

Preface

Air-sea rescue, which kept personnel losses to a minimum, preserved that element of military power most difficult to replace and bolstered the morale of all fighting men.

—U.S. *Naval Aviation in the Pacific*, issued by The Office of the Chief of Naval Operations, United States Navy, 1947.¹

The excellence of the air sea rescue – dumbo – service provided by Fleet Air Wing ONE has done much to foster high morale in the carrier and land based squadrons.

—Admiral William F. Halsey Jr., USN, commander, Third Fleet, 13 September 1945.²

Photo Preface-1



PBY-5 Catalina of VP-52, circa 1944. The squadron was transferred to Woendi Lagoon on 15 July 1944, where it conducted anti-submarine patrols and Dumbo air-sea rescue missions for downed flyers in support of the bombing of Woleai, Truk, and Yap islands. National Archives photograph #80-G-223133

At the outset of World War II, operating procedure for the rescue of pilots and aircrews was practically non-existent. But there were a number of safety devices which permitted pilots to survive the unexpected failure of their planes. Standard equipment included parachutes, inflatable life jackets (popularly known as “Mae Wests”), and rubber life rafts equipped with emergency survival and signaling gear. However, for the first half of 1942, often little or nothing could be done to recover pilots who had survived crashes, engine failure, or being shot down.³

Photo Preface-2



Lt. J. Thorvaldson, pilot from a RAAF Kittyhawk, poses with the rubber boat on which he floated down the Markham River to Nadzab, New Guinea, after he made a forced landing following a single dogfight with four Zeros, 2 October 1943. Australian War Memorial photograph 015902

A number of rescues were made as a result of individual initiative. Such occurred after the Battle of Midway, when PBV Catalinas picked up many pilots. This followed valuable contributions by the versatile

seaplanes during the battle, including locating the enemy and carrying out a bombing attack on Japanese shipping.⁴

Photo Preface-3



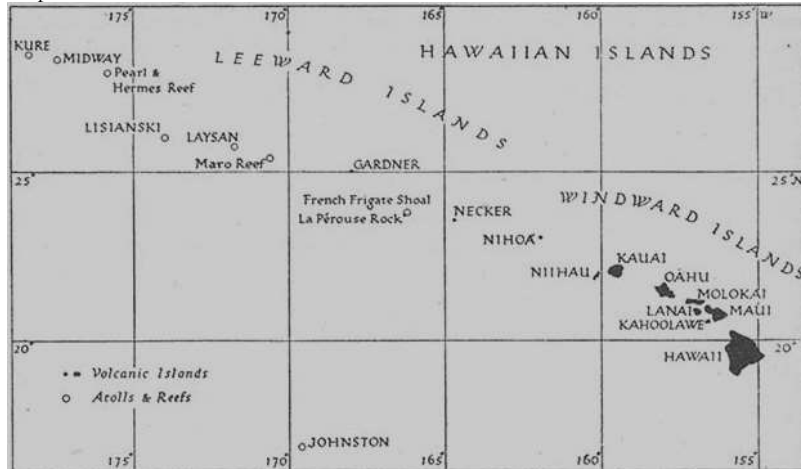
Oil painting by John Hamilton of the discovery, by a PBY, of part of the Japanese Fleet on 3 June 1942, setting the course for an American victory in the battle. Naval History and Heritage command accession #80-142-P

Photo Preface-4



Diorama by Norman Bel Geddes, depicting the torpedo attack made by four PBY-5As on the Japanese Midway Occupation Force during the night of 3-4 June 1942. The oiler *Akebono Maru* was hit during this attack, but was able to continue on her mission. National Archives photograph #80-G-701846

Map Preface-1



Hawaiian Islands

At this point in the war, there was a scarcity of tenders to provide refueling and other services for the seaplanes assigned to the Midway Defense Forces. Accordingly, four ex-tuna clippers, acquired by the Navy from the Portuguese fishing community in San Diego for use as patrol vessels, were positioned at outlying islands to serve as support ships. The *YP-284* (ex-*Endeavor*) was allocated to Lisianski, *YP-290* (ex-*Picaroto*) to Laysan, *YP-345* (ex-*Yankee*) to Gardner Pinnacles, and *YP-350* (ex-*Victoria*) to Necker. Also, two World War I vintage destroyers converted to seaplane tenders—*Thornton* (AVD-11) and *Ballard* (AVD-10)—were at French Frigate Shoals, located 761 miles to the southeast of Midway.⁵

Photo Preface-5



The wooden-hulled *YP-72* (ex-purse seiner *Cavalade*) patrolled fog-shrouded waters, and supported PBY Catalinas of Patrol Wing 4 carrying out searches for Japanese naval forces during the Aleutian Islands portion of the Battle of Midway. U.S. Navy Bureau of Ships photograph

CONSOLIDATED PB-Y-5 AND PB-Y-5A CATALINAS

The PB-Y-5 and 5A Catalina long-range maritime aircraft played an understated, but important role in World War II, providing Allied naval and air forces ground attack, anti-submarine warfare, reconnaissance, and air-sea rescue capabilities. In rare cases, these type aircraft were also employed as dive bombers. The PB-Y Catalina was used in the U.S. Navy and other services of the American military, and also in the air arms of Britain, Brazil, Australia, New Zealand, Canada, the Netherlands, and the Soviet Union. Additionally, squadrons of the RAF were manned exclusively by Norwegians who had escaped from their occupied land. (A Catalina of No. 333 squadron spotted Canadian Victoria Cross winner Hornell, whose story follows on page 9.) The locations at which the patrol aircraft were manufactured are identified in the table:

United States	Canada	Soviet Union
Buffalo, New York	Vickers of Canada,	Beriev's plants at Taganrog,
Norfolk, Virginia	Cartierville, Quebec	Rostov, and Oblast
New Orleans, Louisiana	Boeing of Canada,	
Philadelphia, Pennsylvania	Vancouver, BC	
San Diego, California ⁶		

Interestingly, in 1939, engineers at the Consolidated plant in San Diego, California, carefully appraised the PB-Y-4 Catalina and decided that the flying boat was outdated. (Following introduction of the XP3Y-1 in response to an order from the Navy for a monoplane patrol aircraft, Consolidated produced improved PB-Y-2, PB-Y-3 and PB-Y-4 models between 1936 and 1939.) Two months later, the plane was put back in production with the long sleek fuselages on the assembly line essentially those of its predecessor aircraft designed in 1934.⁷

The twin-engine, high-wing flying boat could take off from land or water. The PB-Y-5 model, produced from September 1940 to July 1943, was characterized by high-power engines, waist gun blisters, and a large "wet wing." This term refers to the wing skin serving as the fuel tank, with no need for separate fuel tanks or bladders to be inserted into areas between ribs and spars—a substantial weight-saving feature, but one that requires that every seam and rivet be sealed or gasketed.⁸

