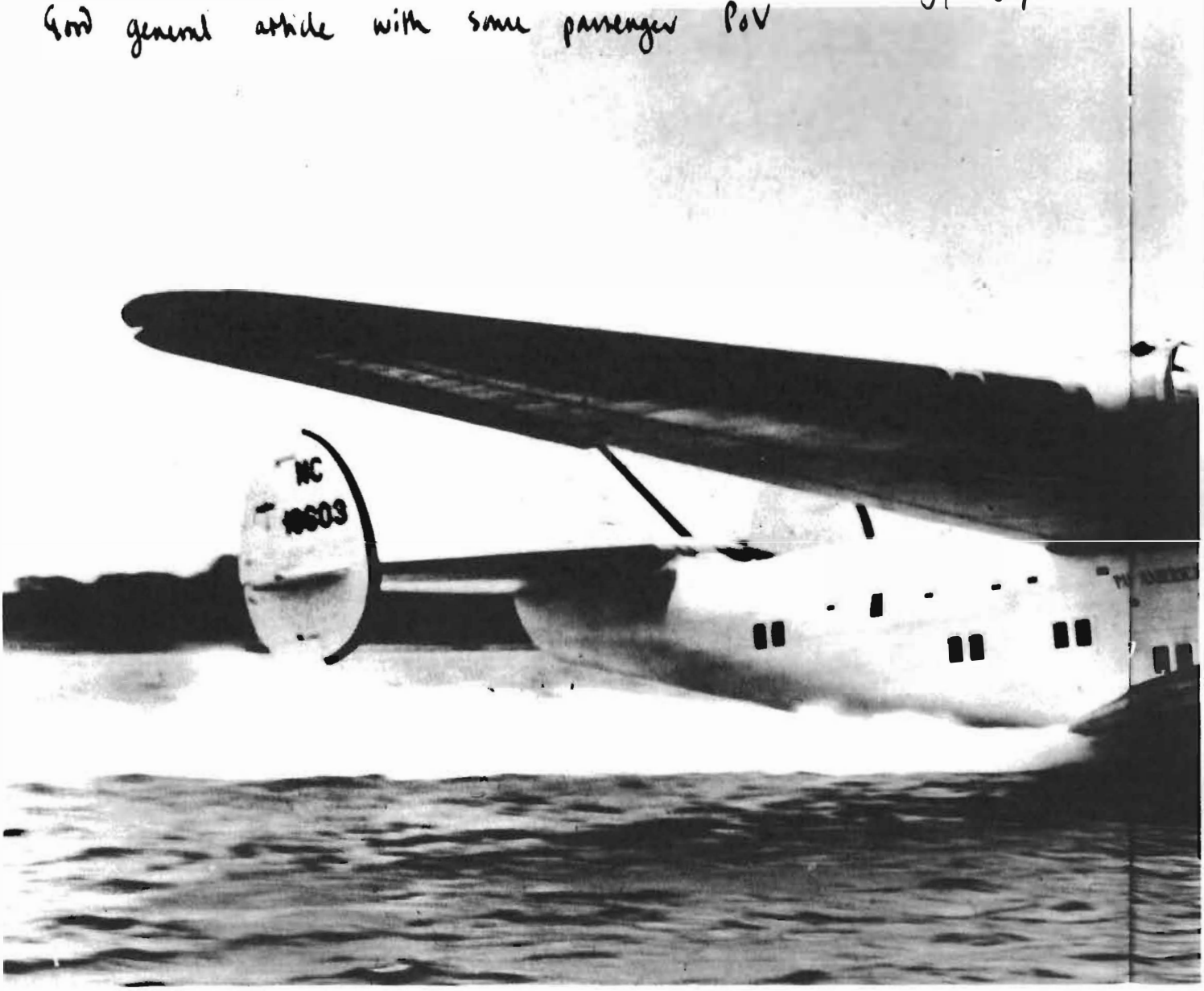
American History Illustrated, May, 1989



Good general article with some passenger POV



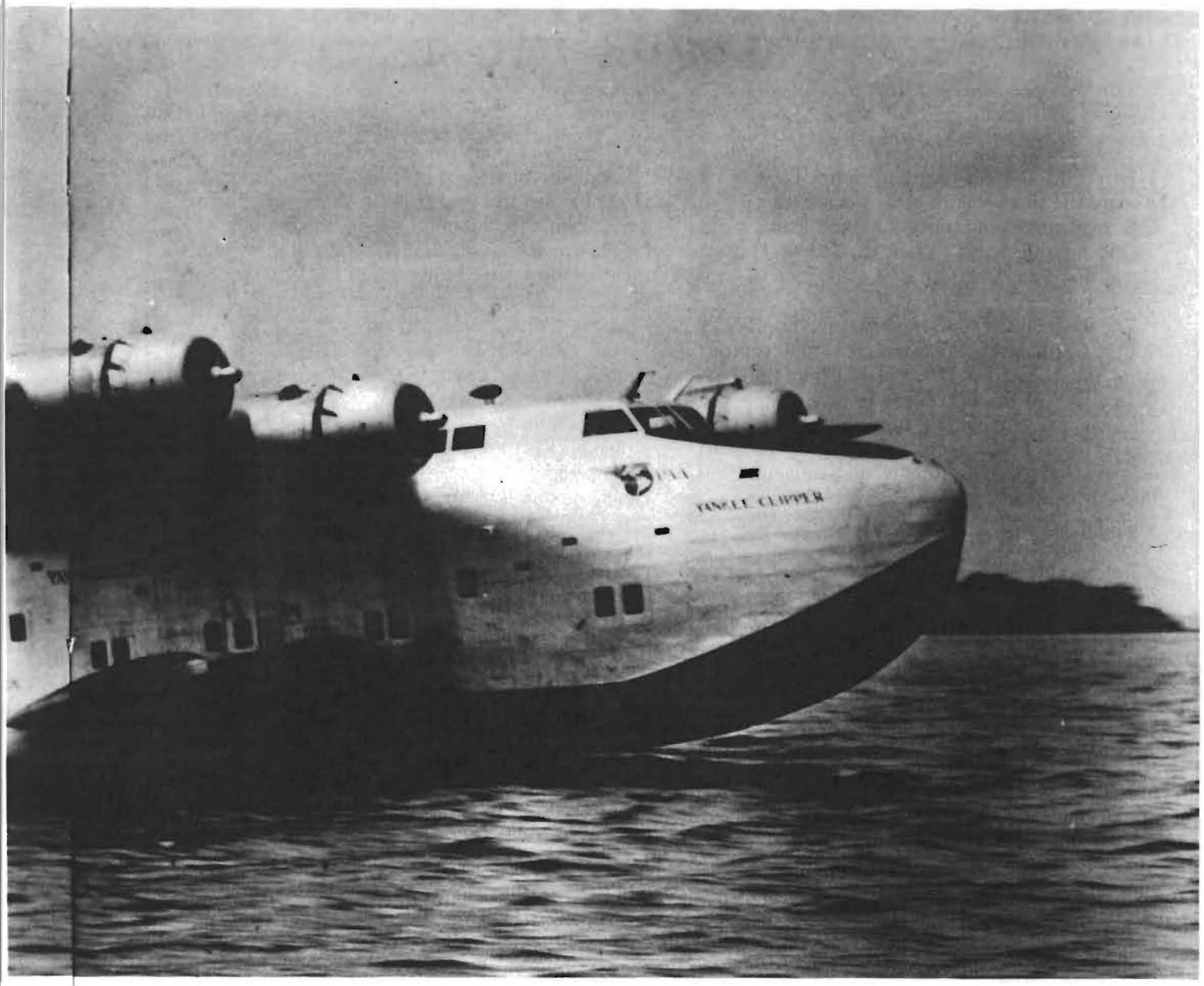

# Bridging the Atlantic

by Richard K. Schrader

**Today millions of passengers fly between the United States and Europe via the world's busiest ocean air corridor. It all started fifty years ago with Pan American's luxurious "Clippers."**



