

NEW YORK to EUROPE



PASSENGER carrying airplane service between New York and Europe—long the dream of the aviation industry—is in the process of inauguration by Pan American Airways.

Poised on this side of the Atlantic ocean, ready for the first history-making flight, is an 82,500-pound, all-metal Boeing flying boat—the largest in the world—powered by four great engines and capable of flying 4,275 miles, non-stop, with full load. With a day capacity of seventy-four passengers, the mighty ship is expected to carry forty passengers in luxurious quarters on its maiden journey across the Atlantic. It has a cargo capacity of 5,000 pounds.

Scarcely will the first clipper roar eastward, within a few weeks, before a second

ocean-going greyhound of the air will be hauled from a hangar at Baltimore, Md., and prepared for the start of the second scheduled voyage. Other sister clippers, now being constructed, will be added to Pan American's Atlantic fleet within a short time, enabling the company to offer service to Europe several times a week.

While the clippers will be serviced at Baltimore, the takeoff terminal will be at North Beach on Long Island sound or at Pan American's temporary base at Port Washington, N. Y. From there a northern

by CLIPPER



Opposite page (bottom), striking night photo of the Yankee Clipper. On this and opposite page, cutaway sketch of the clipper's flight deck with officers at their posts. The master is not pictured. Right, Right-Engineer at the controls.



route, which will be used during summer, is by Shediac, New Brunswick, to Botwood, Newfoundland, thence across a 1,980-mile overwater jump to Foynes, Ireland, and

finally to Southampton, England. Passengers **may** reach London by air taxi or train. Flying time will be approximately twenty-four hours, necessitating an overnight



flight for the trip across the open Atlantic; hence capacity of the clippers will be limited to that of night service, forty passengers. Another route, known as the southern, is by way of The Azores and Lisbon, Portugal, to Marseilles, France. Requiring about thirty-six hours, this route is the one the most favored for winter service and is being considered for the maiden flight. Baltimore probably will be the terminal for winter flights.

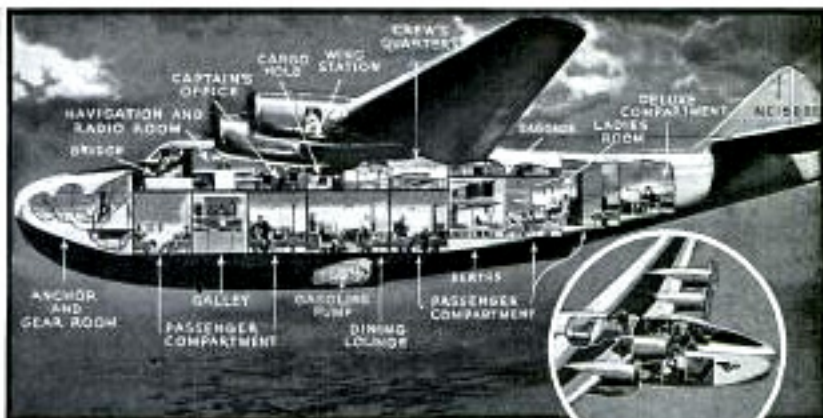
Even persons accustomed to the best in air travel will find clipper accommodations a surprise. With its two decks and eighteen separate rooms, its soft carpeted floors, its davenport-type lounging chairs and its modern styling throughout, the Atlantic air queen is virtually a "Park Avenue suite on wings." You board the ship by gangplank that leads to the broad upper surface of one of the hydro-stabilizers, which is a 1,500-gallon fuel reservoir but serves as a loading deck. Entering the passenger deck by a side door, you step down three steps into the dining saloon and recreation center, the largest room in the ship with the exception of the control room on the upper deck. The ten and one-half by twelve-foot dining room has a gay color scheme, with a spirited blue pattern on furniture uphol-

stery, rich carpeting and walls of silvery beige. Double windows on either side of the room have modern Venetian-type blinds, as do windows of all passenger compartments. There are five dining tables of polished black walnut and deeply upholstered chairs for fifteen persons to be served at a time.

Arched doorways at either end of the central lounge lead to passenger quarters fore and aft. Going aft, you pass through three standard compartments, each with floor dimensions of seven and one-half by twelve feet and a height of seven and one-half feet. Seats are upholstered in beige wool tapestry, tailored with leather trimmings. The cabins are exceptionally quiet, the result of double insulation and sound-proofing in the walls and



Top, dining saloon in use as recreation room. Center, men's room, with electric razor in use. Bottom, bunks made up for night flight, such as the clipper will make across the Atlantic



soft carpeting on the floors.