Improvements offered by the PB-Y-5A (October 1941-January 1945), included hydraulically-operated retractable tricycle landing gear for amphibious operation, a new tail gun position, replacement of the bow single gun position with an "eyeball" turret with twin .30-caliber machine guns, improved armor, and self-sealing fuel tanks. Later models were equipped with radar and MAD (Magnetic Anomaly

Detection) gear to greatly enhance their capabilities to locate enemy submarines.⁹

PBY-5 and 5A Catalinas were powered by two 1,200 hp Pratt & Whitney R-1830-92 engines. Improvements and upgrades made to the PBY-5A resulted in increased aircraft weight, and associated slightly slower top speed and shorter range than the PBY-5. Crew size for the two aircraft varied between seven and nine personnel. The crew of a USN PBY-5A typically consisted of a pilot, co-pilot, radioman, navigator, flight mechanic, bow turret gunner, two waist gunners (one each for the port and starboard blisters), and a ventral gunner. Some positions could be combined. For example, Royal Australian Air Force Catalina crews utilized a Wireless Air Gunner position, incorporating both wireless (radio) operator and gunner duties.¹⁰

Aircraft characteristics and armament of the PBY-5A Catalina, which had a manufacturer's specified maximum speed of 196 mph, cruise speed of 124 mph, range of 2,520 miles, and maximum service ceiling of 15,800 feet, are provided in the table. The height listed is for an aircraft on wheels, and the maximum weight for a takeoff on wheels.

PBY-5A Catalina Characteristics

Dimensions	Armament
Length: 63 ft. 10 in.	Two .30-caliber machine guns in nose turret
Wingspan: 104 ft.	Two .50-caliber machine guns (one in each waist blister)
Height: 21 ft. 1 in.	One .30-caliber machine gun in ventral hatch at tail
Empty weight: 20,910 lbs	2,000 pounds of bombs and two torpedoes,
Max weight: 35,420 lbs	or four 325-lb depth charges ¹¹

“DUMBO” MONIKER

Organized rescue operations in the Pacific were first developed in the Solomon Islands Campaign. PBY Catalinas stripped of all heavy non-essential gear, and known with the adopted name “Dumbos,” were dispatched to recover flyers who had been shot down. Initially, this was incidental to primary duties (such as long-range searches, anti-submarine patrols, and night bombing missions), assigned as a need for it arose. From this unstructured beginning, it evolved into a standard procedure of having a Dumbo circling near the scene of an air raid. Positions were reported as planes went down, and the Catalina, often protected by aircraft from the strike, recovered those in the water. Rescue crews became renowned for their bravery in landing in positions exposed to enemy shore battery fire.¹²

The nickname “Dumbo” was originally coined in reference to a Walt Disney character, the flying elephant (the protagonist of the 1941 Disney film of the same name), for land-based bomber aircraft that searched for downed airmen in the oceans. The planes assigned such duties got their name from their bulky appearance, because they had a large lifeboat attached beneath their fuselage, used for the purpose of the air-sea rescue. The aircraft included the American B-17, and British counterparts such as the Lancaster and Vickers Warwick. The appearance of a lifeboat under a bomber made the aircraft look unwieldy—like a flying elephant. The Dumbo aircraft searched for downed air crews in the water, and in some cases, aided the survivors of sunken ships. When such were sighted, the aircraft would fly in low and drop the boat.¹³

Photo Preface-6



An airborne lifeboat fitted to a Warwick aircraft of the RAF Air-Sea Rescue service, England, circa November 1944.

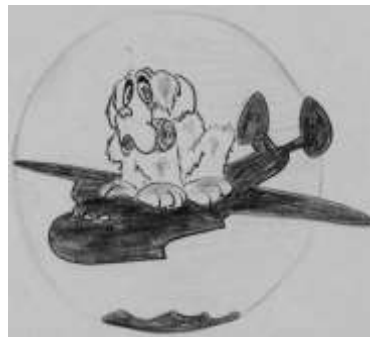
Australian War Memorial photograph SUK13115

“Dumbo” later became synonymous with ocean rescue by flying boats, although Cats (Catalinas) and other such aircraft did not carry ponderous lifeboats. Instead, they landed near survivors and recovered them, or dropped inflatable life rafts if alighting on the water was impossible. The difference between “Cat” and “Dumbo” set-ups of the Catalina, was that Dumbos were stripped of bombs or torpedoes they might otherwise carry, and retained only machine guns for self-protection.¹⁴

Dumbo operations were often difficult, and sometimes dangerous as well, owing to challenges presented by angry seas or combat action. When a PBY had to land on water to recover survivors and the enemy forces that had downed their aircraft or sunk their vessel were still present, both the survivors and the PBY were in peril. Catalinas often performed other missions as well, and this type plane carried out combat and scouting roles in all theaters. As an example, RCAF Flight Lieutenant Daniel E. Hornell posthumously won the Victoria Cross for attacking and sinking a German U-boat in a Canso (Canadian variant of PBY-5A Catalina) in June 1944.¹⁵

RCAF Squadron Leader Leonard Birchall piloting a Catalina flying boat had become known as the “Saviour of Ceylon” two years earlier, by foiling a Japanese attack on a Royal Navy force at Ceylon (today Sri Lanka). After identifying that a Japanese naval fleet was clearly on its way to attack Ceylon, and reporting this imminent danger, he was shot down by Japanese fighter aircraft from a carrier—a prelude to three years of imprisonment.¹⁶

ESTABLISHMENT OF RESCUE SQUADRONS



Rescue Squadron VH-1 plaque, depicting the Disney-character Dumbo, and a sketch of VH-4's squadron insignia

Air-sea rescue on the open ocean, particularly in the Central Pacific, was challenging. Catalinas were employed extensively to search for survivors, to drop emergency gear, and to circle overhead until a ship could arrive. They also made rescues in passable conditions and in protected lagoons. Only the most skillful pilots could land and take off again in enormous swells. Because of the high risks of such operations, it became standard practice for PBYS to avoid open-sea rescues unless conditions were favorable, and there were no other means available.¹⁷

Meanwhile, the growing aircraft carrier strength in the Pacific, and associated increasing number of planes employed for strikes, made the problem more acute. In autumn 1943, it was decided to establish rescue squadrons, which would be specially trained and equipped for rescue work. Catalinas paved the way in the Solomons in 1942-1943, where they established a fine record. In 1944, USN rescue squadrons were organized to meet the war's growing demands.¹⁸

Commander Air Force, U.S. Pacific Fleet, proposed six VH squadrons, each comprised of six Douglas R4D-6 land planes for the evacuation of wounded, and six PBM-3R Mariner seaplanes for the rescue of survivors of downed aircraft or sunken vessels. However, once established, there was such a wide variance in duties performed by these two types of aircraft that difficulties arose in the administration, operation, and maintenance of their squadrons. On 12 December 1944, the land planes were formed into separate evacuation squadrons (VE). The original rescue squadrons retained six seaplanes apiece.¹⁹

Photo Preface-7



Left: Douglas R4D-6 aircraft of the Naval Air Transport Service at Alaskan airfield, circa 1945. Right: A PBM Mariner rescues LTJG J. M. Denison, shot down while operating from the escort carrier USS *Marcus Island* (CVE-77) in 1945. National Archives photograph #80-G-K-5863, and USS *Marcus Island* (CVE-77) 1944-1945 cruise book photograph

The rescue squadrons equipped with PBM-3R Mariners (modified to carry newly developed rescue gear, and with pilots and crews given special training in the techniques of air-sea rescue) were able to carry out rescues under conditions impossible for Catalinas. During the Okinawa invasion, a 6-plane rescue squadron made 76 landings and rescued 183 survivors of all services.²⁰

The commissioning dates of the squadrons, and the identities of their commanding officers follow.

