.	2 P & W R-1830-92	R4D-5 converted to personnel transport version
R4D-5T "Skytrain"	Douglas Long Beach 1943	3 Crew TM Land 28 pass.	2 P & W R-1830-92	Radar trainer with repeater scope.
R4D-5Z "Skytrain"	Douglas 1943	3 Crew TM Land	2 P & W R-1830-92	Administrative version of R4D-5.
R4D-6 "Skytrain"	Douglas Long Beach 1943	3 Crew Cargo 28 pass.	2 P & W R-1830-90D	Same as R4D-5 except engine. AF Mod. "C-47B". Ham. Std. Prop.
R4D-6E "Skytrain"	Douglas Long Beach 1943	3 Crew TM Land 28 pass.	2 P & W R-1830-90D	Trainer with nose and belly radomes and repeater scopes.
R4D-6R "Skytrain"	Douglas Long Beach 1943	3 Crew TM Land 21 pass.	2 P & W R-1830-90D	R4D-6 converted to personnel transport.
R4D-6T "Skytrain"	Douglas Long Beach 1943	3 Crew TM Land 28 pass.	2 P & W R-1830-90D	Radar trainer with repeater scope.
R4D-6Z "Skytrain"	Douglas Long Beach 1945	3 Crew TM Land 15-17 pass.	2 P & W R-1830-90D	Administrative version of R4D-6.
R4D-7 "Skytrain"	Douglas Long Beach 1945	3 Crew TM Land 10 students	2 P & W R-1830-90D	R4D-6 modified as navigational trainer. AF Mod. "TC-47B".
R50-1 "Lodestar"	Lockheed "B" 1941	4 Crew TM Land 14 Pass.	2 Wright GR-1820-60	Similar to Lockheed "Lodestar 18-40". Also operated by Coast Guard. Ham. Std. Prop.

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MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
R50-3 "Lodestar"	Lockheed "B" 1941	4 Crew TM Land 4 pass.	2 P & W R-1830-92	Similar to Lockheed "Lodestar 18-10" executive model. Ham. Std. Prop.
R50-4 "Lodestar"	Lockheed "B" 1942	4 Crew TM Land 7 pass.	2 Wright R-1820-40/-40C	Develop. of R50-3 and similar to Lock- head "18-56" executive model. Also operated by Coast Guard.
R50-5 "Lodestar"	Lockheed "B" 1942	4 Crew TM Land 12 pass.	2 Wright R-1820-40/-40C	Lockheed "Model 18". AF Mod. "C-60". 12-volt system. Ham. Std. Prop.
R50-6 "Lodestar"	Lockheed "B" 1944	3 Crew TM Land 18 pass	2 Wright R-1820-87/-87C	AN standardized version. Paratroop benches. Long range. 24-volt system. AF Mod. "C-5CA". Ham. Std. Prop.
R4Q-1 "Packet"	Fairchild 1949	5 Crew TM Land 64 troops	2 P & W R-4360-20	Air Force - C-119B Cargo, Troop transport & ambulance.

VR(HS) CLASS 4 ENGINE SEAPLANE TRANSPORT

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
JRM-1 "Mars"	Martin 1945	11 Crew TM Boat 132 pass or cargo	4 Wright R-3350-8A	Develop. of PB2M-1R. As hospital plane carries 84 litters and 21 pass. Curtiss prop.
JRM-2 "Mars"	Martin 1946	11 Crew TM Boat 132 pass or cargo	4 P & W R-4360-24	Same as JRM-1 except engine. As hos- pital plane carries 84 litters and 21 pass. Curtiss Prop.