PHOTOGRAPH OF THE BOEING 314 YANKEE CLIPPER COURTESY OF PAN AMERICAN WORLD AIRWAYS



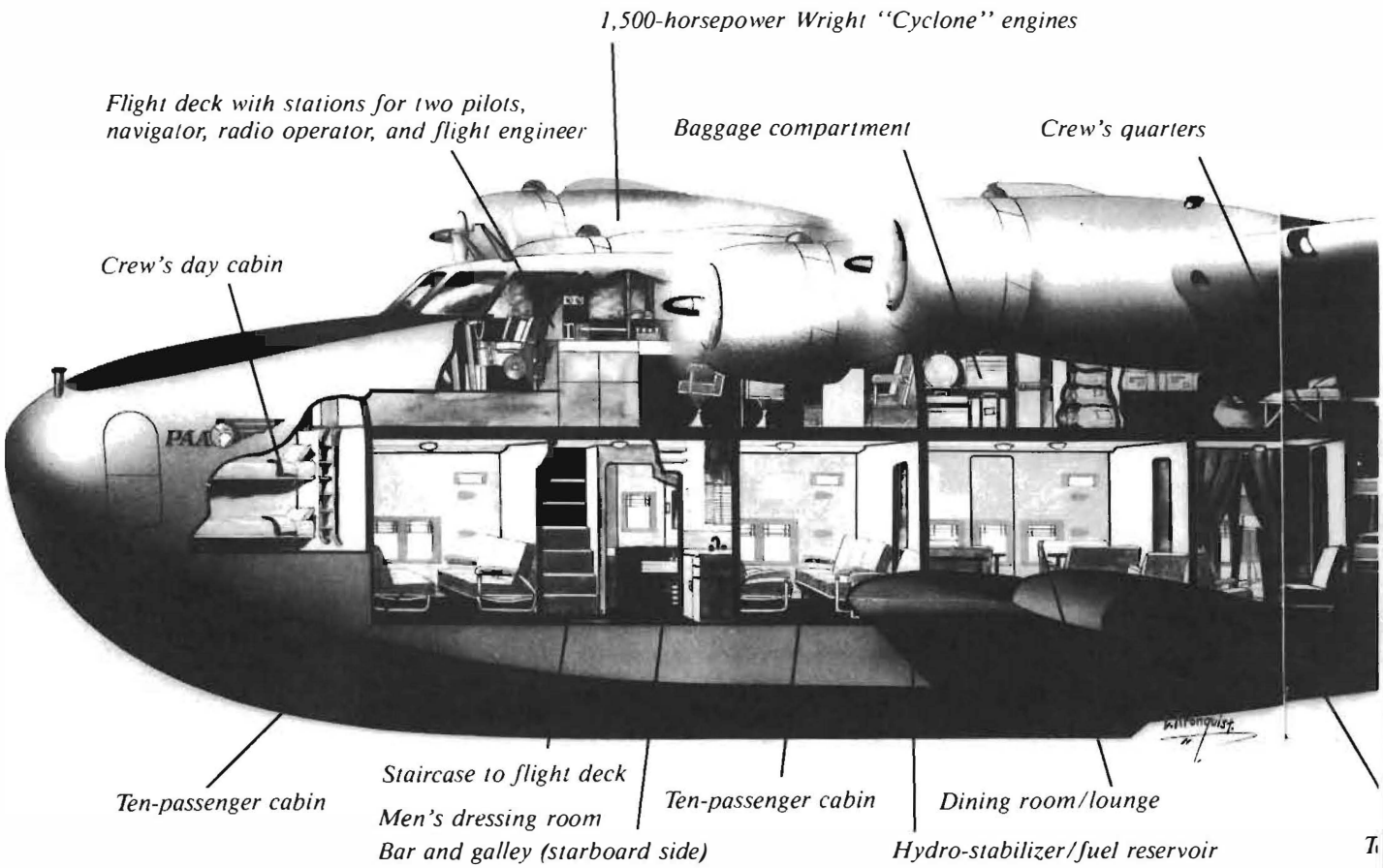

THE PAN AMERICAN AIRWAYS flying boat *Yankee Clipper* taxied from alongside its Port Washington pier onto the open water of Long Island's Manhasset Bay and turned into the wind. Then, as the thunder of its four 1,500-horsepower engines echoed from the shoreside hangars, the gleaming, forty-one-ton airliner accelerated across the inlet, lifted off, and banked eastward toward the Atlantic. With Captain Arthur E. La Porte at the controls and fifteen other Pan American employees aboard as crew and observers, the *Yankee Clipper* was bound for Europe with a cargo of 112,574 pieces of mail and four dozen California marigolds. The date was May 20, 1939—fifty years ago this month.

Twenty-six and one-half hours later, having made a six-hour stop at the port of Horta in the Azores, the Boeing flying boat landed on the Tagus River at Lisbon, Portugal. From there the *Yankee Clipper* made a short jump to Marseilles, France—completing a 3,650-mile journey and inaugurating scheduled airmail service across the North Atlantic.

Flown twelve years to the day after Charles A. Lindbergh's epic solo flight from New York to Paris in the *Spirit of St. Louis*, the Pan American crossing likewise was an unprecedented achievement. Pan American Airways had not even existed at the time of Lindbergh's epic feat.