U.S. Navy VH Rescue Squadrons		
Sqdn	Comm	Commanding Officer(s)
VH-1	15 Apr 44	LCDR J. D. Adam, LCDR Russell R. Barrett Jr.
VH-2	1 Jul 44	LCDR Clarence A. Keller, LCDR Harold A. Wells
VH-3	1 Aug 44	LCDR William D. Bonvillian
VH-4	1 Sep 44	LT Forrest H. Norvell Jr.
VH-5	11 Sep 44	LCDR M. E. Brown
VH-6	20 Sep 44	LCDR Lealand O. Ebey ²¹

VH Squadrons were employed only in areas where the intensity of operations made calls upon their services frequent; elsewhere in the Pacific, patrol plane squadrons continued to provide Dumbos as an adjunct to their other duties. These included the Royal New Zealand Air Force's No. 6 (Flying Boat) Squadron.²²

ROYAL NEW ZEALAND AIR FORCE (RNZAF)

The Royal New Zealand Air Force was established on 1 April 1937, when the Air Force Act and the Air Department Act were passed. The first created the Air Force as a separate branch of the Armed Services, and the second instituted a new department of state for administration of aviation. The Air Department was responsible for the administration of both service and civil aviation.²³

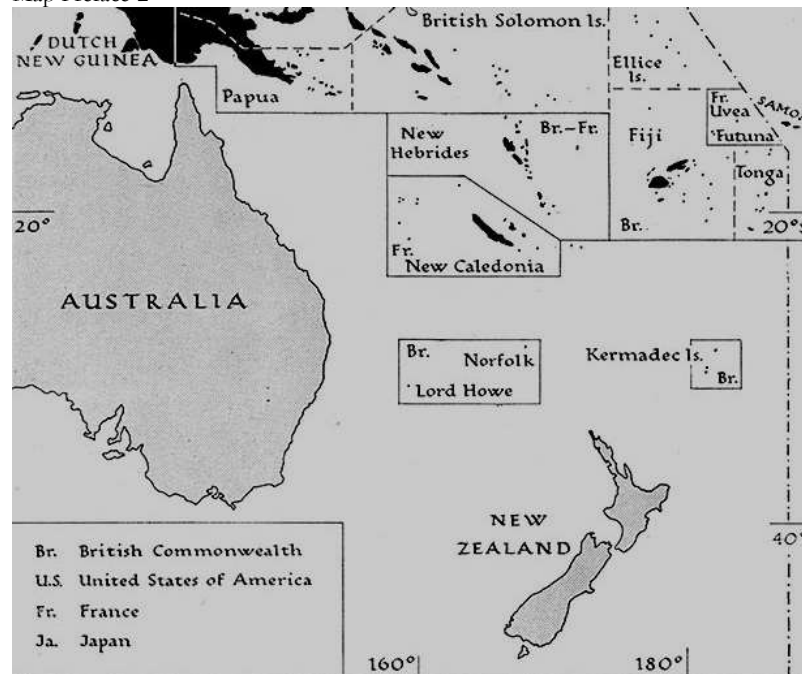
In April 1939 with war looming in Europe, a Pacific Defense Conference was held in Wellington, attended by representatives of the United Kingdom, Australian and New Zealand Governments. It was discussed that, should the Japanese attempt an invasion of Australia or New Zealand, it would be necessary for them to secure bases in the South Pacific and, accordingly, steps should be taken immediately to ensure the protection of potential bases against Japanese attack. At the conference, it was determined that New Zealand would take on this responsibility for territories formerly administered by Britain.²⁴

The most important point in the South Pacific from New Zealand's perspective was the Fijian island chain. The harbor facilities at Suva on the southeast coast of the island of Viti Levu, and supply of fuel there

made it one of the most important naval fueling bases in the South Pacific. Also, it had a communications station, which would become increasingly important as a center of air communications. Additionally, the Fijian islands produced plentiful food, which would enable the Japanese, if they were to successfully invade, to maintain a large force there, capable of easily attacking trans-Pacific shipping.²⁵

To help prevent this possibility, the conference recommended several actions: New Zealand should immediately construct two aircraft landing facilities on Viti Levu, one near Suva and another on the island's northwestern coast; part of New Zealand's reserves of fuel, bombs, and ammunition should be held in Fiji; a survey should be made of Tonga to the east, to determine the feasibility of establishing landing facilities there for the Royal New Zealand Air Force; and finally, in time of war, New Zealand should carry out reconnaissance on a line along the New Hebrides-Fiji-Tonga island chains.²⁶

Map Preface-2



Political control of the Western Pacific islands in 1939 (The lines separating the various groups do not necessarily indicate extent of sovereignty.)

A few hours after the Japanese attacked the U.S. naval base at Pearl Harbor on 7 December, New Zealand declared war on Japan. (It was the 8th in New Zealand across the International Date Line). In addition to protection of shipping in New Zealand waters, the RNZAF also had its new responsibility to protect Fiji. Work began on an aerodrome at Nandi, near Lautoka on the west coast of Viti Levu, and an air strip at Nausori, fifteen miles from Suva on the east coast. At the same time, sites for an aerodrome and seaplane alighting area were surveyed at Tonga, followed by construction of the aerodrome.²⁷

In 1942, to stem the tide of Japanese aggression in the South and Southwest Pacific, the Allies developed a chain of island bases stretching from Northern Australia through New Caledonia, the New Hebrides, Fiji and Tonga to Samoa. These were intended to serve as a protection for Australia and New Zealand, and also guard the vital supply line to Australia. Shipping bound from Bora Bora in French Polynesia to Australia had to pass through or close to the Cook Islands, then the Samoa, Tonga and Fiji groups, and finally, a thousand miles from the Australian coast, the New Hebrides group, and New Caledonia.²⁸

These bases would later provide important supply and repair support as the Allied forces moved up through the Solomon Islands toward the Japanese home islands.²⁹