VT CLASS TRAINING

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
SNB-1 "Kansan"	Beech 1942	4 Crew TM Land	2 P & W R-985-AN-1-3	Twin engine - low wing. AF Mod. "AT-11". Ham. Std. Prop.
SNB-2 "Navigator"	Beech 1942	5 Crew TM Land	2 P & W R-985-AN-1-3	Similar to SNB-1. AF Mod. "AT-7".
SNB-2P "Navigator"	Beech 1942	5 Crew TM Land	2 P & W R-985-AN-1-3	Oblique photographic reconnaissance installation.
SNB-3 "Navigator"	Beech 1942	5 Crew TM Land	2 P & W R-985-AN-1-3	Improved SNB-2. AF Mod. "AT-7C". Ham. Std. Prop.
SNB-3E "Navigator"	Beech 1942	5 Crew TM Land	2 P & W R-985-AN-1-3	Equipped with special electronic gear.
SNB-3N "Navigator"	Beech 1942	5 Crew TM Land	2 P & W R-985-AN-1-3	All-weather fighter trainer.
SNB-3P "Navigator"	Beech 1942	5 Crew TM Land	2 P & W R-985-AN-1-3	Oblique photographic reconnaissance installation.

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MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
SNB-3Q "Navigator"	Beech 1942	5 Crew TM Land	2 P & W R-985-AN-1-3	Radar countermeasures version
SNB-4 "Navigator"	Beech 1942	5 Crew TM Land	2 P & W R-985-AN-1-3	SNB-1 modified. New fuselage and center section.
SNB-5 "Navigator"	Beech 1949	5 Crew TM Land	2 P & W R-985-AN-1-3	New fuselage and wing center section, landing gear, brakes & tail wheel, ARC-1 radio.
SNJ-4 "Texan"	No. American 1941	2 Crew TM Land	P & W R-1340-AN-1	Development of SNJ-3. AF Model "AT-6C". (British "Harvard II A").
SNJ-5 "Texan"	No. American 1943	2 Crew TM Land	P & W R-1340-AN-1	SNJ-4 with 24V elec. system. AF Model "AT-6D". (British "Harvard IV").
SNJ-5B "Texan"	No. American 1949	2 Crew TM Land	P & W R-1340-AN-1	SNJ-5 equipped for gunnery training.
SNJ-5C "Texan"	No. American 1943	2 Crew TM Land	P & W R-1340-AN-1	Carrier version of SNJ-5.
SNJ-6 "Texan"	No. American 1945	2 Crew TM Land	P & W R-1340-AN-1	SNJ-5 with strengthened wing panels and redesigned rear fuselage. AF Mod. "AT-6F".
SNJ-6B "Texan"	No. American 1949	2 Crew TM Land	P & W R-1340-AN-1	SNJ-6 equipment for gunnery training.
SNJ-6C "Texan"	No. American 1946	2 Crew TM Land	P & W R-1340-AN-1	Carrier version of SNJ-6.
N3N-3	MAF 1940	2 Crew TB Conv't	Wright R-760-2-8	Develop. of N3N-1, redesigned tail and landing gear controls.
TO-1 "Shooting Star"	Lockheed 1948	1 Crew M Land	Allison (GM) J-33A-23	Jet trainer - Develop. of AF Mod. "F-80C".
TO-2 "Shooting Star"	Lockheed 1948	2 Crew M Land	Allison J-33A-23	Similar to TO-1 AirForce Model "TF80C".
XNQ-1	Fairchild 1946	2 Crew TM Land	Lycoming XR-680-10	Retractable landing gear, low wing, semi-monocoque construction.
N2S-5 "Kaydet"	Boeing Wichita 1943	2 Crew TB Land	Lycoming R-680-17	AN Standardized primary trainer, AF Mod. PT-13D".

VU CLASS

UTILITY

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
JRB-2 "Expeditor"	Beech 1941	2 Crew TM Land 4 pass.	2 P & W R-985-AN-1-3	Transport. Similar to Beech "C-18S". AF Mod. "C-45A".
JRB-3 "Expeditor"	Beech 1944	2 Crew TM Land- 3 pass.	2 P & W R-985-AN-1-3	Develop. of JRB-2. Similar to AF Mod. "C-45B". Ham. Std. Prop.
JRB-4 "Expeditor"	Beech 1944	2 Crew TM Land 5 pass.	2 P & W R-985-AN-1-3	AF Mod. "C-45F". Ham. Std. Prop.

