

TAT

TRANSCONTINENTAL AIR TRANSPORT, INC.

PLANE TALK

Vol. I, No. 10

Published Monthly at St. Louis

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October, 1929

SEEING AMERICA—BY AIR, BY RAIL, BY SEA

A NEW ERA in American transportation will be inaugurated on November 2, when Transcontinental Air Transport and the Panama Pacific Steamship Company, a branch of the International Mercantile Marine Company, join their services to produce the "over and around America" trip of 9,000 miles in sixteen days.

Fourteen days of leisurely travel, with stops at Havana, Balboa and other old world ports, carry the passenger the 5,300 miles to Los Angeles. There he boards the comfortable cabin plane of TAT for his two-day journey across the continent. He completes his circle in sixteen days and arrives at his home port with a new conception of the size and beauty of America.

He has seen America from the air, from the rails and from the sea.

Two other ships of the Panama Pacific line—the S.S. Pennsylvania and the S.S. Virginia — will be used in the combination service. The three ships are the largest ever built in the United States and each was designed particularly for the heavy traffic through

the Canal, which developed shortly after the World War.

The steamers are turbo-electric driven and each is equipped with first-class and tourist cabins. Their average speed is twenty-one miles an hour. The fleet of three ships will make a sailing every two weeks from New York and Los Angeles or San Francisco and reservations for TAT passengers will be made in either direction.

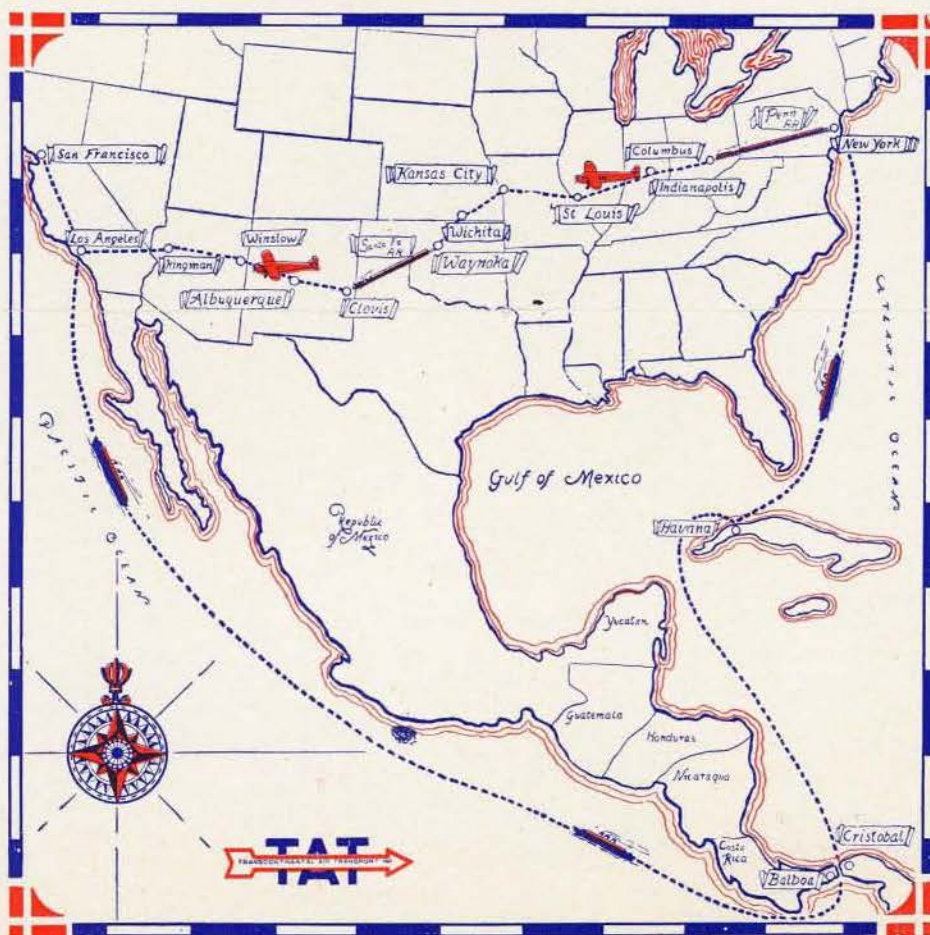
The tour may begin at any place along the route of TAT, the Pennsylvania or Santa Fe railroads and after the air-rail-water circle in either direction, terminate at the point of origin.