RNZAF NO. 6 (FLYING BOAT) SQUADRON

Long-range patrols and reconnaissance flights were carried out from Fiji by PBY Catalinas of Royal New Zealand Air Force No. 6 Squadron. This squadron was commissioned at Fiji on 25 May 1943. Its first Catalina had been delivered at Lauthala Bay (to the east of Suva on the southern coast of Viti Levu Island), in April, by an American crew who flew it there from San Diego, California. The squadron's full allowance of PBYs was twenty-four aircraft.³⁰

Photo Preface-8



Royal New Zealand Air Force No. 6 (Flying Boat) Squadron group photograph.
Courtesy of Jenny Scott

No. 6 Flying Boat Squadron: PBY-5 Catalinas
Formed in Fiji on 25 May 1943
Disbanded on 9 September 1945

Commanding Officers

Wg Cr George Gatonby Stead	May-October 1943
Wg Cr I. A. Scott	October 1943-August 1944
Wg Cr John R. S. Agar	August 1944-June 1945
Wg Cr K. G. Smith	June-September 1945

Duty Assignments

Lauthala Bay, Viti Levu, Fiji Islands	March-October 1943
Flight at Nukualofa, Tongatapu Island	August-November 1943
Espiritu Santo, New Hebrides Islands	October-December 1943
Halavo Bay, Florida Island, Solomons	December 1943-August 1945 ³¹

While most of No. 6 Squadron operated from the Lauthala Bay seaplane base, carrying out ship escort, submarine search, and air-sea rescue missions, a Flight (detachment) of six aircraft and crews was sent to Tonga. Stationed at the U.S. naval base at Nukualofa, it was responsible for the protection of shipping in Tongan waters.³²

The squadron left Fiji at the beginning of October, 1943, when it was posted to Espiritu Santo. Based aboard the seaplane tender USS *Wright* in Second Channel, its PBYs searched for enemy ships and submarines to the west of "Santo." The flight based at Tonga rejoined the squadron in November.³³

Just before Christmas in 1943, the entire unit moved forward to Halavo Bay on Florida Island, near Guadalcanal. On 9 February 1944, two aircraft and crews were sent to the Treasury Islands, to be based with the seaplane tender USS *Coos Bay*. The main body of No. 6 Squadron operated from Halvao Bay for the remainder of the war, with detached units at various times to Funafuti, Ellice Islands; Emirau, Bismarck Archipelago; Los Negros, Admiralty Islands; Green Island, Solomon Islands; and Jacquinot Bay, New Britain.³⁴

ROYAL AUSTRALIAN AIR FORCE AIR-SEA RESCUE

The RAAF's first CSAR (Combat Search and Rescue) capability in World War II was provided by No. 1 Rescue Flight, located at Goodenough Island (in Milne Bay off the eastern tip of Papua), in November 1942, with detachments at various Allied bases around New Guinea. This unit (later renamed No. 1 Rescue and Communication Squadron, and eventually No. 8 Communications Unit) used Walrus, Dornier Do-24 and Catalina flying boats in the CSAR role.³⁵

The Royal Australian Navy had previous experience with the Supermarine Walrus, a single-engine amphibian reconnaissance aircraft

originally termed the Supermarine Seagull V, and known throughout the Royal Australian Navy as the “Pusser’s Duck.” The aircraft was designed to be catapulted from large Navy warships, for use in reconnaissance and gunnery spotting (observing the fall of gun rounds, and advising corrections by radio communications). Walrus obtained by the RAAF were used for coastal patrols and air-sea rescue tasks until they were phased out of service in 1946.³⁶

From December 1944, the number of units specializing in CSAR greatly increased. Air-Sea Rescue Flights were formed at Darwin and Cairns Australia; Madang, New Guinea; and Morotai Island, Netherlands East Indies. These Flights were equipped with PBY Catalina flying boats for search and rescue operations, often involving the recovery of aircrew stranded in enemy territory. Some of the units also had motor launches that could be used to recover personnel when alighting on the water was not possible. Catalinas also transported medical supplies to remote Army units as well as providing courier runs throughout the region.³⁷

Photo Preface-9



A Supermarine Walrus amphibian aircraft of the Air-Sea Rescue Service on a landing ground in North Africa, circa 1942.
Australian War Memorial photograph MED0032

Summary information about the RAAF air-rescue flights follow: specifically, names of their commanding officers and locations at which the units were based. Several members of Flights 112 and 113 earned awards for valour, including the Distinguished Flying Cross,

Distinguished Flying Medal, Air Force Cross, and Mention in Despatches. The identities of these individuals, and Royal New Zealand Air Force counterparts similarly honoured are provided in Appendix A.



**Distinguished
Flying Cross**



**Distinguished
Flying Medal**



Air Force Cross



**Mention in
Despatches**

Photo Preface-10



Madang, New Guinea, January 1945. Flight Lieutenant Ian James Lock Wood in the cockpit of a Catalina, of No. 111 Air-Sea Rescue Flight. While previously assigned to No. 8 Communications Unit, Wood had received an immediate award of the Distinguished Flying Cross for the dramatic rescue of six Americans off the coast near Boram in northeast New Guinea.

Australian War Memorial photograph OG2028

No. 111 Air-Sea Rescue Flight
(Formed at Madang on 13 December 1944 under Northern Command,
which became Northern Area Command from December 1944;
disbanded on 24 January 1947.)

Commanding Officers

FL Ian James Lock Wood (DFC)	13 December 1944
FL C. W. Miller (DFM)	6 January 1945
FL G. H. Priest	1 September 1945
FL B. Parker	1 June 1946

Duty Assignments

Madang, Papua New Guinea	13 December 1944
Port Moresby, Papua New Guinea	18 March 1946

112 Air-Sea Rescue Flight
(Formed at Darwin on 23 December 1944 under North Western Area
Command. Final Unit History entry on 16 September 1947.)

Commanding Officers

SL Kenneth Arthur Crisp	23 December 1944
FL Robin Morton Corrie	20 March 1945
FL L. M. Cameron	1 September 1945
FL R. J. Rankin	21 November 1945
FL A. E. Delahunty	15 May 1946
SL F. S. Robey	1 April 1947
SL C. A. Voges	26 June 1947

Duty Assignments

Darwin, Australia	23 December 1944
-------------------	------------------

No. 113 Air-Sea Rescue Flight
(Formed at Cairns on 10 January 1945;
based at Morotai from 11 March through the
duration of the war under First Tactical Air Force;
final unit history entry on 31 January 1946.)