At night two triple seats and two double seats in each compartment will be converted into upper and lower berths all more than six feet long. Each berth has an outside window, individual ventilator, reading light, steward's call button, clothes rack and hangers.

Farther toward the stern you find a four-passenger port side compartment, opposite which is the women's dressing room. Furnishings of this dressing room include leather-covered upholstered dressing table stools, long double dressing table with two plate-glass mirrors and modern lighting fixtures, wash basin with hot and cold running water, another large mirror and a dental lavatory. Finally, in the aft-most section, you enter a de luxe compartment, or "bridal suite." This room contains a love



Top, exterior view of the clipper showing spacious passenger quarters and the right deck. Inset, motor and control section at front of giant ship. Center, map showing northern and southern routes over which the clipper will fly to Europe. Bottom, one of the ten-passenger compartments made up for day travel

(Continued to page 151A)

New York to Europe by Clipper

(Continued from page 872)

seat by the starboard window, two end tables, a davenport-style triple seat that converts into berths, a combination dressing table and writing desk, a folding washstand cabinet, an occasional chair and a coffee table.

Ahead of the lounge you find another standard compartment, then a section containing a galley to the port and a men's dressing room to the starboard, and beyond is another standard compartment. The men's dressing room has a dental lavatory, two wash basins with hot and cold running water, two plate-glass mirrors and a plug-in for electric razors. The galley contains compact equipment designed by Pan American for serving full-course meals en route and an arrangement for setting up a cocktail bar between meals.

For the comfort of the passengers, the clipper has a thermostatically controlled heating system capable of circulating five times more warm air than the heating system of the modern seven-room home. There are two "furnaces" using exhaust heat from two of the four engines.

Up on the flying bridge, which is entirely lined with black to eliminate glare, will be two pilots to handle the controls on the clipper's maiden scheduled journey. Back of the bridge is the navigation and radio room, directive brain of the mighty ship. Here will be the radio officer, pilot-navigator and flight engineer, all of whom have telephone communication with the bridge. Curtained off and just behind this room is the master's office.

Actual operation of the power plant, consisting of four 1,500-horsepower Wright engines, will be supervised by the flight engineer. Engine stations are maintained in the big nacelles, one behind each motor, and are connected to the flight deck by telephone. One panel before the flight engineer contains twenty-six instruments which serve the functions of sixty-two different indicators. Most of the instruments are dual indicators and one multiple indicator gives engine head and base temperatures at sixteen different points. The radio officer has charge of three transmitters and three receivers, with which he will maintain contact with land stations and ships

(Continued to page 152A)



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Weather Ships Chart Air for Atlantic Clippers



Top, left, Lieutenant Commander Edward M. Smith, commanding the cutter "Chelan," and Lieutenant Ned Strow preparing radio meteorograph for trip aloft; right, sighting departing balloon with theodolite, to compute wind velocity and direction



Forecasts of weather along the Atlantic seaboard and over the British Isles are not enough to satisfy a pilot starting from New York for Europe with a load of passengers and mail. So, when regular transatlantic flights begin, floating weather stations will make daily observations along the air route. The U. S. Coast Guard cutter "Chelan" and "Champton" will pioneer the service, sending aloft balloons with radio meteorographs to report temperature, pressure and humidity to ship while observers from balloons fix wind direction. Right, chief radio officer on coast guard ship tuning in to receive data from meteorograph



Left, attaching radio meteorograph to balloon, which must be checked for proper carrying weight. Parachute is provided to bring instruments down slowly after balloon bursts in stratosphere. Above, releasing automatic weather observer, which rises until it disappears but continues signaling



Two-Story Transocean Plane Has Six Engines

Six motors of 1,500 horsepower each will power the vast flying boat the French war ministry has ordered built for the transatlantic service of Air France. Its cabin will be a two-story structure with the first floor lounge and drawing room so designed that it can be converted into separate passenger cabins at night. Upstairs are the piloting and navigation posts, a room for the crew, two cabins for passengers, two drawing rooms and a kitchen. The ship will have a maximum speed of about 150 miles an hour and fuel capacity to cruise 3,750 miles nonstop. It will be 133 feet long and thirty feet high, with 173-foot wing span, and will weigh seventy-five tons.



Top, drawing of six-engine transatlantic plane. Below, a view of lounge, convertible into separate cabins.