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HT CLASS

TRAINING

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
HTL-1	Bell 1947	2 Crew Land	Franklin O-335-1	AF Mod. "YH-13" single two-bladed rotor with tail anti-torque rotor.
HTL-2	Bell 1947	2 Crew Conv't	Franklin O-335-3	Bell Mod. 47-D modified for training.
HTL-3	Bell 1949	2 Crew Conv't	Franklin O-335-2	Similar to HTL-2 except engine.

HU CLASS

UTILITY

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
XHJD-1	McDonnell 1948	2 Crew Conv't	2 P & W R-985-AN-14B	Two lateral three-bladed rotors. For flight test research and development.
XHJP-1	Piasecki 1948	3 Crew Land	Continental R-975-34	Dual intermeshing three-bladed rotors. Battleship, Cruiser, Carrier operation.
HUP-1	Piasecki 1950	3 Crew Land	Continental R-975-34	Production version of XHJP-1
XHJS-1	Silorsky 1948	3 Crew Land	Continental R-975-34	Single three-bladed rotor and auxiliary tail rotor. For carrier operation.
K-225	Kaman 1949	2 Crew	Lycoming O-435-C	Syncopter, twin rotor side by side (wgt 2700#)
UH-12	United Helicopters 1949	2 Crew	Franklin O-335-3	One main and one tail rotor (wgt 2247#)

KD CLASS

PILOTLESS AIRCRAFT (K) TARGET AIRCRAFT

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
KD2C-1 "Skeet"	Curtiss 1947	M Land	Continental 14" Pulse-jet	Low-wing, triple tail, all-metal. For aircraft & anti-aircraft gunnery practice. Air launched. Non-recoverable.
KD2C-2 "Skeet"	Curtiss 1948	M Land	McDonnell 14" Pulse-jet	Same as KD2C-1 except for engine change.
KDG-1 "Snipe"	Globe 1946	TM Land	McCulloch 4300	Mid-wing, all metal, for aircraft and anti-aircraft gunnery practice. Parachute recovery. Lewis or Sensenich Prop. Catapult launched.
KDG-2 "Snipe"	Globe 1947	TM Land	McCulloch	Similar to KDG-1 except for 24V electrical system. Parachute recovery.
KD2G-1	Globe 1947	M Land	McDonnell 8" pulse-jet	Mid-wing, all metal, twin tail monoplane for aircraft and anti-aircraft gunnery practice, 28V. Parachute recovery.
KD2G-2	Globe 1950	M Land	8" Pulse-jet	Similar KD2G-1. Parachute recovery.
KD3G-1	Globe 1946	TM Land	Kiekhaefer O-45-35	Same as KDG-1 except for engine. Parachute recovery.