Commanding Officers

FL W. G. White	10 January 1945
FL Walter Raymond Mills	17 September 1945
FL E. M. Allison	29 November 1945

Duty Assignments

Cairns, Queensland, Australia	10 January 1945
Townsville, Queensland, Australia	20 February 1945
Morotai, Molucca Islands	11 March 1945
Labuan Island, Borneo	29 September 1945
Rathmines, New South Wales, Australia	28 January 1946

The most lauded aircrew was that of Flight Lieutenant Walter Mills of No. 113 Air-Rescue Flight, which had some interesting experiences, beyond those associated with typical air-sea activities. On one occasion, after delivering supplies to Kapit, Borneo, PBV Catalina A24-104

received tasking to support an operation by P-40 Warhawks. The Penghula (tribal chief) of the Kapit area was aboard the Catalina. (Presumably, to serve as an airborne guide to help them reach their destination.) By the time the seaplane reached the target area, the fighter/ground-attack aircraft had thoroughly strafed and burned the barracks at a Japanese base, resulting in many enemy casualties. The chieftain was wild with excitement and wanted to land in order to add more skulls to his collection. As the PBY was departing, Flight Lieutenant Walter Mills and the others aboard could see dozens of prahus (boats) full of headhunters converging on the area.³⁸

After occupying Borneo, the Japanese had targeted the Kapit District, in southern Borneo. Bordered by the Rajang River, this area was home to many Dyak (who practiced headhunting). The ill-treatment spurred natives to join with the allies against a common enemy. Trained by American and Australian military leaders in guerrilla warfare in the jungle, the indigenous fighters in ensuing years captured or killed 1,500 Japanese and provided vital intelligence about enemy-held oil fields.³⁹

No. 114 Air-Sea Rescue Flight
(Formed at Cairns on 18 July 1945 under North Eastern Area
Command; ceased to function on 1 October 1947.)

Commanding Officers

SL G. M. Mason	18 July 1945
FL R. T. Clark	1 July 1946
FL R. J. Rankin	10 February 1947

Duty Assignments

Cairns, Queensland, Australia	18 July 1945
Garbutt, Queensland, Australia	September 1946

115 Air-Sea Rescue Flight
(Formed at Morotai on 16 July 1945 under 11 Group,
replacing 113 which moved to Labuan;
disbanded on 28 March 1946.)
































Commanding Officers

FL Geoffrey Francis Gregerson	16 July 1945
-------------------------------	--------------

Duty Assignments

Morotai, Molucca Islands	18 July 1945
Detachment at Balikpapan, Borneo	
Detachment at Balikpapan discontinued	mid-October 1945
1 plane detachment at Biak, Papua New Guinea	24 October 1945
Detachment at Biak discontinued	22 November 1945

Before leaving this preview of the Royal New Zealand Air Force, and No. 6 Squadron, some readers might find a comparison of USN, RNZAF, and RAAF officer ranks in World War II useful.

U.S. Navy		Royal Australian Air Force		Royal New Zealand Air Force	
Fleet Admiral FADM (O-11)		Marshal of the Royal Australian Air Force MRAAF		No equivalent	
Admiral ADM (O-10)		Air Chief Marshal ACM (O-10)		No equivalent	
Vice Admiral VADM (O-9)		Air Marshal AM (O-9)		Air Marshal AM (OF-9)	
Rear Admiral RADM (O-8)		Air Vice-Marshal AVM (O-8)		Air Vice-Marshal AVM (OF-8)	
Commodore CDRE (O-7)		Air Commodore AC (O-7)		Air Commodore AC (OF-7)	
Captain CAPT (O-6)		Group Captain GC (O-6)		Group Captain GC (OF-6)	
Commander CDR (O-5)		Wing Commander Wg Cr (O-5)		Wing Commander Wg Cr (OF-5)	
Lieutenant Commander LCDR (O-4)		Squadron Leader SL (O-4)		Squadron Leader SL (OF-4)	
Lieutenant LT (O-3)		Flight Lieutenant FL (O-3)		Flight Lieutenant FL (OF-3)	
Lieutenant (junior grade) LTJG (O-2)		Flying Officer FO (O-2)		Flying Officer FO (OF-2)	
Ensign ENS (O-1)		Pilot Officer PO (O-1)		Pilot Officer PO (OF-1)	

The ranks of Fleet Admiral and Commodore no longer exist in the U.S. Navy. The last fleet admirals were in World War II, and there were only four; Chester W. Nimitz, William D. Leahy, Ernest J. King, and William F. Halsey Jr. Commodore was a command rank in the Navy from 1862 to 1899. It was reestablished on 9 April 1943 for war service, and 147 officers held it as a temporary rank. After the war, the flag rank structure reverted to its prewar form. Navy captains promoted to flag rank jumped directly to two stars. There were no O-7 (one-star

admirals. This changed in 1982, with the introduction of commodore admiral. This title was changed to rear admiral (lower half) after eleven months, and the latter convention continues today.

It is important to highlight that several variants in the abbreviations of military rank are used throughout the book. This is because, in addition to those identified on the previous page for the U.S. Navy, and Royal Australian and Royal New Zealand Air Forces, there are also references to Royal Navy, and U.S. Army Air Force and U.S. Marine Corps ranks. Those for the Royal Navy are only associated with a small portion of the book devoted to the British Pacific Fleet, while those of the USAAF and USMC pertain mostly to the identities of survivors.

AFLOAT SEAPLANE BASES

Photo Preface-11



Large seaplane tender *Salisbury Sound* (AV-13) tending P5M-2 Marlin anti-submarine patrol seaplanes at Tsugen Jima, Japan, in March 1957.
Painting by Richard DeRosset

The valuable Dumbo contribution of RNZAF No. 6 Squadron, which included the recovery of seventy-nine survivors (identified in Appendix B) of downed aircraft and sunken vessels, was but part of a much larger role of patrol aircraft and seaplane tenders in the war.

The U.S. Navy's sixty-seven seaplane tenders refueled, rearmed, and repaired the "eyes of the fleet," its scout planes and patrol planes. Later in the war, this included patrol bombers. The ships could function

in any sizeable body of protected water where their tended aircraft could land and take off. (It is important to note that only a few tenders supported seaplanes wholly devoted to Dumbo operations, and generally only for certain periods of time. The squadrons assigned to most tenders carried out many missions, including long-range search, anti-submarine, and strike operations, and Dumbos, only as specifically tasked, or when a situation arose requiring air-sea rescue.)

Tenders were particularly valuable in advance areas which lacked facilities for land-based reconnaissance aircraft. The bulk of the Navy's seaplane tenders served in the Pacific Theater, due to the scarcity of existing airstrips or airfields across its oceanic vastness. Of the 109 battle stars collectively earned by tenders during the war, only six of them were outside the Asiatic-Pacific Theater.⁴⁰

As General MacArthur drove up through Papua-New Guinea, Admiral Halsey through the Solomon Islands, and Admiral Spruance through the Central Pacific toward the Japanese home islands, tenders supported the assault forces. Their aircraft scouted for Japanese naval forces, and carried out attacks on enemy ships and shore targets as opportunities presented themselves. Once Naval construction battalion personnel ("Seabees") had built airstrips and supporting facilities in captured areas to host land-based fighter and attack aircraft, the seaplane tenders moved forward to new areas, repeating this cycle.⁴¹

These offensive operations are described in my book, *Eyes of the Fleet: The U.S. Navy's Seaplane Tenders and Patrol Aircraft in World War II*, a companion to this one.