The all inclusive cost of the tour will be only \$550. This includes plane fares, transportation to and from airports, meals aloft and at the TAT passenger stations, rail and Pullman fares and steamship fare, meals and berth.

The circle combination has been arranged for the service of the tourist who wishes to cover as much territory as possible in a limited time; for the emergency traveler who must speed across the continent but desires greater leisure on his return, or for the business traveler who can suit the service to his needs, utilizing the stop-over privileges allowed both on the steamship and TAT service.

It is ideally arranged for the vacationer who has but two weeks in which to do a year's traveling.

Like the planes of TAT, the Panama Pacific liners were designed with the com-



fort and pleasure of its passengers as ideals. Each is a veritable home on the seas, equipped with swimming pool, gymnasium, ballroom lounge, promenade decks, twin beds, hot and cold water in each stateroom and other features.

The new service is, in a word, an association of the highest type travel facilities.

NEW AERIAL RADIO PERFECTED FOR TAT

REMARKABLE results have been obtained from a new radio transmitter which has been perfected for use on planes of Transcontinental Air Transport, within the last two months. The new equipment has been substituted for the transmitters with which the planes were first equipped and which were developed by a commercial radio company.

Tests of the new transmitter have given unusually clear two-way communication between a plane flying over the T A T airport at Kingman, Arizona, and the T A T ground station at Clovis, New Mexico, a distance of 617 miles. Another test provided excellent two-way communication between a plane aloft at St. Louis and the ground station at Waynoka, Oklahoma, more than 500 miles.

It is believed to be the only voice transmitter to give entire satisfaction in airplane use.

A new design for the radio receivers, with which all T A T planes are equipped, has been developed and will be installed shortly, giving pilots aloft more efficient reception.

The new transmitter is an adaptation of well known radio circuits and principles and is unique chiefly for its small size, slight weight and greater power. Its value for airplane use is greatly enhanced by the low weight, which permits installation in the tail of the ship rather than in the passenger cabin.

The weight of the transmitter including all controls and tubes, dynamotor, antenna and microphone is 87 pounds. The transmitter panel weighs only 30 pounds with the four tubes in place. The weight of the former equipment was 165 pounds and it was necessary to install it in the passenger cabin.

Because of its compact design the transmitter can be removed from a plane and another installed in less than five minutes.

The transmitter is mounted on a panel 27 inches long by 12 inches wide and con-

WHO'S WHO IN TAT

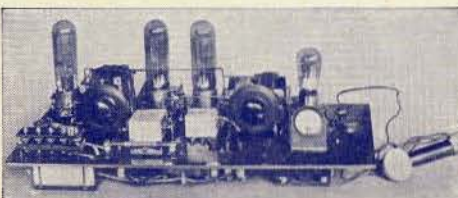


J. B. BAYARD, whom we hasten to say is much better known to T A T as "Buddy" Bayard, occupies the unique position of being the first or almost the first employe on the company's payroll. As such, he has a very decided place in "Who's Who in T A T." As a graduate of the University of Illinois in architectural engineering, in 1928, "Buddy" looked around for a field in which to exercise his talents. He was fortunate enough to choose T A T and joined the company's organization in its very infancy at Washington, D. C., on October 1, 1928, as draftsman. During the early stages of the company's development he made all preliminary sketches of landing fields and other equipment. He was also a member of the group which went west in December to conduct an intensive survey of the proposed route. Since then few projects of expansion undertaken by T A T have not passed over his drawing board in some form. He is unmarried and confesses to a decided hobby for radio.

sists of four tubes connected in a circuit of 100-watt output. An oscillator tube, power amplifier tube and modulator tube, each of fifty watts and a microphone tube of 7.5 watts are used.