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MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
KD3G-2	Globe 1947	TM Land	Kiekhaefer 0-45-35	Same as KD3G-1 with AN/ARW-26Y radio control receiver, 28V. Parachute recovery.
KD4G-1	Globe 1949	TM Land	Kiekhaefer 1-KB-35 0-45-35	High all metal wing controlled by rudder and elevator surfaces. No ailerons. Glide recovery on land or water. Air gunnery trainer.
XKD5G-1	Globe 1950	M	Pulse-jet	High wing and twin tail. Parachute recovery.
KDH-1 "Katydid"	McDonnell 1945	M Land	McDonnell 8" pulse-jet	Mid-wing, "V" tail. Develop. of XKDD-1. Formerly TD2D-1 and KDD-1. Catapult or air launched. Parachute recovery.
KDM-1	Martin 1950	M	Ram-jet	High wing air launched. Development of PTV-N-2. (Gorgon IV). Parachute recovery.
KDR-1 "Quail"	Radioplane 1946	TM	Kiekhaefer 0-45-35	High-wing, plywood monocoque airframe. Parachute recovery. No alighting gear. AF Model "OQ-17". (Formerly XTD4D-1).
KDR-2 "Quail"	Radioplane 1947	TM	Kiekhaefer 0-45-35	Similar to KDR-1 except structural changes. Parachute recovery.
KD2R-1 "Quail"	Radioplane 1946	TM	McCulloch 0-90-2	High wood wing, metal monocoque fuselage. Catapult. Parachute recovery.
KD2R-2 "Quail"	Radioplane 1947	TM	McCulloch 0-90-2	Similar to KD2R-1 except 28V radio and stabilized. Parachute recovery.
KD2R-2E "Quail"	Radioplane 1948	TM	McCulloch 0-90-4	KD2R-2 modified for AFS-2 and 3 stabilization systems for test at NAMTC. P.R.
TD2C-1 "Turkey"	Culver 1944	1 Crew TM Land	Franklin 6ACT-298-J5	Target drone for aircraft and anti-aircraft gunnery practice. Low wing. AF Mod. "OQ-14". Sensenich Prop.
TDD-3 "Denny"	Radioplane 1944	TM	Kiekhaefer 0-45-1	Similar to TDD-2 and AF Mod. "OQ-14". Anti-aircraft and aircraft gunnery. P.R.
TDD-4 "Denny"	Radioplane 1946	TM	Kiekhaefer 0-45-35	Same as TDD-3 except for engine. Parachute recovery.
F6F-3K	Grumman 1945	1 Crew TM Land	P & W R-2800-10W	F6F-3 modified for target drone. Carrier-catapult.
F6F-5K	Grumman 1945	1 Crew TM Land	P & W R-2800-10W	F6F-5 modified for target drone. Carrier-catapult.
F7F-3K	Grumman 1945	1 Crew TM Land	2 P & W R-2800-34W	F7F-3 modified for target drone. Carrier-catapult.
FG-1K	Goodyear NADC 1947	TM Land	P & W R-2900-8W	*FG-1D modified for target drone. Carrier-catapult.
F4U-4K	Chance Vought 1947 NADC	TM Land	P & W R-2800-18W	F4U-4 modified for target drone. Carrier-catapult

RESTRICTED

RESTRICTED

SH-3ED
NAVAER 00-25Q-13

GUIDED MISSILES (M) TEST VEHICLE (TV)

C CLASS

CONTROL GUIDANCE

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
CTV-N-2 "Gorgon IIC"	NADC 1946	M	14" NEES Pulse-jet	High wing. Canard design. Formerly KGN-1 and KUN-1.
CTV-N-4 "Gorgon IIA"	NADC 1944	M	Reaction CML2N-5	High mid-wing monoplane. Canard design Formerly KA2N-1 and KU2N-1.
CTV-N-6 "Gorgon IIIA"	NADC 1946	M	Reaction CML2N-6-7	High mid-wing monoplane. Conventional twin tail design. Formerly KA3N-1 and KU3N-1.

L CLASS

LAUNCHING

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
LTV-N-2 "Loon"	Willys-Over- land 1945	M	Ford PJ-31 Pulse-jet	Similar to German "V-1". AF Model LTV-A-1. Formerly KGW-1 & KUW-1.

P CLASS

PROPULSION

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
PTV-N-2 "Gorgon IV"	Martin 1947	M	Marquardt C-20-85C	High swept monoplane wing (for testing subsonic ram jet engine). Formerly KUM-1.

R CLASS

RESEARCH

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
RTV-N-2 "Gargoyle"	McDonnell 1945	M	Aerojet JATO 8-AS-1000E	Low wing monoplane, Vee tail. Formerly LBD-1, KSD-1 and KUD-1.
RTV-N-4 "Gorgon IIIC"	NADC 1946	M	2 Reaction CML3N-1	Similar to CTV-N-6. All wood construc- tion. Dual Rocket Motors. Formerly KA3N-2 and KU3N-2.

