



PB2Y-3R Coronado "52," Convair A684. (via Peter Bowers)

TRANSATLANTIC CORONADOS

by Peter Berry MRAeS

From May 17/18, 1944, in the run-up to "D-Day" on June 6, a fleet of four-engined, Consolidated PB2Y *Coronado* flying-boats added urgent passenger and cargo capacity across the North Atlantic to Britain. The U.S. Navy PB2Y-3R 'boats were flown by Pan American and American Overseas Airline crews. And RAF crews from 231 Squadron, flew the PB2Y-3Rs.

The first record of a transatlantic flight by a U.S. Navy *Coronado* was recorded on September 14/15, 1941, when a XPB2Y was flown from Argentia, Newfoundland, to Stranraer, Scotland carrying the Harriman Party to Britain.¹ Here, the American and British agreed the level of war supplies that would be made available to Russia, following its invasion by German forces in June. Averill Harriman and Lord Beaverbrook took the Anglo-American Supply Mission to Moscow on September 22 aboard HMS *London*.² The XPB2Y returned to Argentia on September 28/29.³

It is recorded that 31 U.S. Navy PB2Y *Coronados* were contracted to the Atlantic Division of Pan American Airways and American Export. Engineers had to make 96 modifications to the fleet of flying boats for their new transport roles, including removing guns and bomb racks, faired-over turrets and passenger and cargo accommodation.³

The first transatlantic service by PB2Y *Coronados* was operated by the U.S. Navy Naval Air Transport Service from New York to Sandy Bay, Lough Neagh in Northern Ireland, via the

flying-boat base at Botwood in Newfoundland. Here, a meteorological officer, Hugh Lacey, kept a diary of many of the arrivals and departures through the base. His log reveals that at 1610 hours on May 17, 1944, a PB2Y BuNo. 7219, flown by Captain Durst, alighted from New York. It departed that day at 2010 hours for Lough Neagh, arriving at 1150 the following day.⁴

A clerk from the RAF No.1 Armament Practice Camp, alongside Lough Neagh, was moved to record the comings and goings of these large flying-boats! He recorded, "May 18, 44: This Thursday, the first transatlantic Ferry service by *Coronados* arrived in Sandy Bay from New York at 1150 hours. The weather was fair, apart from occasional thundery rain. The state of the Lough was ruffled." On average, two PB2Ys arrived and departed Lough Neagh each day, and as many as ten were noted at their moorings on a single day.⁵ The PB2Y-3Rs made a total of some 538 North Atlantic crossings during the summer of 1944.⁵

Serial numbers of PB2Y-3Rs noted at Lough Neagh included BuNos. 7077, 7086, 7092, 7094, 7100, 7101, 7219, 7223, 7226 and 7230.⁶

Operational direction came from the U.S. Navy Commodore in Londonderry, Northern Ireland, and the U.S. Navy, ETOUSA in London. Briefing and Control was from RAF Transport Command, the RAF Station at Belfast/Nutts Corner and Prestwick. RAF Coastal Command provided

buoys, moorings, marine craft and local marine facilities.

A large house on the outskirts of Crumlin, "Ben Neagh," was requisitioned as the Base Headquarters for the PB2Y operation. RAF, Nutts Corner, provided accommodation and messing for the crew and passengers and the permanent base staff.⁷

The PB2Y-3Rs were also noted as transiting Shediac in New Brunswick, Canada, Dartmouth in Nova Scotia, Stephenville in Newfoundland, Largs, in Scotland, and Casablanca, in North Africa.

From June 10, the PB2Y transatlantic service to Lough Neagh was extended to Port Lyautey in North Africa and at least 192 flights were made on this route to October 19.⁷

During June 1944, 60 PB2Y-3R flights arrived at Lough Neagh from New York and Port Lyautey, carrying 280 passengers. Most flights carried ten to 18 passengers and had a crew of nine.⁷

Captain Olaf Abrahamson of Pan American logged a record flight from Lough Neagh to Shediac in a PB2Y, BuNo. 7230, on July 21/22. The flight time was 14 hours 18 minutes, followed by a 3-hour 57-minute flight to New York.⁸

One PB2Y was damaged at Lough Neagh, when BuNo. 7223 struck some rocks on July 17. According to a Mr. Jim McGarry of Ardmore, Northern Ireland, the aircraft was raised by the firm and towed to shore, where it was repaired. It subsequently returned to service.¹⁰

After the cessation of the PB2Y services, the U.S. Navy Base at Sandy Bay closed on May 15, 1944, bringing to an end an interesting addition to transatlantic flight.⁷