Only five electrical connections to the transmitter are necessary; two high voltage connections to the dynamotor, two to the tube filaments and one to the microphone.

A trailing wire antenna which can be



THE new 87-pound voice transmitter developed by T A T engineers and now installed on T A T planes.

let down and taken up on a reel operated from the pilot's cockpit is used for transmission and a special type of fairlead insulates the antenna from the metal skin of the plane. The antenna is weighted down by a 2 1/4-pound attachment streamlined to offer the least wind resistance.

The microphone is of the army type redesigned for hand use.

Operation of a single switch changes the circuits from receiving to transmission, starting the dynamotor and the transmitter and sending current to the tube filaments. The opposite throw of the switch changes operations from transmitting to receiving.

The receiver, which is also located in the tail of the ship, is controlled remotely from the cockpit. A five-foot antenna is used for the receiver.

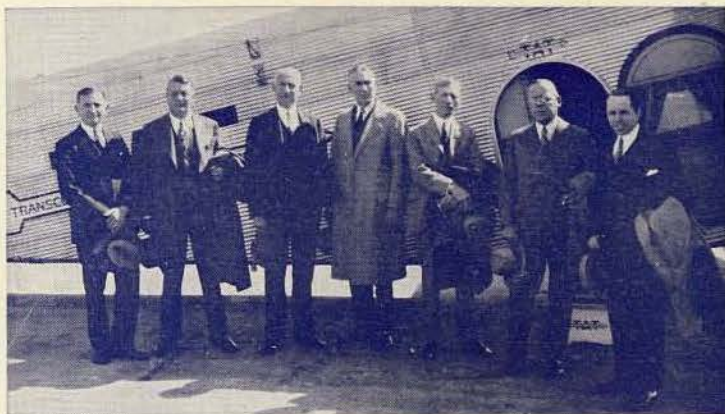
The new transmitter, which has been approved for airplane use by the Department of Commerce and the Radio Commission, thus makes more effective the two-way communication which T A T has provided for all its planes. Pilots aloft are in constant communication with ground stations and the radio facilities have in several instances been placed at the disposal of passengers for emergency personal use.

In addition to the normal transmission of messages from planes, the transmitters form a part of the direction finding system. The ground operator, each time he is in communication with a plane, places a dual loop antenna into his receiving circuit and determines the directional bearing of the plane from the station. The pilot as a double check on his position, transmits his geographical position with each message.

Direction radio beacons with visual indicators are being installed along the T A T airways to supplement the direction finding facilities.

Planes are in communication with ground stations every fifteen minutes and the pilots stand constant radio watch for emergency messages from ground stations. Pilots thus are informed of unfavorable weather conditions which develop suddenly along the line of their flight and reports from the weather bureau, radioed to the pilot, inform him how to avoid the unfavorable conditions.

The new transmitter was developed within the company by E. W. Proctor, Communication Engineer of T A T, and Daniel Givens, Assistant Engineer.



WHEN the semi-annual meeting of the Associated Traffic Clubs of America was held at St. Louis on October 14, 15 and 16, several of these are shown in the above picture. Left to right they are: T. T. Harkrader, Traffic Director of the American Tobacco Company and President of the Associated Traffic Clubs of America; W. J. L. Bannham, General Traffic Manager of the Otis Elevator Company; George F. Hichborn, General Traffic Manager, United States Rubber Company and President of the New York Traffic Club; J. W. Roberts, Assistant Vice-President, Pennsylvania Railroad; C. A. Swope, General Eastern Freight Agent, Louisville & Nashville Railroad and Secretary of the New York Traffic Club, and Henry W. Conner, Eastern Traffic Manager, Transcontinental Air Transport, Inc.



SETTING a new precedent in travel for college athletes, 15 members of the University of New Mexico football squad on October 11, made their trip from Albuquerque to Los Angeles via T A T for the game with Occidental College. Enthusiastic and in the pink of condition, the football men are shown here on their arrival in Los Angeles, after the seven hour air trip. At the extreme right of the picture is H. W. Beck, Western Traffic Manager of T A T. Next to him is Tom Popejoy, graduate manager of the New Mexico team, and next George Ellsworth, graduate manager of the Occidental team, who welcomed the New Mexico players to Los Angeles. The remaining men in the group are all members of the New Mexico football squad. They returned to Albuquerque via T A T, arriving in time for classes Monday morning.

