

# Martin Aircraft Specifications

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## PBM Mariner

Customer Model Type	Martin Model No.	Martin Serial No.	Customer Serial No.	Type/Customer	Delivery Date	Contract Number	First Flight	Total Built	Engine(s)	Notes
-	162A	815	X-19168	Flying model/ Martin	-	-	12/3/37	1	One Martin-Chevrolet 4-333 4 cyl	Three-eighths scale flying "Tadpole Clipper" used to test water takeoffs and landings.
XPBM-1	162	795	0796	Patrol boat/Navy	9/7/39	55642	2/18/39	1	Two Wright R-2600-6's (1600 hp)	Used retractable floats. Dihedral was later added to the tailplane for stability.
XPBM-1A	162	(795)	(0796)	Experimental/ Navy	1941	55642	N/A	(1) modified	Two Wright R-2600-6's	Used in armament experiments by the Aircraft Armament Unit at Norfolk Naval Air Station.
PBM-1	162 "	816 818-836	1246 1248-1266	Patrol boat/Navy	3/26/41 "	58395 "	N/A N/A	1 19	Two Wright R-2600-6's	Most -1's went into service during 1941 with squadrons VP-55 (eventually VP-74) and VP-56, a transitional training unit. Later retrofitted with AN/APS-15 radar.
XPBM-2	162	817	1247	Experimental/ Navy	4/22/41	58395	N/A	1	Two Wright R-2600-6's	Identical to the -1, but with extra fuel capacity and provisions for catapult launching. Fuel capacity was also increased by 2115 gals.
PBM-3	162B "	2908-2911 2924-2951	6455-6458 6471-6498	Patrol boat/Navy	10/23/42 "	MXsa-LL76927	3/42 N/A	4 28	Two Wright R-2600-12's (1700 hp)	All -3's utilized fixed wing floats, power turrets, and lengthened engine nacelles (for added bomb capacity). Later all -3's converted to PBM-3R's.
XPBM-3E	162B	(2909)	(6456)	Experimental/ Navy	N/A	MXsa-LL76927	N/A	(1) modified	Two Wright R-2600-12's	Used for AN/APS-15 radar development.
PBM-3R	162B "	2912-2923 2952-2957	6459-6470 6499-6504	Transport/Navy	10/29/42 "	MXsa-LL76927	N/A N/A	12 6	Two Wright R-2600-12's	Transport version with strengthened floor, passenger seating, and removed armament.
PBM-3C	162C "	2958-3207 3208-3231	6505-6754 01650-01673	Patrol boat/Navy	7/31/43 "	MXsa-LL76927	N/A N/A	250 24	Two Wright R-2600-12's	Increased defensive armament (twin 0.50-in turret guns, rear and side gunner), improved crew protection, and added AN/APS-15 radar.

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XPBM-3D	162C	(3109)	(6656)	Experimental/ Navy	N/A	MXsa- LL76927	N/A	(1) modified	Two Wright R-2600-22's (1900 hp)	Prototype for -3D, utilizing upgraded engines and additional armament.
XPBM-3S	162C	(3146)	(6693)	Experimental/ Navy	N/A	MXsa- LL76927	N/A	(1) modified	Two Wright R-2600-12's	Prototype for -3S, although Navy still counted as PBM-3C.
PBM-3S	162C "	3232-3286 7896-7934	01674-01728 48125-48163	Anti-submarine patrol boat/Navy	9/8/43 "	MXsa- LL76927	N/A N/A	55 39	Two Wright R-2600-12's	Stripped for longer range, -3S's utilized fixed gun mounts and downgraded armament.
PBM-3D	162D " " "	7895 7935-7994 7995-8064 8067-8194	48124 48164-48223 45205-45274 45277-45404	Patrol boat/Navy	N/A 1/7/44 6/30/44 "	NOa (s) -174 and NOa (s) -2921	N/A N/A N/A N/A	1 60 70 128	Two Wright R-2600-22's	Utilized the Norden bombsight. Newer, stronger engines proved deficient as problems generated with faulty valve seating. Turrets were also reevaluated and changed.
PBM-4	162E	[5564-5793]	[N/A]	Patrol boat/Navy	-	MXsa- LL83844	-	[original contract for 230]	Two Wright R-3350's	Contract terminated by Navy on 4/5/43 in lieu of the Air Corps' B-29 production.
XPBM-5	162F	8065-8066	45275-45276	Experimental/ Navy	N/A	N/A	N/A	2	Two P&W R-2800-34's (2100 hp)	Used to evaluate new uprated engines and Hamilton Standard 3-bladed propellers.
PBM-5	162F " " " "	8195-8234 9735-10083 11285-11484 11485-11509 12095-13009	45405-45444 59000-59348 84590-84789 85136-85160 98602-98615	Patrol boat/Navy	8/12/44 N/A N/A N/A N/A	NOa (s) -174, -909, -4017, -4976	N/A N/A N/A N/A	40 349 200 25 14	Two P&W R-2800-22's	Incorporated the new Jet Assisted Take Off (JATO) bottles mounted on both sides of the aft fuselage. Later equipped with a compact AN/APS-31 radar system.
XPBM-5A	162G	10084	59349	Experimental/ Navy	N/A	NOa (s) -909	12/47	1	Two P&W R-2800-22's	Modified 389th production PBM- 5 with retractable tricycle landing gear.
PBM-5A	162G " " "	N/A N/A N/A (9989-9993)	122067-122086 122468-122471 122602-122613 (59253-59256)	Amphibian patrol boat/Navy	N/A N/A N/A N/A	NOa (s) -8451	N/A N/A N/A N/A	20 4 12 (4) mod	Two P&W R-2800-34's	Amphibian version. Four -5's eventually remodeled bringing total to 40 aircraft.