Listing of PanAm PB2Y-3R under U.S. Navy Contract, NOa(s)-1516

Bu Aer	Delivered	
7083	4-22-43.	Damaged Aug 1, 1944, on training flight at LGA, when wing dropped and wing float torn off. Repaired
7086	4-5-43	
7087	4-22-43	
7089	4-13-43	Written off, Aug 14, 1944. Capsized while landing on training flight. Long Island Sound. Recovered and used as an instructional airframe.
7092	4-14-43	
7101	2-44	Fuel tests at MIA from Feb 23/28, 1944.
7216	4-6-44	Written off Aug 4, 1944, in night water landing near LGA. Six injured.
7219	4-17-44	
7229	7-7-44	
7230	1944	
7231	7-1-44	
7238	8-8-44	
Contract terminated, 10-15-44.		

Ref: Letter from Matthew E Rodina, 2-2-98. "PAA Archives - University of Miami".

Although 32 RAF serial marks were allocated to RAF *Coronados* (JX470 to JX501), only ten of these aircraft were in fact delivered and flown on the transatlantic routes.⁹

The RAF had already sampled an early delivery of a *Coronado* in 1943, when JX470 alighted at the Largs base in Scotland on April 24. This base was contracted to Scottish Aviation at Prestwick, who also had a base at Greenock on the River Clyde. Here, they modified and maintained the PBY *Catalina* deliveries from Bermuda and Gander Lake in Newfoundland. Two more *Coronados*, JX495 and JX496, arrived at Largs on September 36, 1943, later to be based at Beaumaris on the Island of Anglesey and Helensburgh/Rhu in the River Clyde.¹

The RAF *Coronado* was powered by four 1,200-hp P&W

R-1830-88 engines, driving four-bladed steel reverse-pitch propellers on the inboard engines and three-bladed aluminum propellers on the outboard. The gross weight for takeoff, as used by RAF Transport Command, was 68,000 lb, with a maximum landing weight of 62,000 lb. A total of 24 passenger seats were fitted. The range was some 2,680nm at a cruising speed of 115 knots. Takeoff time was around 73 seconds and with 30-degrees of flap, the approach speed was around 95-100 knots.¹¹

The Marine Aircraft Experimental Establishment found the controls of the aircraft to be "heavy and tiring to fly manually for any length of time, while the swing on takeoff became difficult to remedy unless caught quickly. Water handling was reported to be good." JX495 had the ventilated step, which cured a tendency to "skip."¹¹

JX496 was passed to British Overseas Airways for trials in March and April 1944, but they found that the *Coronado* did not have the payload/range enjoyed by the three Boeing B314A flying-boats already in service, and it was returned.¹¹

However, Flt. Lt. Hughie Green, Commanding Officer of the *Coronado* detachment, No.231 Squadron, RAF and later to become a TV personality, wrote, "They were large, stable machines, with excellent water-handling qualities, a spacious flight deck and electric propellers, which allowed engines two and three to be started in neutral. Here, you remained stationary at the buoy, until life took over one and four and then in a gracious manner, you taxied away. Engines two and three could be operated in reverse, allowing one to back up to a pontoon, or tear up to a buoy, throw them into reverse and come to a dead stop beside the buoy. The interior was spacious, like the flight deck, with two floors forward of the wing. Below the upper flight deck were the crew and VIP cabins. The galley, full-sized also on a raised deck, was aft of the main cargo bay and behind that was accommodation for up to 44 passengers."¹²

Between June 1944 and January 1946 and under the control of 45 Group in Montreal, Canada, 231 Squadron, RAF, flew a transatlantic service with the *Coronados*, from Boucher-ville/Montreal to Largs, Scotland, via Gander Lake or Botwood in Newfoundland. The westbound crossing was made via a refuelling stop at Reykjavik in Iceland and some-



Nose of a PB2Y-3R marked "PAA Contract 10." (Anon.)



PB2Y-3R RAF Coronado, JX496. (via Peter Bowers)

times at Goose Bay in Labrador.⁶

The first *Coronado* Ferry Service, in JX501, and flown by Captain D.L. Genrty, OBE, departed Largs on June 8, 1944, at 0938Z. The flight arrived at Reykjavik 5 hours and 40 minutes later at 1518Z. A night departure left at 0006Z and a 12-hour 6-minute flight brought them to Gander Lake at 1212Z. After refuelling, departure was at 1440Z and a 6-hour, 17-minute flight brought them to Montreal/Boucherville at 2057Z.**