* Its first commercial flight, five months later on October 19, 1927, had been a 110-mile hop from Key West, Florida to Havana, Cuba with a borrowed single-engine floatplane carrying 251 pounds of mail. But such was the dynamism of the airline—and of its foresighted, aggressive president Juan Trippe—that by 1939 its sphere of influence had expanded to encompass the Caribbean, South America, and the Pacific and Atlantic

**The company's name was changed to Pan American World Airways on January 3, 1950.*

ILLUSTRATION BY L. KRONQUIST, COURTESY OF THE BOEING COMPANY




thority issued Pan American operating rights for the transatlantic routes. The formality was promptly approved by President Roosevelt. There would be no red tape from Washington, D.C., to hold up the flights.

Then came the historic May 20 inaugural mail flight with 1,804 pounds of cargo. That was followed by another on June 24, when Captain W.D. Culbertson and the *Atlantic Clipper* carried 609 pounds of airmail, along with sixteen newspaper and radio reporters.

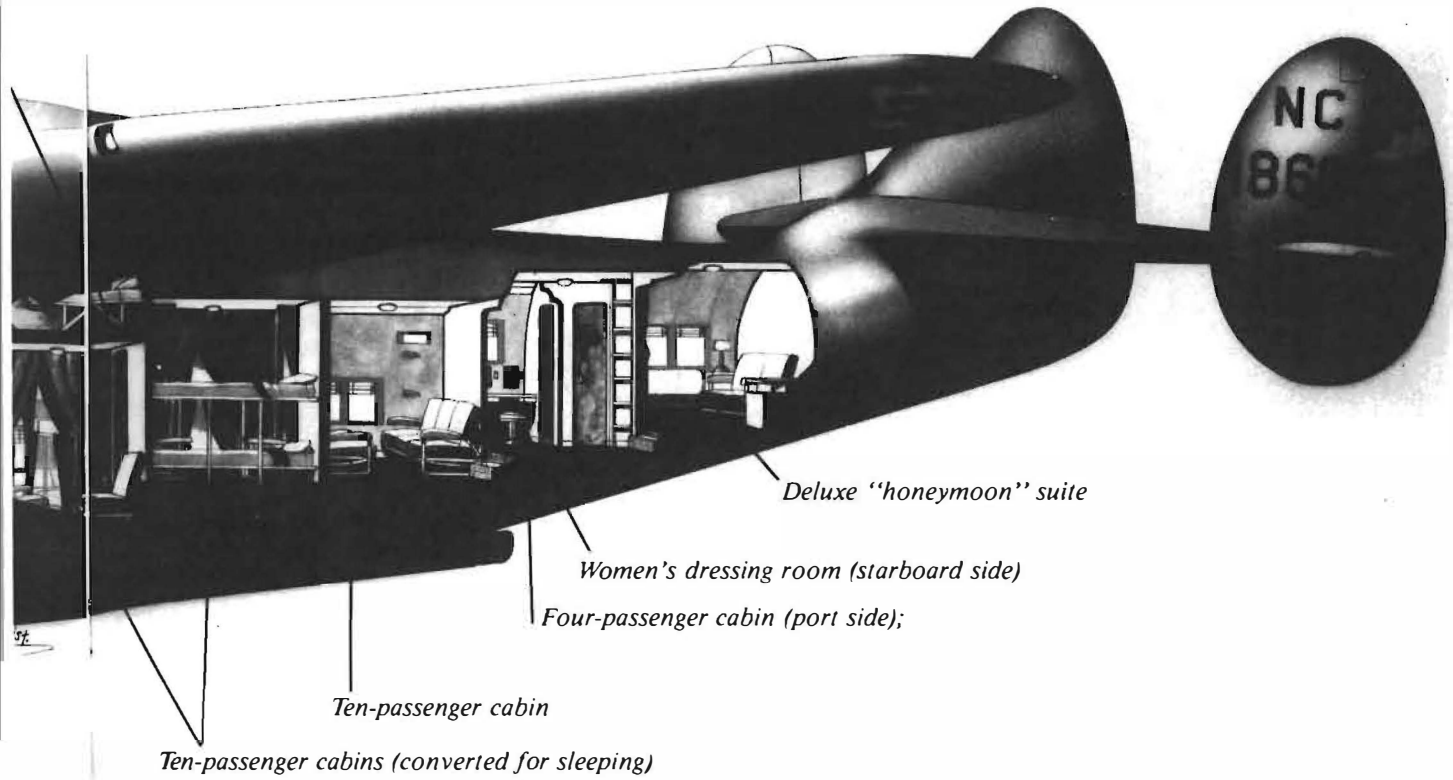
On June 24, the *Yankee Clipper*, with Captain Grey again at the controls, commenced airmail flights over the northern route via Shediac, Botwood, Foynes, and Southampton. Along with 2,543 pounds of mail were twenty officials from the U.S. government and Pan American.