LIGHTER-THAN-AIR(Z) AIRSHIPS

ZP CLASS

PATROL & ESCORT

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
ZPK	Goodyear 1942-45	10 Crew 456,000 cu.ft.	2 P & W R-1340-AN-2	Also usable for search-rescue, utility & training.
XP2K	Goodyear 1943-45	10 Crew 456,000 cu.ft.	2 P & W R-1340-AN-2	ZPK with modernized electronics, instruments, etc.
XZPM	Goodyear 1944	14 Crew 725,000 cu.ft.	2 P & W R-1340-AN-2	Long range.

RESTRICTED

RESTRICTED

SH-3BD
NAVAER 00-25Q-13

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
ZPM	Goodyear 1944-45	14 Crew 725,000 cu.ft.	2 P & W R-1340-AN-2	Production version of XZPM.
ZPN	Goodyear 1950	14 Crew 850,000 cu.ft.	2 Wright R-1300-2	Long endurance anti-submarine. AFS-20 radar etc. Internal mounting of engines.

ZT CLASS

TRAINING

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
ZTG	Goodyear 1943	6 Crew 200,000 cu.ft.	2 Continental R-670-4	
XZTL	Goodyear 1942	4 Crew 123,000 cu.ft.	2 Warner R-500	Experimental envelope of synthetic fabric.

ZT CLASS

FREE BALLOON

TRAINING

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
ZTF	Goodyear	4-6 Crew 19000-350000 cu. ft.	None	

RESTRICTED

RESTRICTED

AIRCRAFT COMMON TO NAVY AND AIR FORCE

21. The following aircraft are common to the Navy and the Air Force. Designations used by both Services are shown below.

<u>NAVY</u>	<u>AIR FORCE</u>	<u>POPULAR NAME</u>	<u>MANUFACTURER</u>
<u>Class VA Attack</u>			
SB2C-5	A-25	Helldiver	Curtiss
<u>Class VO Observation</u>			
OY-1	L-5	Sentinel	ConVair
OY-2	L-5		ConVair
<u>Class VP(HL) Patrol (Four Engine Landplane)</u>			
PB4Y-1, -2	NB-24M	Liberator	ConVair
PB-1W	NB-17G	Fortress	Boeing
<u>Class VP(MS) Patrol (Two Engine Seaplane)</u>			
PBY-5A-6A	OA-10, -10B	Catalina	ConVair
<u>Class VR (HL) Transport (Four Engine Landplane)</u>			
R5D-1, -2, -3, -4	C-54A,B, D,E	Skymaster	Douglas
<u>Class VR (ML) Transport (Two Engine Landplane)</u>			
R5C-1	ZC-46A, -46E	Commando	Curtiss
R4D-5,6	C-47A, C-47B	Skytrain	Douglas
R4D-7	TC-47B	Skytrain	Douglas
R5O-1,-3,-5,-6	C-59, -60, -60A	Lodestar	Lockheed
R4Q-1	C-119B	Packet	Fairchild
<u>Class VT Training</u>			
N2S-5	NPT-13D	Kaydet	Boeing-Wichita
SNB-1	AT-11	Kansan	Beech
SNB-2,3	AT-7-7C	Navigator	Beech
SNJ-4,-5,-6	AT-6C,-6D,-6F	Texan	North American
TO-1	F-80C	Shooting Star	Lockheed
TO-2	TF-80C	Shooting Star	Lockheed
<u>Class VU Utility</u>			
JD-1	A-26	Invader	Douglas
J2F-5,-6	NA-12	Duck	Grumman
JRB-2 -3,-4,-5,-6	NC-45A,-45B,-45F	Expeditor	Beech
JRF-5	OA-9GR		Grumman
UF-1	SA-16A-GR	Albatross	Grumman
<u>Class HO, HR, and HT Helicopters</u>			
HO3S-1	H-5F		Sikorsky
H1L-1	YH-13		Bell
H1L-2	YHL-13A		Bell
H1L-3	YHL-13A or B		Bell