AERIAL MOVIES ENTERTAIN TAT PASSENGERS

PASSENGERS on the Transcontinental Air Transport westbound plane of October 8, were treated to the most novel of all aerial experiments—a motion picture show in the skies.

On the flight from Columbus, Ohio, to Waynoka, Oklahoma, they whiled away the hours of their journey watching the current newsreel of the week and the antics of Oswald, the comedy cat of cartoons.

The pictures, which had been tested with their projector the day previous at Columbus, were shown both on the eastern and western divisions of the line as passengers left the plane and new ones were taken aboard. The showing inaugurated a regular feature which may be included in T A T service if motion pictures prove popular with the passengers.

Five thousand feet over the airport at Columbus the first aerial motion picture show in the history of aviation was held on October 7, in the presence of an invited group of Ohio state officials, T A T representatives and newspaper men, in an experimental showing of the films.

The successful operation of aerial movies was apparent from the first attempt. With little apparent "fussing about" on the part of the operator, a sharp, well focused picture began to unroll on a silver screen suspended at the rear of the pilot's cockpit.

The ten passengers on the inaugural movie trip settled themselves to enjoy one of the most novel and entertaining experiences of their lives.

A specially designed lamp was introduced to meet the low voltage available on the plane. To achieve this, engineers were obliged to employ a filament of the

most delicate variety.

Not only was the lamp unaffected by the slight motor vibration but it was actually kept lighted while the ship was being landed after the experiment had been completed.

A specially constructed screen 26x30 inches was used, with a velvet drop bearing the T A T device. The traditional silver screen was pulled down on a roller in front of the drop when the pictures were to be shown.

Of compact construction, the machine itself weighs less than eight pounds. With screen and batteries the total combined weight of the equipment is 34 pounds, a vital factor in its adaptation to the airplane.

It was found that installation of the machine with screen, projector and batteries could be made in less than two minutes and with little complication.



FIVE thousand feet up—T A T passengers witnessing the first aerial motion picture show in the history of aviation, October 8, 1929, between Columbus and Waynoka.



"BRIDGING the Continent" on T A T—a chummy bridge game aloft in a luxurious Curtiss Condor makes the coast-to-coast time seem even shorter.

TAT—WOMAN'S BEST TRAVEL MODE



by *Audette Bonhart*
Assistant to the General
Traffic Manager
TRANSCONTINENTAL AIR
TRANSPORT, INC.

CONTRARY to what I believe is an accepted theory, women are real lovers of travel. As soon as tradition and circumstances made it possible for them to leave home and travel they did so. At present they are found in increasing numbers from the north pole to African jungles, trying out every means of transportation.

This fact doesn't mean women do not care fundamentally for home life, and all that goes with it, but that they share with the rest of humanity—meaning men—the desire for change and the stimulation of new environment.

On T A T planes 16 2/3 per cent of the passengers are women.

My interest is to find the reason why this is less than one-half, and try to demonstrate that women are just as ready to accept the air travel mode as are men.

I have come to the conclusion one cause for the difference may be a misunderstanding of what is involved in air travel. If women knew of the comfort and convenience possible, I believe they would adopt it as one of their favorite travel modes. Various air transport lines are employing women for the purpose of explaining to others the service offered from a woman's standpoint.

I feel that I can conscientiously say that T A T, of which I am Assistant to the General Traffic Manager, presents the highest type of service existing, particularly as far as women are concerned.

MORE RAIL CONNECTIONS ADDED TO TAT SERVICE

ARAPIDLY widening group of railroad companies has joined hands with Transcontinental Air Transport to provide both close rail connections and increased travel facilities. T A T's stability of service has been paid a tribute in the willingness with which so many of the rail carriers have joined their services.