THE PRELUDE OF AIR MAIL SERVICE having proven successful, on June 28, 1939, Pan American was ready to attempt its greatest ambition: flying passengers between America and Europe. Even the weather was auspicious—a beautiful summer day with a nearly cloudless sky. Residents of Port Washington were also caught up in the excitement of the event, and a "semi-holiday" was declared. When buses carrying the passengers and reporters arrived at the city limits, a police motorcade met and escorted them down colorfully decorated streets to the seaplane base. There the town's eighty-five-member high school band, in blue and white uniforms, played selections while newsmen photographed the air-bound passengers and crew.

There was more than just popping flashbulbs and fanfare. The citizens of Port Washington saw this flight as a momentous event linking the countries and peoples of two continents. After a benediction by the Rev. William J. Woon, John J. Floherty of the Chamber of Commerce presented the commanding pilot, Captain R.O.D. Sullivan, with three commemorative scrolls containing greetings for the mayors of Horta, Lisbon, and Marseilles.

At 3 P.M., the *Dixie Clipper*, with twelve crew members and twenty-two passengers aboard, cast off her lines and taxied out onto Manhasset Bay. Numerous sailing craft and motorboats were on hand to bid "bon voyage"; they were kept a safe distance by a company lookout boat that also inspected the water for drifting debris. Thousands observed from the shoreline.

# Boeing 314
# Pan American Clipper




*Pan American president Juan Trippe's vision and drive were the keys to the airline's success in achieving transatlantic passenger service. But another individual's foresight and enterprise played an important role in providing the huge Boeing 314 seaplanes (above) that bridged the Atlantic. When in 1936 Trippe challenged Seattle's Boeing Airplane Company to build a true oceanic airliner, the manufacturer was overworked with other projects and declined to compete for a contract. But a young Boeing engineer named Wellwood Beall began working at home on his own time to design a super flying boat. On paper, he created a large hull with lounges and staterooms, and combined it with Boeing's huge XB-15 bomber wing. For power he selected four of Wright Aeronautical's new double-row Cyclone engines capable of producing a total of six thousand horsepower. The result was an airliner unprecedented in size, power, range, and load-carrying ability. Then Beall took his plans to work and showed them to company managers. They listened—and were astonished. They were also so impressed with Beall that they made him supervisor of an eleven-man team to finalize details of the design. Two months later Boeing president Claire Egtvedt traveled across the country to Pan American's main office with the blueprints in hand, and on July 21, 1936 signed a $4.8 million contract for six of the aircraft.*

Turning into the breeze, Captain Sullivan watched the lookout boat drop a checkered flag to signal that the takeoff area was clear. Then he opened the throttles to full power and the *Dixie Clipper* surged ahead, spray enveloping her sides.

Inside the cabin, passengers peered intently through the windows. Prior to embarkation they had displayed surprising poise, answering reporters' questions in a jovial manner. But beneath the placid surface was courage. They were placing their trust—their very lives—in the crew and aircraft. They were pioneers in spirit, the first revenue passengers to cross the Atlantic Ocean by airplane: W.J. Eck, Captain Torkild Rieber, Colonel