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21. (Cont'd)

<u>NAVY</u>	<u>AIR FORCE</u>	<u>POPULAR NAME</u>	<u>MANUFACTURER</u>
<u>Class KD Target Aircraft (Pilotless)</u>			
KDR-1	OQ-16	Quail	Radioplane
KD2R-1, -2	OQ-19	Quail	Radioplane
TD2C-1	Q-14B	Turkey	Culver
TDD-3,4	OQ-14	Denny	Radiophone
<u>Class L Guided Missile - Test Vehicle</u>			
LTV-N-2	LTV-A-1	Loon	Willys-Overland

22. The foregoing list of model designations for Naval Aircraft is issued for the information of all activities of the United States Navy concerned with Naval aircraft.

A.M. Pride
Rear Admiral, U. S. N.
Chief of Bureau of Aeronautics

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

TECHNICAL NOTE
NO: 21-50

CONFIDENTIAL
TD-6
23 October 1950

MODEL DESIGNATION OF NAVAL AIRCRAFT
CLASSIFIED AS CONFIDENTIAL

1. CANCELLATION. None. This Technical Note supplements RESTRICTED Technical Note No. 20-50 of the same title.
2. ILLUSTRATIONS. None.
3. PURPOSE. This Technical Note presents model designations of naval aircraft classified as CONFIDENTIAL and not listed heretofore. This note lists all CONFIDENTIAL, experimental and production aircraft, including guided missiles, under contract, construction and in service as of 1 October 1950, except that aircraft classified as RESTRICTED and OBSOLETE are not shown herein. A separate Restricted Technical Note will be issued concurrently with this note listing the aircraft classified as RESTRICTED.
4. TABLE OF CONTENTS. There follows a table of contents showing aircraft by type and class, and corresponding page number this note

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INTRODUCTION

5. INTRODUCTION. As indicated in Technical Note No. 20-50 naval aircraft are divided into types, and are further subdivided into classes in accordance with basic usage for which the aircraft is designed. Model designations for aircraft listed in this Technical Note are determined in the same manner as described in Technical Note No. 20-50.
6. Aircraft within mission categories have been arranged alphabetically by identification letter of the manufacturer.
7. The symbols used to identify Naval aircraft by types and classes, and the letters assigned to aircraft manufacturers used in model designations herein, are listed in the Introduction of Technical Note No: 20-50.

CONFIDENTIAL

HEAVIER - THAN - AIR (FIXED WING)(V) AIRPLANES

VA CLASS

ATTACK

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
XA3D-1	Douglas El Segundo 1951	3 Crew M Land	2 Westinghouse XJ40-WE-12 (After-burner)	Carrier based, high performance jet propelled.
XA2J-1	North American 1951	3 Crew TM Land	2 Allison XT40-A-6	Carrier based, high performance turbo-propeller airplane. Aero products dual rotating.

VF CLASS

FIGHTER

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
F3D-2 "Skynight"	Douglas 1950	2 Crew M Land	2 Westinghouse J34-WE-38	Carrier based high performance, jet-propelled.
F3D-3 "Skynight"	Douglas 1952	2 Crew M Land	2 Westinghouse XJ46-WE-4	Carrier based high performance jet-propelled night land plane.
XF4D-1	Douglas 1952	1 Crew M Land	1 Westinghouse J40-WE-8 (After burner)	Carrier based high performance interceptor, jet-propelled. Tricycle land. gear.
F9F-4	Grumman 1951	1 Crew M Land	1 Allison J33-A-16 or 1 P & W J48-P-6	Carrier based high performance jet-propelled day fighter. Develop- ment of F9F-2. Tricycle land. gear.
F9F-5	Grumman 1951	1 Crew M Land	1 P & W J48-P-6 or Allison J33-A-16	Carrier based, high performance jet-propelled day fighter. Tricycle land. gear.
F9F-5P	Grumman 1951	1 Crew M Land	1 P & W J48-P-6 or Allison J33-A-16	Similar to F9F-5 except modified for photographic reconaissance. Tricycle land. gear.
XF10F-1	Grumman 1951	1 Crew M Land	1 Westinghouse XJ40-WE-8 (After-burner)	Carrier based general purpose with turbo-jet. Tricycle land. gear.