As recounted in *Eyes of the Fleet*, cloaked by jungle foliage to escape detection, the unheralded seaplane tenders operated ahead of the Fleet, like the Navy’s famed PT boats. The Japanese were keen to destroy the scouts and their floating bases, and seaplane tenders often lived a furtive existence, particularly early in the war. The PBY Catalinas and later PBM Mariners they tended combed the seaways for Japanese forces and carried out bombing, depth charge, and torpedo attacks on enemy ships and submarines. Their nighttime anti-shipping missions were dangerous and daytime combat operations even more so, when encounters with more maneuverable and heavily-armed fighters necessitated hiding in clouds to survive.

Seaplanes in forward areas where there were no aviation facilities ashore, were wholly dependent on tenders and the seadromes they maintained. In simple terms, a seadrome was a sheltered body of water, typically a bay or harbor, on which planes could land and take off, refuel, rearm, and make up to mooring buoys when not in flight. Because of their close association and intertwined dependency, the tenders’ stories are inextricably linked to those of the aircraft they serviced. Among the Navy’s oldest tenders were two classes of converted World War I vintage minesweepers and “four-piper, flush-deck” destroyers:

Ex *Lapwing*-class Minesweepers, 187 feet, 1,350 tons

<i>Lapwing</i> AVP-1 (ex AM-1)	<i>Avocet</i> AVP-4 (ex AM-19)	<i>Swan</i> AVP-7 (ex AM-34)
<i>Heron</i> AVP-2 (ex AM-10)	<i>Teal</i> AVP-5 (ex AM-23)	<i>Gannet</i> AVP-8 (ex AM-41)
<i>Thrush</i> AVP-3 (ex AM-18)	<i>Pelican</i> AVP-6 (ex AM-27)	<i>Sandpiper</i> AVP-9 (ex AM-51) ⁴²

Photo Preface-12



Small seaplane tender *Avocet* (AVP-4) carrying a Curtiss SOC Seagull scout biplane. U.S. Navy Photograph 1 Hanson Place Brooklyn, New York

I Preface

Photo Preface-13



Destroyer seaplane tender *Osmond Ingram* (AVD-9) underway off Norfolk Naval Shipyard, Portsmouth, Virginia, on 10 July 1943.

U.S. Naval History and Heritage Command Photograph # NH 42922

Former “Flush Deck” Destroyers, 314 feet, 1,215 tons

<i>Childs</i> AVD-1 (ex DD-241, ex AVP-14)	<i>Goldsborough</i> AVD-5 (ex DD- 188, ex AVP-18, later APD-32)	<i>Osmond Ingram</i> AVD-9 (ex DD- 255, later APD- 35)	<i>Greene</i> AVD-13 (ex DD-266, later APD-36)
<i>Williamson</i> AVD-2 (ex DD-244, ex AVP-15)	<i>Hulbert</i> AVD-6 (ex DD-342, ex AVP- 19)	<i>Ballard</i> AVD-10 (ex DD-267)	<i>McFarland</i> AVD- 14 (ex DD-237)
<i>George E. Badger</i> AVD-3 (ex DD- 196, ex AVP-16, later APD-33)	<i>William B. Preston</i> AVD-7 (ex DD- 344, ex AVP-20)	<i>Thornton</i> AVD-11 (ex DD-270)	
<i>Clemson</i> AVD-4 (ex DD-186, ex AVP-17, later APD-31) ⁴³	<i>Belknap</i> AVD-8 (ex DD-251, later APD-34)	<i>Gillis</i> AVD-12 (ex DD-260)	

Beginning in 1943, as new, purpose-built *Barnegat*-class small seaplane tenders began to replace them, these ex-destroyers served in other roles including convoy escort; anti-submarine warfare; and local patrol, plane guard, and shakedown support for escort carriers. The newly constructed tenders included the *Coos Bay*, previously mentioned as supporting New Zealand’s No. 6 flying boat squadron.⁴⁴

Barnegat-class Small Seaplane Tenders, 311 feet, 2,750 tons

<i>Barnegat</i> (AVP-10)	<i>San Pablo</i> (AVP-30)	<i>Floyds Bay</i> (AVP-40)
<i>Biscayne</i> (AVP-11)	<i>Unimak</i> (AVP-31)	<i>Greenwich Bay</i> (AVP-41)
<i>Casco</i> (AVP-12)	<i>Yakutat</i> (AVP-32)	<i>Onslow</i> (AVP-48)
<i>Mackinac</i> (AVP-13)	<i>Barataria</i> (AVP-33)	<i>Orca</i> (AVP-49)
<i>Humboldt</i> (AVP-21)	<i>Bering Strait</i> (AVP-34)	<i>Rebooth</i> (AVP-50)
<i>Matagorda</i> (AVP-22)	<i>Castle Rock</i> (AVP-35)	<i>San Carlos</i> (AVP-51)
<i>Absecon</i> (AVP-23)	<i>Cook Inlet</i> (AVP-36)	<i>Shelikof</i> (AVP-52)
<i>Chincoteague</i> (AVP-24)	<i>Corson</i> (AVP-37)	<i>Suisun</i> (AVP-53)
<i>Coos Bay</i> (AVP-25)	<i>Duxbury Bay</i> (AVP-38)	<i>Timbalier</i> (AVP-54)
<i>Half Moon</i> (AVP-26)	<i>Gardiners Bay</i> (AVP-39)	<i>Valcour</i> (AVP-55)
<i>Rockaway</i> (AVP-29) ⁴⁵		

Fifteen large seaplane tenders served during World War II. Although designated seaplane tenders, they were often referred to as “large seaplane tenders” or “heavy seaplane tenders” because of their size. A converted merchant ship and a Navy collier were the first two of these tenders. The *Wright* had been laid down in the builder’s yard as a Hog Island type “B” cargo vessel, and was later fitted out as a lighter-than-air aircraft tender and commissioned *Wright* (AZ-1) on 16 December 1921. She was reclassified a heavier-than-air aircraft tender (AV-1) on 2 December 1926.⁴⁶

Photo Preface-14



USS *Wright* (AV-1) under way, location and date unknown.
Naval History and Heritage Command photograph # UA 475.19

Langley had been commissioned on 7 April 1913 as the collier *Jupiter*. Following conversion to the Navy’s first aircraft carrier in 1920, she was renamed *Langley*. In 1937 the Navy converted her to a seaplane tender (AV-3). *Langley* was irreparably damaged by Japanese aircraft bombs

south of Java in the Dutch East Indies, on 27 February 1942, and was sunk by the destroyer *Whipple* (DD-217) to avoid capture or salvage by the enemy.⁴⁷