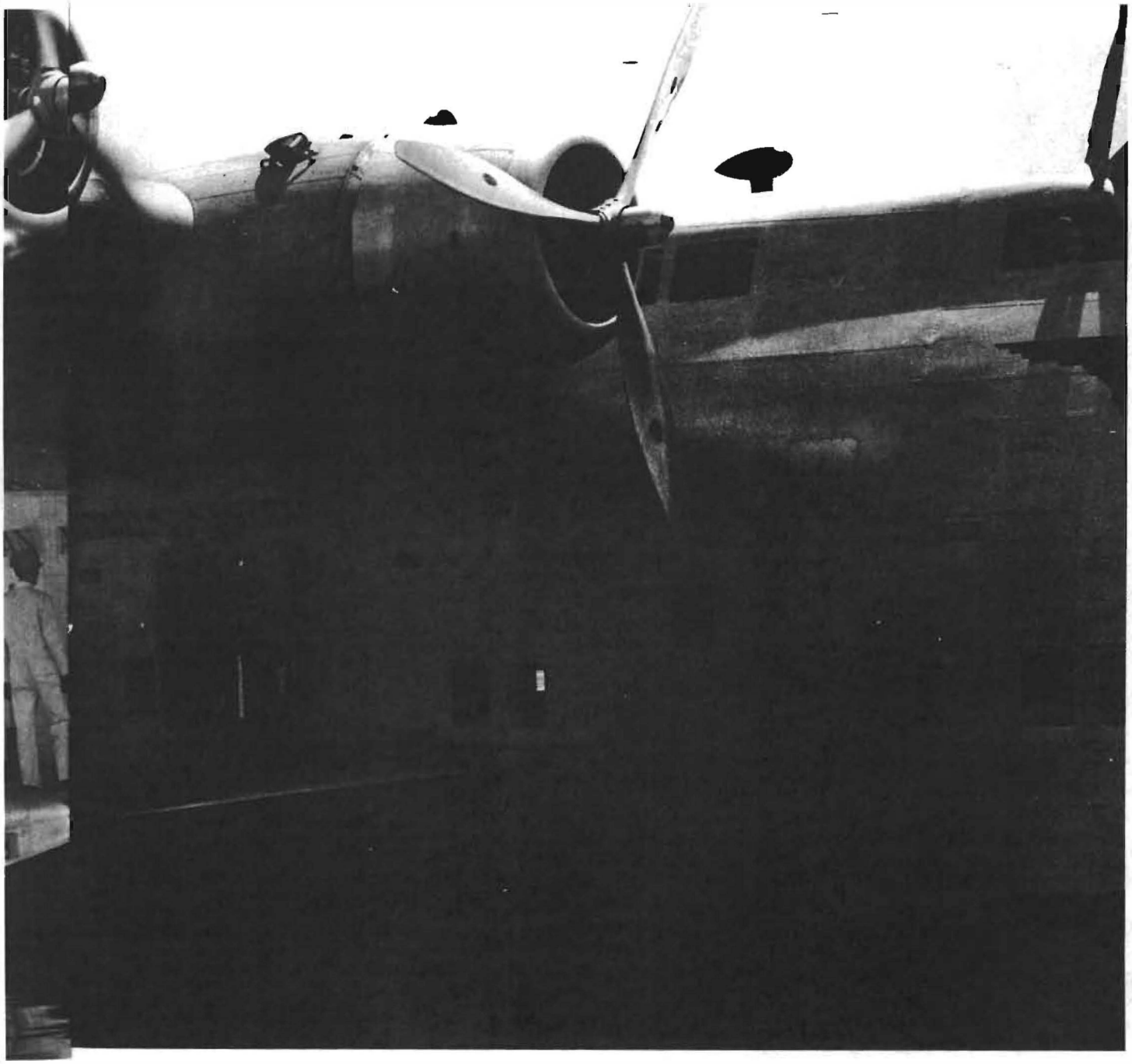
*Article continues overleaf; text continues on page 46*

CULVER PICTURES, INC., NEW YORK CITY


# Flying the Clippers

CROSSING THE ATLANTIC in a Pan American Clipper back in 1939 was an unforgettable experience. You checked in with your luggage at the Port Washington terminal, then walked down a ramp to a floating dock and boarded the plane as you would a ship. Once seated, anticipation grew as the engines warmed up and the crew cast off the mooring lines. The Clipper taxied out to open water with a steady motion if the sea was calm. But if it was rough, you knew you were in a boat—one with wings.

The takeoff was thrilling. The engines' thunder was but a muffled rumble inside, but large windows af-



*Minutes before takeoff, transatlantic passengers board a Pan American Clipper via a gangplank and one of the flying boat's distinctive "sea wings." Designed to provide stability for the aircraft on the water, the sponsons also served as reservoirs for 1,500 gallons of fuel.*

forded a fine view of the action taking place. You could feel the acceleration and sense the change in pitch as the seaplane rose onto the step of the hull and reached a planing attitude. Then, breaking free from the friction of the water and the pull of gravity, the plane slowly climbed to cruising altitude.

En route, the airliner lumbered along through the lower depths of the atmosphere at a cruising speed of about 150 miles per hour—not much faster than Charles Lindbergh on his New York to Paris flight. At an altitude of seven thousand or eight thousand feet, this wasn't anywhere near the upper, rarified domain of today's jetliners, and the flying boat encountered a wide range of weather conditions, including adverse winds and turbulence.

Your view depended on the visibility. During clear

COURTESY OF PAN AMERICAN WORLD AIRWAYS

*A view of the Clipper's spacious flight deck (above) shows the navigator at his station and the pilot and copilot up front on the "bridge." Once en route, the navigator was the busiest of all crew members, for he had to keep constant track of the aircraft's position, altitude, course, speed, and drift, using dead reckoning, celestial sightings, and bearings provided by the radio operator. Today the skillful navigator is a memory, replaced by a computerized inertial navigation system. The pilot navigates by pressing buttons.*

weather the seemingly endless expanse of ocean below took on a dark, blue-gray hue. When there were cloud formations along the way, the plane flew among and through them, providing an incredible sight of great valleys, ravines, buttresses, and towering minarets. At night the sky was ablaze with stars that appeared so close you felt you could almost touch them.

Passengers weren't cramped back then. The cabins (there were a half-dozen on the Boeing 314) were spacious, and the comfortable seats had plenty of leg room. The "modern interior" was art deco in design with lounges colored "skyline green" and "Miami sand beige." Coordinated carpets enhanced the setting. At night the cabins became Pullman-like sleeping compartments closed off by "Pan American blue" curtains; each berth had a window, reading light, ventilator, steward call button, and a clothes rack with hangers. The aft deluxe suite featured a love seat, coffee table, combination dressing table and writing desk, and a davenport-style seat that converted into a bed.