CONFIDENTIAL

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
F10F-1	Grumman 1952	1 Crew M Land	1 Westinghouse XJ40-WE-8 (After-burner)	Production version of XF10F-1.
F2H-3 "Sandee"	McDonnell 1951	1 Crew M Land	2 Westinghouse J34-WE-34	Carrier based, high performance jet-propelled all weather land plane. Tricycle land. gear.
F2H-3P "Sandee"	McDonnell 1951	1 Crew M Land	2 Westinghouse J34-WE-34	Similar to F2H-3 except modified for photographic reconnaissance. Tricycle land. gear.
1F3H-1	McDonnell 1951	1 Crew M Land	1 Westinghouse XJ40-WE-8 (After-burner)	Carrier based high performance jet-propelled interceptor. Tricycle land. gear.
F7U-3	Chance Vought 1952	1 Crew M Land	2 Westinghouse J46-WE-2	Carrier based, high performance, jet propelled general purpose. Tricycle land. gear.

VS CLASS

SUBMARINE SEARCH & ATTACK

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
XS2F-1	Grumman 1951	4 Crew TM Land	2 Wright R-1820-22	Carrier and shore based high wing. Tricycle land. gear.
S2F-1	Grumman 1952	4 Crew TM Land	2 Wright R-1820-22	Production version of XS2F-1.

HEAVIER-THAN-AIR (ROTARY WING)(H)
HELICOPTERS

HS CLASS

SUBMARINE SEARCH & ATTACK

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
XHSL-1	Bell 1951	3 Crew	1 P & W R-2800-50	Twin rotor (each rotor two blades) ASW configuration.
HEL-1	Bell 1952	3 Crew	1 P & W R-2800-50	Production version of the XHSL-1

GUIDED MISSILES (M)

AA CLASS

AIR TO AIR

MODEL	MANUFACTURER	FEATURES	ENGINE	REMARKS
XAAM-N-2 "Sparrow I"	Sperry Gyro- Scope 1950	Cruciform controllable wings and tail	Solid propellant motors	Short range beam-rider missile.
XAAM-N-2a "Sparrow II"	Douglas 1951	Cruciform controllable wings and tail	Solid propellant motors	Development of the XAAM-N-2 except for radar homing seeker.

AS CLASS

AIR TO SURFACE

MODEL	MANUFACTURER	FEATURES	ENGINE	REMARKS
ASM-N-2 "Bat-O"	NBS 1944	M	None	Short range glider operational missile.
ASM-N-2a "Bat-1"	NBS 1944	M	None	Development of ASM-N-2.

SS CLASS

SURFACE TO SURFACE

MODEL	MANUFACTURER	FEATURES	ENGINE	REMARKS
XSSM-N-6 "Rigel"	Grumman 1950	Canard Design Wing	Twin Ram Jets	Supersonic medium range bombardment missile.
XSSM-N-8 "Regulus"	Chance vought 1950	Mid wing Monoplane	Allison J33-A-14	Subsonic medium range bombardment missile.

TEST VEHICLE

C CLASS

CONTROL GUIDANCE

MODEL	MANUFACTURERS	FEATURES	ENGINE	REMARKS
CTV-N-9 "Lark"	Fairchild 1946	Cruciform Wing	Liquid fuel reaction motors	Formerly KAQ-1&XSAM-2 ship to air guided missile
CTV-N-10 "Lark"	ConVair 1946	Cruciform Wing	Liquid fuel reaction motors	Formerly KAY-1&XSAM-4 ship to air guided missile.

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