Large Seaplane Tenders No Name Class

Wright (AV-1) 448-feet, 12,142 tons | *Langley* (AV-3) 542-feet, 19,360 tons

***Curtiss*-class, 527-feet, 13,880 tons**

Curtiss (AV-4) | *Albemarle* (AV-5)

***Currituck*-class: 541-feet, 14,300 tons**

Currituck (AV-7) | *Norton Sound* (AV-11) | *Pine Island* (AV-12) | *Salisbury Sound* (AV-13)

***Tangier*-class: 492-feet, 8,950 tons**

Tangier (AV-8) | *Pocomoke* (AV-9) | *Chandeleur* (AV-10)

***Kenneth Whiting*-class: 492-feet, 8,000 tons**

Kenneth Whiting (AV-14) | *Hamlin* (AV-15) | *St. George* (AV-16) | *Cumberland Sound* (AV-17)⁴⁸

Although predominantly in the Pacific, U.S. Navy seaplane tenders operated in every theater during World War II. The activities of tenders and patrol aircraft along the east coast of South American and in the narrows of the Atlantic between Brazil and west Africa, are described in my book *Ingram's Fourth Fleet*.



In the Pacific, seaplane tenders earned their first battle stars at Pearl Harbor, and during unsuccessful defenses of the Philippine Islands and the Java Sea. As combat spread across the Pacific, stars were won in the Aleutian Islands and far to the south-southwest in the Solomons.

Tenders also earned battle stars in the Santa Cruz, Gilbert, New Georgia, Bismarck, Western Caroline, and Marshall islands. More stars were garnered in Western New Guinea, and at Saipan, at Leyte, and Luzon in the Philippines and, as war drew nearer an end, at Iwo Jima and Okinawa. The chart on the following two pages show the advance of Allied forces across the Pacific toward Japan, between 7 August 1942 and 1 March 1944, and from 1 March 1944 to 1 March 1945.⁴⁹

COMBINED RESCUE OPERATIONS

Because fast-carrier operations during the latter stages of the war were generally deep in enemy waters, the only rescue facilities were seaplanes carried aboard battleships and carriers, the ships of the task force itself, and submarines. Lifeguard submarines were positioned at key points to rescue flyers forced down. In March 1944, the submarine USS *Tang* (SS-306) recovered twenty-two flyers off Truk, which resulted in her second war patrol being cut short. This was described by Motor Machinist's Mate Clayton Decker:

We received a message to rescue a bunch of Navy carrier pilots who had been shot down during the battle of Truk Atoll. We pulled 22 flyers out of the water; they weren't hurt physically. We had a crew of 87 and now we had an extra 22 to accommodate—talk about “hot bunking!” Admiral [William F.] Halsey wanted all of those flyers back in service as fast as he could get them, so we went back to Pearl Harbor. We did not get a star in our combat pin for that patrol, but Admiral Halsey gave every member of the *Tang* crew the Navy Air Medal.⁵⁰

In the vicinity of carrier task force operations, destroyers assigned to screening and picket duties performed rescues. Air strikes on the enemy fleet during the Battle of the Philippine Sea cost twenty planes shot down, and another fifty-five forced by lack of fuel to ditch on the water before reaching their carriers. Of approximately 180 personnel involved, all but 16 pilots and 22 aircrewmen were recovered, most by destroyers before dawn.⁵¹

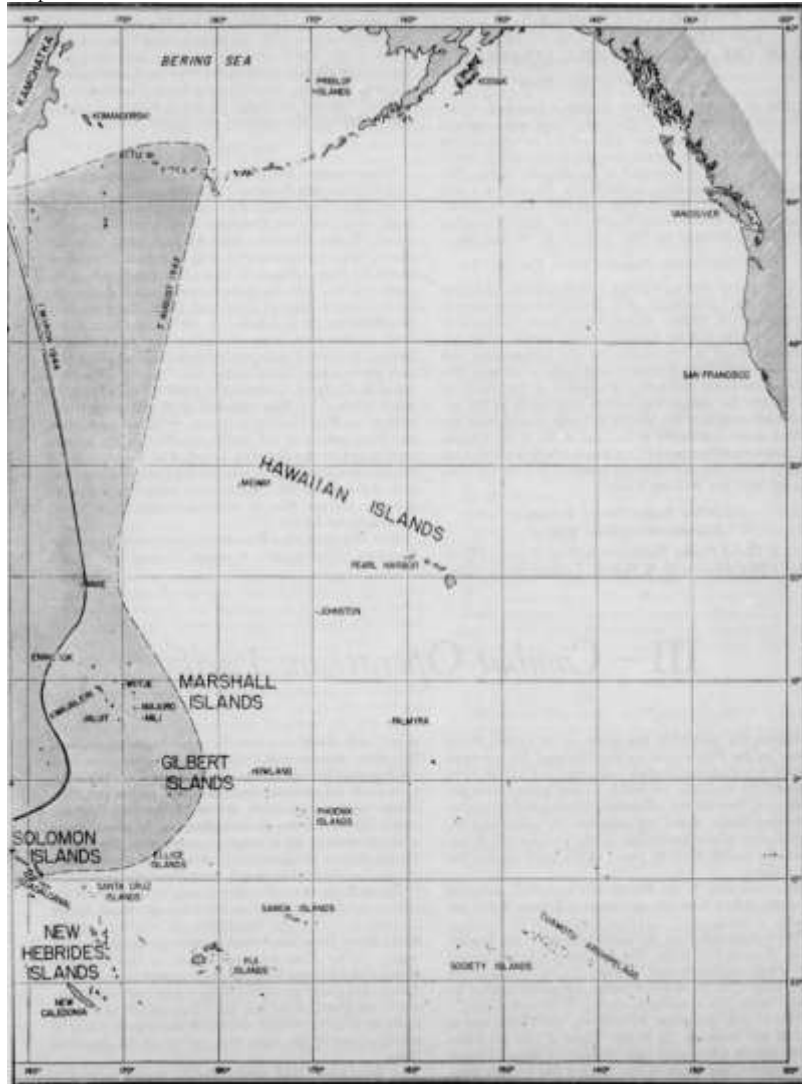
Coordinated rescue operations reached their high point in connection with B-29 strikes against Japan. A chain of ships and submarines, each with a supporting aircraft circling overhead, was stationed along the route from the Marianas to the target. When a bomber went down, the assigned air-sea rescue plane (which on the most remote stations was usually a specially equipped B-29 “Super Dumbo” and on closer stations a Navy seaplane) searched for survivors and directed a ship or submarine to the scene.⁵²

Map Preface-3a



Movement of Allied Forces up through the South, South West, and Central Pacific toward the Japanese home islands
United States Navy at War, Second Official Report to the Secretary of the Navy, covering combat operations March 1, 1944, to March 1, 1945 by Fleet Admiral Ernest J. King

Map Preface-3b



During the last year of the war, a total of 2,150 flight personnel of all services were recovered by a variety of naval air and surface units. The value of air-sea rescue transcended the lives saved, as it bolstered morale and spurred combat aircraft crews to even greater efforts against the enemy.⁵³

PHILOSOPHY AND SCOPE OF THIS BOOK

The underlying theme of this book is heroic actions of PBV Catalina and PBM Mariner pilots and aircrews in rescuing survivors of Allied aircraft downed over water and, less commonly, crewmembers of ships sunk at sea. The slow and ungainly Catalinas distinguished themselves in a wide variety of roles for which the aircraft was never intended. *Eyes of the Fleet* details combat operations of the “Cats” (referred to as “Black Cats” if painted all black for nighttime offensive operations). *Salvation from the Sky* concerns itself with the “Dumbos,” stripped down Catalinas employed for air-sea rescue duties.