In-flight service was superb. The dining room could accommodate fourteen passengers at a sitting. Uniformed stewards served gourmet meals on polished black walnut tables covered with Irish linen, bone china, silverware, and European crystal. Vintage wines complemented the courses.

After dining, you might pass the hours by conversing with other passengers*, playing cards, reading, following the Clipper's progress on a chart of the North Atlantic, sitting back and sipping a Scotch or a French aperitif, or just looking out the window and losing yourself in the resonant rhythm of the engines. Finally, it was time for a steward to transform the cabin seats into comfortable upper and lower berths, and you turned in for a night of dreamless sleep.

The aerial journey across the North Atlantic was a long one in 1939. For example, on the northern route from New York to Great Britain, the Pan American Clipper took about five hours to reach Shediac, New Brunswick; three more hours to Botwood, Newfoundland; fourteen additional hours to Foynes, Ireland; and another three hours to Southampton, England. Total flying time: twenty-five hours. This figure varied somewhat with the intensity of the winds aloft.

But the plane also spent an hour refueling at Shediac, an hour and a half at Botwood, and an hour at Foynes before commencing the last leg to Southampton. So, if you left New York early in the morning, you arrived at Southampton in the afternoon of the following day.

The trip was expensive! The round-trip fare between New York and Southampton was $675—the equivalent of about $7,000 today. As a result, the first international "jet setters" were royalty, movie stars, the rich, and a few aviation enthusiasts who had been able to save enough money to make the trip. For most Americans in 1939, a transatlantic flight had to be a vicarious experience. But despite the high cost, national interest in the Clipper flights was high. People realized that these ocean crossings marked the start of a new epoch in air travel.

As for the Pan American air crews, both pilot and copilot were expert mariners as well as experienced aviators. They had to be able to judge the effects of water currents and winds on their aircraft while taxiing, taking off, and landing—a skill learned through years in

*"*There is excellent conversation in three or four languages," noted a 1940* Life *article on the transatlantic Clipper flights, "and a striking absence of social ice to break, for the air and the [European] war combine to produce an easy good fellowship of the Atlantic traveling elite."*

COURTESY OF PAN AMERICAN WORLD AIRWAYS

seaplanes prior to upgrading to the Boeing 314.

Once on course and at cruising altitude, much of the actual flying was left to the automatic pilot while the flight crew monitored the instruments and weather conditions ahead. Behind the pilots on the flight deck or "bridge" stood the navigator at his station, a seven-foot-long chart table for plotting courses and fixes. The navigator also had access to a celestial observation dome for "shooting" the sun and stars with an octant. Across from him sat the radio operator at his desk with communications equipment and a direction finder. The seaplane carried three transmitters and four receivers: redundancy assured safety. Seated just aft was the flight engineer, who monitored the engines and aircraft systems at a panel containing twenty-six instruments, throttles and pitch controls, and numerous switches. If necessary, he could tread on catwalks inside the wings to inspect and service the engines while in flight.

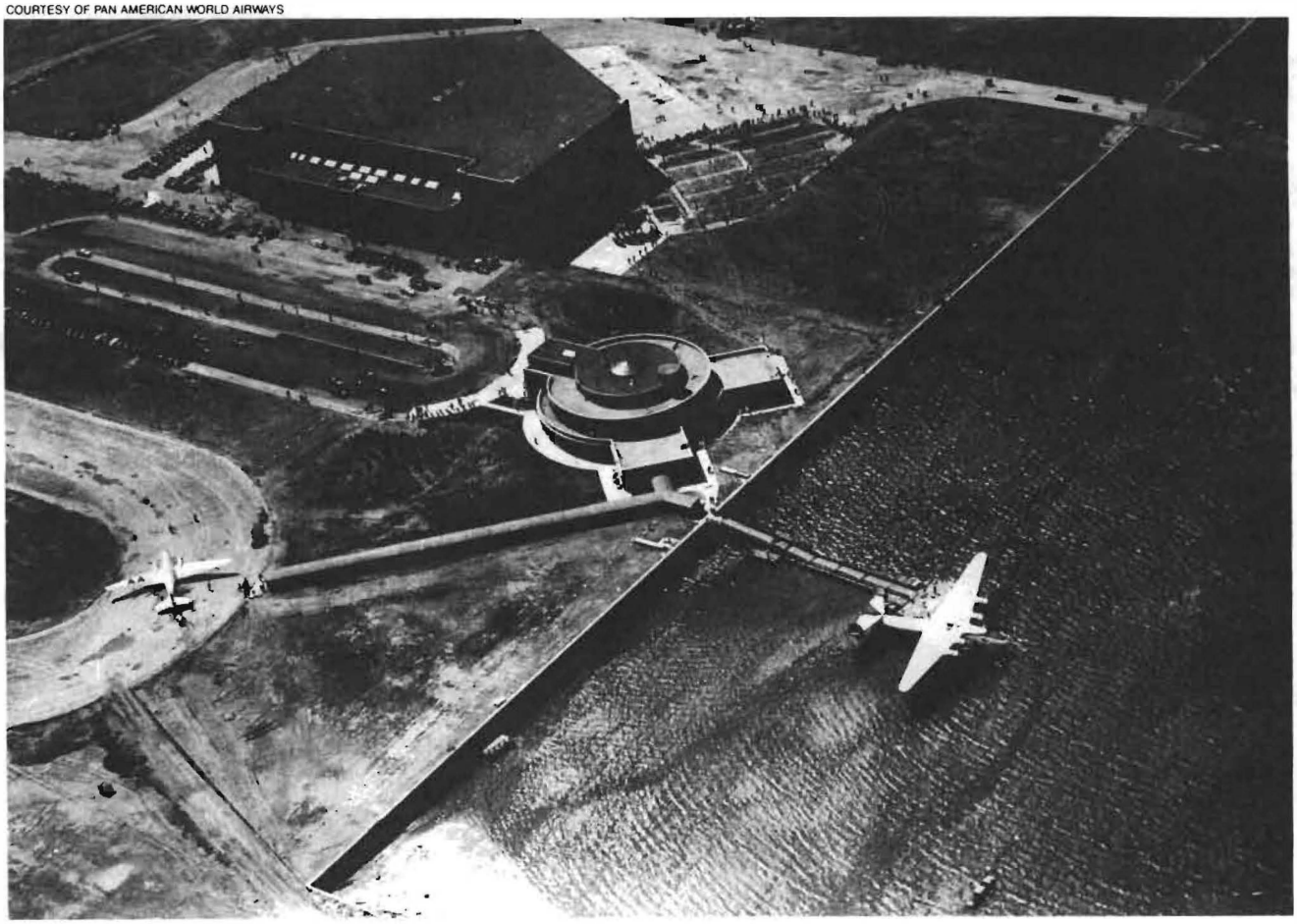
Because the transatlantic crossing was so long, a second aircrew shared the tasks. Totaling all crew members, including the stewards, there were enough to compose a football team. Off-duty crewmen could rest or sleep in their own quarters in the nose of the aircraft.