Negotiations have been completed or are under way with twenty-one railroads, exclusive of the Pennsylvania, Santa Fe and Norfolk & Western, whose affiliation with T A T is more elaborate. The New York, New Haven & Hartford has placed T A T tickets in the hands of their agents at all principal ticket offices and are prepared to furnish their passengers with all information concerning TAT service.

A similar arrangement has been made with the Kansas City Southern, the Chicago & Alton and the Southern railways. All these lines will sell tickets on T A T for through passage from points originating within their lines.

In addition, Missouri Pacific; Chicago & Great Western; Missouri, Kansas & Texas; Mobile and Ohio; Nashville, Chattanooga & St. Louis; C. & E. I.; Illinois Central; Burlington; Union Pacific; Texas & Pacific; Central of Georgia; Frisco; Hocking Valley, and Gulf Coast Lines have placed with their agents information concerning T A T service, as well as tariffs.

Negotiations with still other railroads are in progress and it is expected that within the near future a network of railroads covering the entire country will have joined with T A T in providing through train and plane service from all points.

FOREIGN AIRLINES SERVE TAT PASSENGERS

RECOGNIZING the importance of T A T in the American air transportation network, leading European air lines have entered into an alliance with the Company for the exchange of passengers and the reciprocal sale of tickets.

Prominent among these is Imperial Airways Ltd., the famous London-to-Paris line which has operated so successfully since shortly after the world war. In Imperial Airways' planes, thousands have received their "Baptism of the Air" in the course of their European trips. Within a short time Imperial is expected to enter into a close working agreement with T A T.

Transadriatica, operating over the beautiful Adriatic from Vienna to Venice, has completed an arrangement for reciprocal service to air passengers, and T A T tickets will be available in all its offices.

Koninklijke Luchtvaart Maatschappij (K. L. M.) with Holland as a base operating to Denmark and Belgium, will have full information on T A T schedules and service for their passengers at all stops on their lines.

Compagnie Internationale de Navigation Aérienne has completed arrangements with T A T for an exchange of tickets and all information respecting the two lines. It is possible to purchase CIDNA tickets in any T A T office and vice versa. CIDNA operates to Constantinople and the near east from Paris, covering the Balkan states.

Deutsche Luft Hansa, the most extensive system in Europe, has entered into an agreement with T A T for the mutual sale of tickets, so that any passenger on the Luft Hansa lines may book his passage on

T A T before arrival in the United States. The Luft Hansa lines radiating from Berlin and Munich, cover almost every important country in Europe.

Lignes Farman, operating a number of short lines in France as well as regular services to Germany, Belgium, Holland and Denmark, with Le Bourget field in Paris as a base, will also exchange tickets with T A T.

A. B. Aerotransport, operating from Paris to the Scandinavian countries, has agreed to complete the service arrangement between major European lines and T A T.

THEY SAY—

*Excerpts from letters written by
TAT Passengers*

The speed, safety, cleanliness and comfort of the trip were enhanced by the unexcelled service extended by your entire personnel—T A T has made another convert to the advantages of Air Travel.

JOHN F. MORRISSEY,
Crowell Publishing Company,
New York City.

Even my long service with the railroads has not been able to prevent my complete conversion to travel by air especially with a company rendering such excellent service as T A T.

MARY E. CARROLL,
Seaboard Air Line Railway Co.,
Norfolk, Virginia.

Your service was the most courteous and efficient I have ever received on a trip.

RUSSELL P. REEDY,
Assistant Football Coach,
U. S. Military Academy,
West Point, New York.

I look forward to my fourth crossing on your system shortly.

RICHARD J. BURKE,
Big Bear Lake, Calif.

Your plane service exceeded my expectations.

SAMUEL W. HARDY,
Washington, D. C.

What you are doing entitles you to the slogan, "SERVICE FIRST."

HARRY T. HALL, Vice-President
Bank of the Manhattan Co.,
New York City.

I anticipate making this mode of travel my own.

MRS. HELEN B. STRAIT,
St. Cloud, Florida.

Volume I October, 1929 No. 10

Published Monthly by

Transcontinental Air Transport, Inc.
Syndicate Trust Bldg.

St. Louis, Mo.

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