Twenty-three return crossings were recorded at the Largs base during the summer of 1944, with a further three not logged at Largs.¹² During the winter months, when ice closed the Northern Route in Canada, the service was continued from Bermuda to Lagos, Nigeria, on the West Coast of Africa, with a returning crew ferry service via Nassau.¹⁴ The *Coronados* also served to bring back RAF safety crews, during the Russian delivery of *Catalinas* from Iceland.¹⁵

From May 14, 1945, the RAF transatlantic *Coronado* service from Montreal/Boucherville to Largs via Botwood, was

re-instated to cope with the huge transatlantic passenger and mail traffic demands. Using eight of the *Coronados*, eastbound departures were made on Mondays and Thursdays of each week. The return crossings were scheduled for Thursdays and Sundays, with a refuelling stop at Reykjavik in Iceland and another, either Goose in Labrador or Botwood in Newfoundland. The cruising attitudes for the transatlantic crossings were below 10,000 feet as oxygen was not carried for the passengers.¹⁰

The critical range/payload of the RAF *Coronados* resulted in careful preparation for flight. The most difficult stage was the eastbound flight from Botwood to Largs. The minimum fuel requirement for this sector was 3,300 U.S. gallons.¹⁰

This resulted in a Weight & Balance Sheet as follows

Basic Weight	41,600 lb
Oil – 160 U.S. gallons	1,120 lb
Fuel – 3,300 U.S. gallons	19,239 lb
Crew – 7 + baggage	1,750 lb
Catering	50 lb
Payload	4,241 lb
Takeoff weight	68,000 lb
Limits of CG	21% to 32% MAC



PB2Y-5R, BuNo. 7099, USN Museum, Pensacola, Oct 1987. (Peter Berry)

In the eastbound direction, the priority was for the carriage of urgent freight, assigned by ATFERO* or CANTAS*, or up to 17 passengers at 250 lb. each. In the westbound direction the priority was for passengers, up to 24 seats being occupied for the Largs-to-Reykjavik sector, plus 5,820 lb. of cargo. The payload for the Reykjavik-Goose/Botwood sector was 7,156 lb and for the remaining sector to Montreal, 11,237 lb.¹⁰ The last RAF *Coronado* service departed Largs for Montreal on September 25, 1945 (JX498).¹³

Two RAF *Coronados* suffered damage. On September 6, 1945, JX471 departed Largs for Reykjavik and Montreal, but

returned due to weather conditions, alighting on the diversion base at Alness, Invergordon, Scotland. Here, it was holed and beached.¹ JX472 was damaged beyond repair on September 9, 1944 after being in collision with *Mariner* JX111.²

The total number of RAF *Coronado* flights is recorded as 169 North Atlantic crossings, plus a further 51 on the South Atlantic route.¹⁵ □