*Served by a uniformed steward, travelers aboard the Boeing 314 enjoy a fine meal on linen-covered tables with china and silverware. Vintage wines and "Classic" Coca Cola complement the course —and the little boy has his glass of milk. When not used for meals, the dining compartment doubled as the passenger lounge.*

The flying boat slowly plodded nearly two thousand miles over the ocean. Then, at last, landfall! Sighting Ireland was a welcome event for crew and passengers as the coast gave way to a carpet of green. How beautiful the earth! The River Shannon appeared. A castle loomed into view below as the plane banked and descended to alight on the river by the small town of Foynes. The aircraft skimmed the water's surface with a "swish." The landing completed, the plane turned toward the base. There townspeople waited to greet the voyagers from America.

Playwright and editor Clare Boothe Luce flew the North Atlantic on one of the Pan American Clippers. "Fifty years from now," she wrote, "people will look back on a Clipper flight as the most romantic voyage in history." Her words were prophetic. ★

COURTESY OF PAN AMERICAN WORLD AIRWAYS



*American terminus of the transatlanic air route during 1940-41 was the North Beach (subsequently La Guardia) airport on Bowery Bay. Here one of Pan American's Boeing 314s floats alongside the pier while a DC-3 embarks passengers on shore.*

William Donovan, Roger Lapham, Clara Adams, Mrs. Sherman Haight, J.H. Norweb, Louis Gimbel, Jr., H.L. Stuart, Ben Smith, Russell Sabor, Mark W. Cresap, Julius Rapoport, James McVittie, Mr. and Mrs. C.V. Whitney, Mr. and Mrs. Graham Grosvenor, Mr. and Mrs. E.O. McDonnell, Elizabeth S. Trippe, and John M. Franklin.

Gradually the *Dixie Clipper* gained speed and rose onto the step of her hull. Then, planing cleanly, she broke free and lifted gracefully into the air. Climbing, she circled Port Washington and then turned toward the ocean's expanse.

The historic two-day flight proceeded uneventfully to Marseilles with stops at Horta and Lisbon. The return flight arrived at Port Washington on July 4, and four days later the *Yankee Clipper* expanded passenger service to Southampton via the northern route with stops at Shediac, Botwood, and Foynes. Weekly trips followed in each direction over both routes.