The opening chapter describes a particularly daunting rescue by a U.S. Navy Catalina of survivors of the USS *Indianapolis* (CA-35). Her story is well known to the public. Following delivery to Tinian of components for the A-Bomb that would be dropped on Hiroshima, the heavy cruiser was sunk by torpedoes fired by the Japanese submarine *I-58*. Up to 800 survivors ended up in the sea, facing death from their wounds, dehydration, overexposure, exhaustion, or shark attack. The pilot of the Catalina, upon observing bodies being eaten by the fearsome predators, landed in enormous, 12-foot waves to save as many of the still living as possible. Richard DeRosset’s brilliant cover art depicts the destroyer escort USS *Cecil J. Doyle* (DE-368) searching by spotlight at night for the Catalina. Damaged by pounding waves, and loaded with survivors including grievously injured laid atop her wing and covered with parachute fabric, she could not take flight.

Following this testament to the intrepidity of one Catalina and crew, *Salvation from the Sky* joins the war in the Pacific, on the eve of Admiral Halsey’s South Pacific Forces beginning their drive northwest through the Solomon Islands toward the Japanese stronghold at Rabaul, New Britain. This beginning coincides with the arrival of the seaplane tender USS *Coos Bay* (AVP-25) and Royal New Zealand Air Force No. 6 Squadron at Espiritu Santo, New Hebrides, in late summer/early autumn 1943. The newly built ship and recently constituted flying boat squadron reached the base separately, but were soon working together as part of the Allied offensive.

As *Coos Bay* moved forward, helping facilitate Allied advancements up the Solomons, Catalinas operated from her and other tenders, and from shore bases. PBV-5 Catalinas, pure flying boats, required support from tenders anchored in the vicinity of their mooring buoys. Successor PBV-5As had retractable landing gear, allowing them to taxi up ramps and out of the water for maintenance and repair “on the hard.” Once aviation facilities were constructed ashore in newly captured areas,

seaplane tenders could “step farther forward” to provide needed support where there was none.

Late in the war, scores of tenders were in the Western Pacific, supporting Catalina and Mariner seaplanes carrying out a variety of missions. These included maritime patrol; anti-submarine warfare; night attack, and naval interdiction; and of course, search and rescue. As MacArthur’s forces driving up through Papua-New Guinea (on his road “back to the Philippines”), and Halsey’s and Spruance’s through the Solomons and Central Pacific, began to converge in the final push toward Japan, Allied bombing attacks on enemy installations increased dramatically. So too did numbers of bombers lost to enemy action, and associated need for the rescue of downed flyers.

In late 1944 and through war’s end, American and Australian bombers were also striking Japanese positions in New Guinea, and in parts of the Netherlands East Indies including, in the last action of the war, on Borneo (today Indonesia). The rescue of Australian and American flyers provided much work for Royal Australian Air Force Flights No. 111, 112, 113. Two additional flights—114 and 115—were formed too late to get into the war. Flying from bases in northern Australia and forward areas, Aussie Cats performed myriad important duties, including many heroic rescue operations.

With this introduction in our wake, it’s time to take flight (vicariously) with the air-sea rescue aircraft of the U.S. Navy, and the Royal Australian, and Royal New Zealand Air Forces in World War II.



RAAF Ensign
1922–1948



USN Ensign
48-Star U.S. Flag
1912-1959



RNZAF Ensign
1939-present

But first, a testament to the love downed pilots and aircrews had for Dumbos, as evidenced by the poem, “Fifty Baker Twenty Eight.” It was penned by a Marine fighter pilot while in sick bay aboard the *Cook Bay*, after being picked up by a PBV Catalina, responding to “50B28,” the VHF radio call sign for a “Dumbo.” A map following the poem may assist readers to understand the dire situation in which the aviator found himself, and why Dumbos were valued so greatly.

FIFTY BAKER TWENTY EIGHT

He was over Rabaul bombing
When some "flak" got in his way
And his engine coughed and sputtered
and then called it a day
He was gliding for the channel
and was cursing at his fate
When suddenly he remembered
Fifty Baker Twenty Eight

He opened up his R/T
and he broadcast loud and clear
"This plane of mine has had it,"
and the water's getting near
I'm fifteen east of Cape Gazelle
So please don't make me wait
Just send me out the "Dumbo"
Fifty Baker Twenty Eight

So that PBY came quickly
and its fighter escort too
Till they saw the PVs [patrol bombers] circling
as the PVs always do
They took one look and landed
and I'm happy to relate,
They got them all home safely
Fifty Baker Twenty Eight

Now remember this you fighters
and bombers, large and small,
If you ever get shot up
while bombing old Rabaul
Just head off down the channel
And get some other "crate"
To yell like hell for "Dumbo"
Fifty Baker Twenty Eight

Map Preface-4



From the powerful Japanese naval and air base at Rabaul (on the northern tip of the island of New Britain), attacks from the air and sea were launched on Allied forces in the South and Southwest Pacific.

Henry I. Shaw Jr. and Douglas T. Kane, *History of U.S. Marine Corps Operations in World War II Volume II: Isolation of Rabaul* (Washington, DC: U.S. Marine Corps, 1963)

Ix Preface

Photo Preface-15



Painting *Salvation from the Sky* by Richard DeRosset, depicts the destroyer escort USS *Cecil J. Doyle* searching in darkness for a PBY-5A Catalina seaplane alighted on the water. Earlier, Lt. Robert A. Marks had heroically landed in towering waves to rescue survivors of the heavy cruiser USS *Indianapolis*, sunk by the Japanese submarine *I-58*. Damaged by pounding seas, and heavily burdened by the weight of fifty-six survivors, the aircraft could not take off again. About twenty-five of the most grievously injured, many with broken arms and legs, are seen laid on the wing, covered with parachute-fabric to provide a measure of shelter from the night chill and wind-driven sea spray.