SUMMARY OF RAF CORONADOS⁹

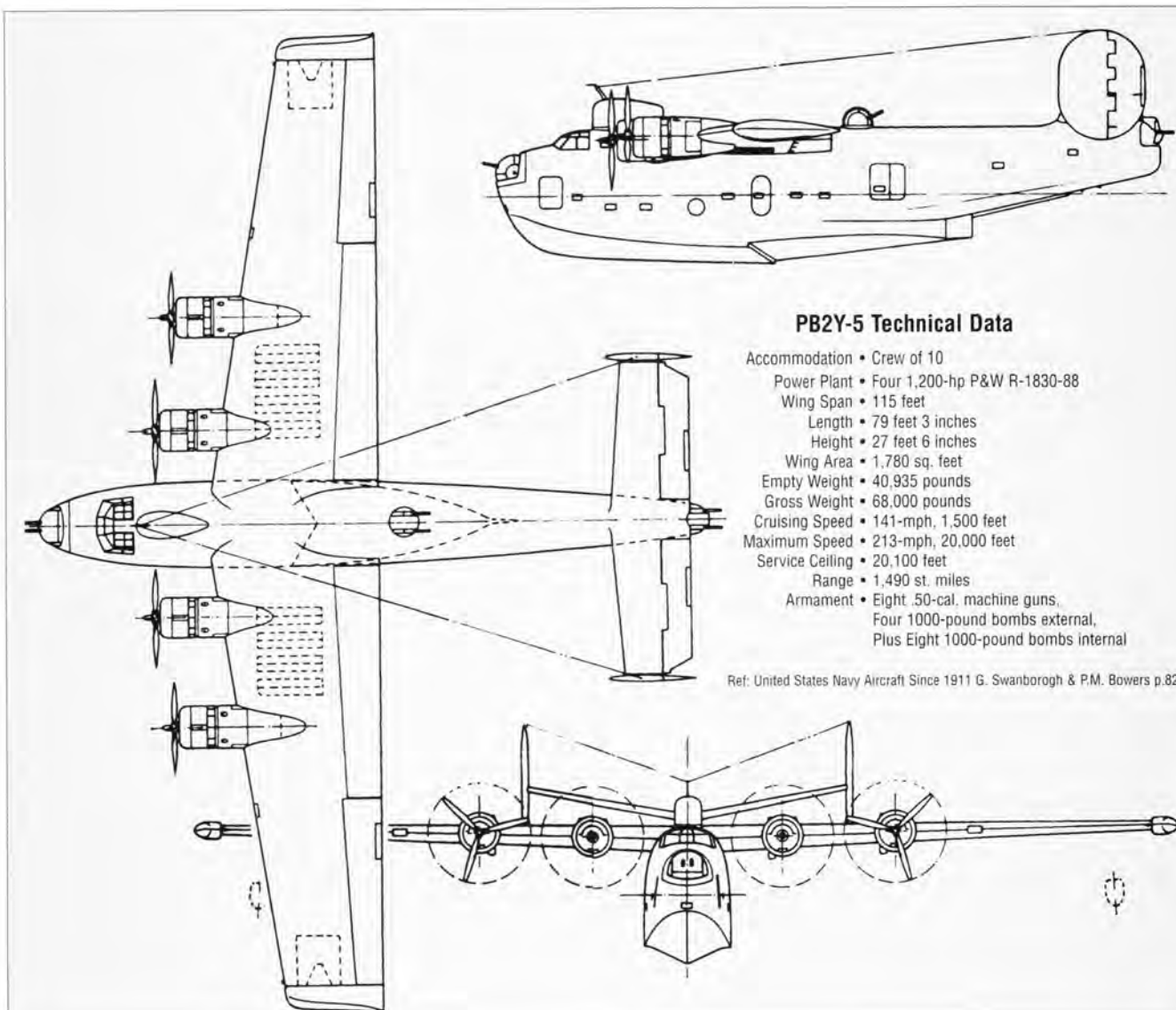
Mark	Del. to U.K.	Noted Largs 1944	Fate
JX470	16-4-43	*	SOC 30-8-45
JX471	12-2-44		SOC 18-10-45
JX472	21-1-44		SOC 26-9-44 after damage by <i>Mariner</i> , JX111 in Wig Bay.
JX486	31-3-45	*	Scuttled off Largs, 28-3-46
JX490	31-3-45	*	SOC 30-8-45.
JX494	31-3-45	*	Scuttled off Largs, 28-3-46
JX495	18-9-43		SOC 17-8-45
JX496	20-9-43		SOC 11-1-45
JX498	31-3-45	*	Scuttled off Largs, 28-3-46
JX501	15-2-44	*	Scuttled off Largs, 28-3-46

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 5. PRO File AIR25/639, No.44 Group Appendix, 1945.
 6. ORB, No.1 Armament Practice Camp, 1945.
 7. ORB, RAF Nutts Corner, 1945.
 8. Letter from Matt Rodina, October 4, 1996.
 9. *RAF Aircraft*, JALOO-JZ999, Halley, Air-Britain, 1990.
 10. File, DHH181.009(D3077), NDHQ, Ottawa, 1998.
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 12. *Largs Lug*, Scottish Aviation, via Tom Macfayden
 13. *Action Stations* Vol.7, pp.127, Smith, Airlife, 1983.
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 16. Account from Ernie Cromie, President of the Ulster Aviation Soc.
- * *Aeroplane Monthly* March, 1996, pp.44-45.
 ** Letter to H R Marmer Ltd., dated 15 December, 1958,

ATFERO = Atlantic Ferry Organization.

CANTAS = Canadian Transatlantic Service



PB2Y-5 Technical Data

- Accommodation • Crew of 10
- Power Plant • Four 1,200-hp P&W R-1830-88
- Wing Span • 115 feet
- Length • 79 feet 3 inches
- Height • 27 feet 6 inches
- Wing Area • 1,780 sq. feet
- Empty Weight • 40,935 pounds
- Gross Weight • 68,000 pounds
- Cruising Speed • 141-mph, 1,500 feet
- Maximum Speed • 213-mph, 20,000 feet
- Service Ceiling • 20,100 feet
- Range • 1,490 st. miles
- Armament • Eight .50-cal. machine guns,
Four 1000-pound bombs external,
Plus Eight 1000-pound bombs internal

Ref: United States Navy Aircraft Since 1911 G. Swanborough & P.M. Bowers p.82.