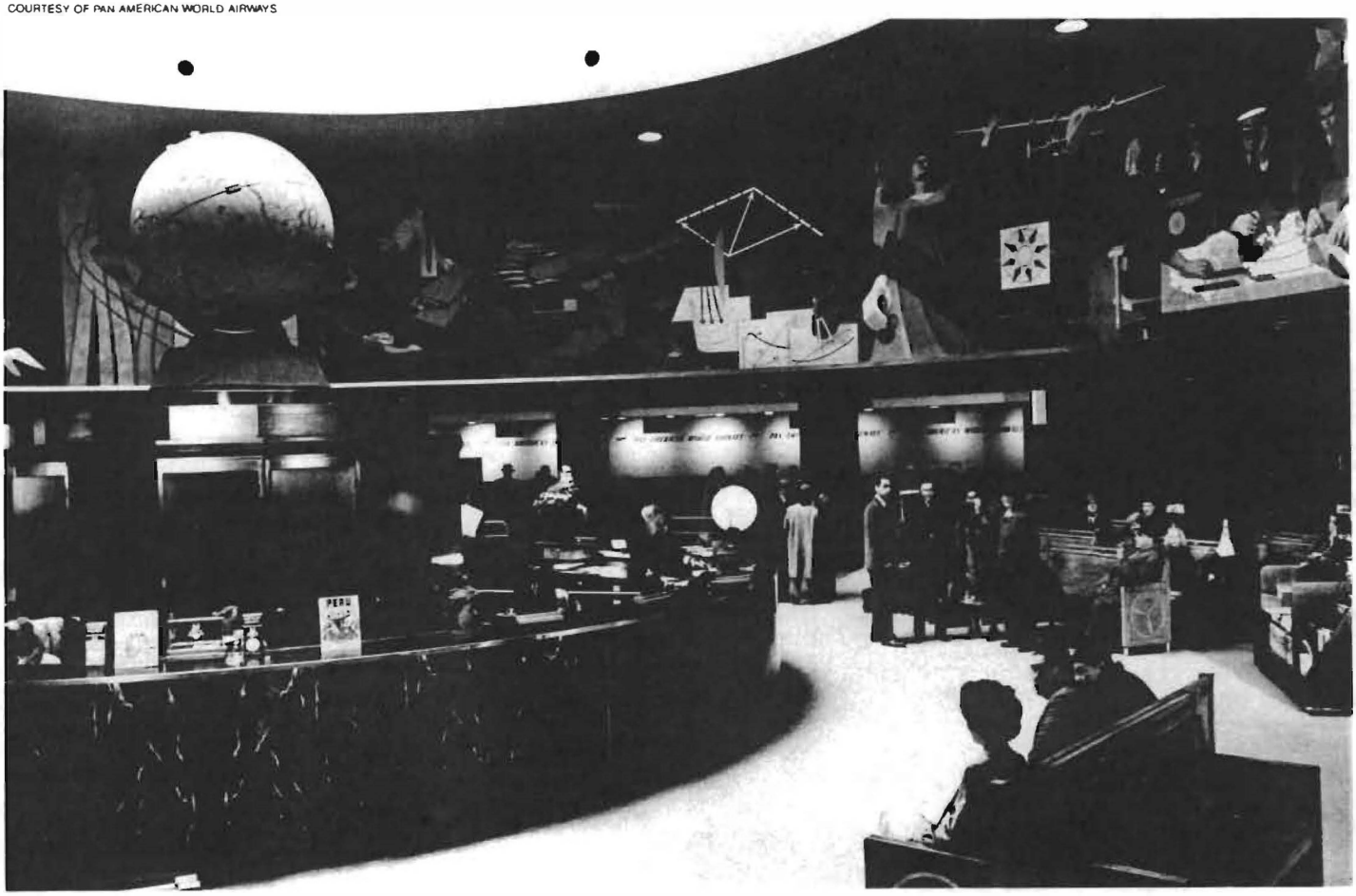
Bolstered by the excellent performance of the Boeing 314s, Pan American ordered six more in September 1939. On March 31, 1940 the company transferred its New York base from Port Washington to its new North Beach [later LaGuardia Airport] terminal on the shoreline of Bowery Bay.*

PAN AMERICAN'S widely-acclaimed transatlantic air service was destined to remain in the limelight for less than two years. In August 1940 the company diverted three of its new flying boats to Britain to help that nation beset by the outbreak of World War II. Then America became involved in the conflict, and the U.S. War Department requisitioned the company's remaining Boeing 314s. Painted in camouflage, they served with the Army Air Force and Navy as military transports, making thousands of vital flights around the globe. In January 1943 one carried President Roosevelt to and from the Casablanca Conference in Africa—the first time that a president had traveled out of the country by air.

The Boeing 314s returned for commercial service af-

**During the harsh winter of 1939-40, weather conditions limited most crossings to the southern route via the Azores. High seas at Horta often prevented even these flights and sometimes delayed the Clippers for weeks at a time. And freezing harbors forced Pan American to successively move its East Coast terminus from North Point to Baltimore, Maryland; then Norfolk, Virginia; Charleston, South Carolina; and finally Miami, Florida.*

COURTESY OF PAN AMERICAN WORLD AIRWAYS



*The luxurious flying boats that opened the Atlantic air route are all gone now, but Pan American's marine air terminal at La Guardia Airport, seen here during its 1940s heyday, has been restored to its former "art deco" elegance and serves the airline's New York-Boston shuttle route.*

ter the war, but accelerated development of long-range landplanes and the construction of large airports around the world had by this time rendered the flying boats obsolete. Pan American continued to fly its famous seafaring Clippers between America and Europe only until December 1945.

Today the North Atlantic, the world's busiest airline traffic corridor, is routinely traversed by the advanced jets of Pan Am and other international carriers. But their existence and the relative dependability of the travel they provide are direct results of aviation progress made possible by Pan American's foresight and that first giant leap with the Boeing Clippers.

None of the pioneering Boeing 314 flying boats survive. All were eventually lost in accidents or destroyed for scrap after passing into the hands of smaller operators. The last Boeing 314 sank during a storm in Baltimore harbor in 1951.

At La Guardia Airport, the Marine Air Terminal is still in use, now serving Pan American's New York to Boston shuttle. This beautiful building—now a historic landmark—is rich in art deco design with exquisite embellishments such as sculptured dolphins and artist James Brooks's huge mural depicting the Clippers and other aviation milestones. (In the 1950s the mural was covered with green industrial paint, but, through the efforts and funds of Geoffrey Arend, DeWitt Wallace, Laurence Rockefeller, and the Port Authority of New York and New Jersey, the artwork was restored and rededicated in 1980.)

Outside the terminal, visitors may find it difficult to imagine that flying boats once operated from the site. The seaplane mooring jetty is gone, and jet traffic screaming off adjacent runways dissolves any atmosphere of yesteryear.

But at Port Washington the setting is more conducive to visualizing the past. Visitors can see the old seaplane base and hear gentle waves lapping on the ramp. They can watch seaplanes still being used by the nearby charter firm of Ventura Air Service. And amid the sound of small aircraft taking off is the occasional greater roar of a Wright Cyclone engine. In one's mind's eye the *Yankee* or *Dixie Clipper* can be seen planing on the water's surface . . . rising majestically into the sky . . . and banking toward the east. ★

*Richard K. Schrader is a commercial pilot with numerous writing credits.*