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## SPECIFICATIONS: 162A

<b>Description:</b>	Three-eighths scale flying model
<b>Engine:</b>	One 120 hp Martin-Chevrolet 4-333 belt-driven inverted 4-cylinder air-cooled engine
<b>Dimensions:</b>	Span: 43 ft 5.5 in; length: 28 ft 6 in; height: 5 ft 3 in
<b>Weights:</b>	1700 lb loaded
<b>Crew:</b>	1 (2 on early layout)
<b>Armament:</b>	None
<b>Performance:</b>	Maximum speed: 120 mph

## SPECIFICATIONS: PBM-3C / PBM-3R / PBM-3S / PBM-3D

<b>Description:</b>	Twin engine Navy patrol bomber flying boat
<b>Engine:</b>	PBM-3R/3C/3S: two 1700 hp Wright R-2600-12 Cyclones / PBM-3D: two 1900 hp Wright R-2600-22's
<b>Dimensions:</b>	Span: 118 ft 0 in; length: 79 ft 10 in; height: 28 ft 10 in; wing area: 1400 sq ft
<b>Weights:</b>	33,175 lb empty; 58,000 lb loaded
<b>Crew:</b>	7 to 10
<b>Armament:</b>	Eight 0.50-in machine guns; up to 8,000 lbs of bombs
<b>Performance:</b>	Maximum speed: 211 mph; cruising speed: 147 mph; service ceiling: 19,800 ft; range: 2,240 miles with 4,000 lb of bombs

## SPECIFICATIONS: XPBM-1 / XPBM-1A / PBM-1

<b>Description:</b>	Twin engine Navy patrol bomber/transport/cargo flying boat
<b>Engine:</b>	Two 1600 hp Wright R-2600-6 Cyclones
<b>Dimensions:</b>	Span: 118 ft 0 in; length: 77 ft 2 in; height: 27 ft 6 in; wing area: 1400 sq ft
<b>Weights:</b>	32,328 lb empty; 56,000 lb loaded
<b>Crew:</b>	7
<b>Armament:</b>	Five 0.50-in machine guns (2 turrets, 2 waist, 1 tunnel); 4000 lbs of bombs / XPBM-1A: 20mm cannon mounted in nose
<b>Performance:</b>	Maximum speed: 200 mph; cruising speed: 147 mph; service ceiling: 20,200 ft

## SPECIFICATIONS: PBM-5 / PBM-5A

<b>Description:</b>	Twin engine Navy patrol bomber flying boat / PBM-5A: amphibian Navy patrol bomber
<b>Engine:</b>	PBM-5: two 2100 hp Pratt & Whitney R-2800-22 Double Wasps / PBM-5A: two Pratt & Whitney R-2800-34's; provisions for four RATO or JATO bottles
<b>Dimensions:</b>	Span: 118 ft 0 in; length: 79 ft 10 in; height: 28 ft 10 in; wing area: 1400 sq ft
<b>Weights:</b>	58,000 lb loaded
<b>Crew:</b>	7 to 13
<b>Armament:</b>	Eight 0.50-in machine guns; 4000 lbs of bombs
<b>Performance:</b>	Maximum speed: 215 mph; cruising speed: 147 mph; service ceiling: 21,000 ft; range: 2,480 miles with 4,000 lb of bombs