



How to Run an Airport

Union Air Terminal, fourth busiest field in U. S., now is owned by Lockheed.

by Kurt Rand

Dudley Steele, manager of Union Air Terminal, has definite ideas about making an airport attractive. Take a look at them for yourself.

IN the bustle and hustle and general expansion of the aviation industry, another job is coming of age. It opens one more professional avenue for the young man who is casting about for something to do in "this flying business" and, as private and commercial transportation increases, it is destined to have further growth. It's the kind of a job, too, that a genuine aviation enthusiast would welcome, because it gives the holder a chance to be of real service in winning and holding good will for the industry.

There are few men today who understand the operation of a leading airport. Fields are increasing in number so rapidly, passenger traffic is leaping ahead with such speed and problems are coming up with such startling suddenness that men haven't been found to cope with the situation.

What would you do if abruptly you were notified that effective tomorrow you had such a job? In modern airport operation here are some of the problems:

Maintenance of field, lighting systems, runways and buildings; control of police force; in charge of the granting of concessions; supervisor of gardening and landscaping; supervision of control

tower; handling rental of offices for various flying services; supervision of ticket office; control of operations of garage facilities, parking, restaurant and bars; regulation of the procedure in handling baggage; adjusting complaints; handling legal and insurance phases of operation, building and holding good will and in general getting more people to fly by making flying convenient.

Rating America's leading airports from a standpoint of traffic, one lists LaGuardia at New York City, Chicago Municipal Airport, Cleveland Municipal Airport and Union Air Terminal at Burbank, Cal. In each city, these airports serve as "introductions" to the areas which they serve. Of the four, none of the others can compare with the downright hospitality and friendliness, combined with efficiency that is Union Air Terminal, serving Los

Angeles and Southern California. The man responsible for the conduct of the affairs for the past three years is Dudley Steele. Steele, former World War pilot, is peculiarly qualified by experience for his job. His career is a tip-off to anyone who'd like to have a job like his as they start opening up in the near future.

Union Air Terminal now is rated as the fourth busiest field in America. Lockheed which has just purchased the field from United Air Lines Transport Corp tests its *Hudsons*, its *Lodestars* and the XP-38 on it, together with other experimental ships and products; Pacific Air-motive Corporation fills a huge hangar with a repair base; Vega Airplane Company, Lockheed subsidiary, is building a plant on the field. Also operating from the field are private pilots and three flying services.



Excellent example of a place-to-get-good-food-at-an-airport is the Sky Room at Union Air Terminal. Most large airports today serve good meals.

Dudley Steele, Union's manager, is an ex-World War flyer who tackled the Burbank airport a few years ago and has made it hum with ideas.



And, to top all this, American Airlines, TWA, United Air Lines and Western Air express now operate 62 flights per day, maintain maintenance and repair bases in some cases and soon Catalina Airlines will use it as a base. Add Army and Navy planes, visiting ships from all parts of the world, an average of 5,000 visitors a day and you have something.

Your approach to the field from the air is one you'll never forget. Your pilot lets down over the rugged Sierra Madres. You see the long macadam runways, the administration building with its Spanish architecture, the hangars, the shining planes at six gates, and the next thing you know you're on the ground. A few minutes later you find yourself bundled into a limousine, baggage stowed and you are on your way into Los Angeles, some 15 miles away.

It's "streamlined," that business of landing and leaving. You've gone under a canopy, if the weather is wet; you've found an immaculate waiting room, any accommodations which you might have wanted from a pack of cigarettes to a six course dinner. Going out is even smoother. A uniformed attendant takes your bag. You never see it again until you've reached your destination. One Steele innovation is calling attention to a large garage. If you've driven out to the field alone, you may leave your car, knowing that it will be taken care of safely until you return. There's no fuss and bustle, no loss of time and baggage.

"The main thought in the mind of an airport manager," Steele says, "is to sell air transportation. Someone has talked the potential passenger into flying. At this point, the airport manager picks up. He must make all ground facilities as

near perfect as possible. After that it is up to the airlines.

"It must be remembered always that airports and air transportation must be merchandised. Attendants must be neat and clean and well uniformed. Every building must be spick and span. Questions must be answered intelligently. And not only must air transport be sold but the airport must itself be put on a paying basis."

If you are thinking of being an airport manager, that must be one of your objectives—to make the airport pay. The airlines will want space for storage and operations; private pilots will want a good hangar; all plane operators will want gasoline. There'll be rental receipts all right. But what of public convenience?

First of all, you have to make the passenger like your "shop." What do you sell in addition to service? Plenty. For instance, there's one airport in the east which is beside a highway over which pass 60,000 automobiles a day. This airport, believe it or not, has no service station to supply automobiles with gasoline. If there was one, what does that suggest to the motorist? A chance to eat, now that he's stopped. And where does he want to eat? Well, at Union Air Terminal, he eats overlooking the runways, where he can see everything from Boeing Stratoliners to 40 h.p. trainers take off and land. At most of the major airports, so-called cafes are so constructed and placed that runways are not visible to patrons.

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and began practicing it in 1925. As the world now knows, the famous German *Stukas* showed the efficiency of the technique in the recent Nazi conquests.

"Dive bombing is practically impossible to stop once it gets going," says McDonough. "I personally feel that if any good test pilot gets within 30 miles of his target, nothing can stop him. There are so many ways of attacking. You can dive down with the sun at your back or you can use clouds as detection shields and suddenly attack from them. Horizontal bombing can't be nearly as effective, despite bomb-sights. Anti-aircraft defenses keep big bombers up so high a zig-zagging boat has a chance to dodge. Also, in sighting while flying horizontally, a smooth and level run is necessary before a bomber can get good results."

So far, the Navy and marine force are the only U. S. services to exploit dive bombing. The Army has not yet adopted it to a wide extent and McDonough, as a Navy man, feels this is a technical lapse that should be overcome.

As to the ability of the United States' flying personnel, the cautious Scot believes longer training than is afforded pilots of other nations is advantageous, but points out that U. S. pilots naturally lack vital experience.

"Only one way to get it, too," he feels. "If a combat pilot has luck with him he may come safely through his first fight. If he comes through it, he gets experience."

McDonough, however, hopes he'll be permitted to get more experience as an airline and test pilot. From his record-wrecking whirl at test-piloting the *Aircobra*, McDonough gained a nice sum of money, recognition, a suspended sentence in Atlanta and—last and probably least—a nickname. In joshing tribute to his 620 m.p.h. mark, his comrade pilots now call him—you couldn't guess, could you?—"Speedy".

END

Armament School

A NEW and novel course for commercial aviation schools has been announced by the Aero Industries Technical Institute in Los Angeles. The course is called Armament Design and, according to J. L. McKinley, director of the school, has been instituted "because of the great scarcity of men versed in this vital phase of modern aeronautical engineering. This new division of the school is headed by Harvey G. Chapman, Jr., former armament engineer with Boeing, Douglas, Lockheed and the government aircraft factory in Sweden.

Airport...

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People watching planes take off safely and land safely are coming back to fly some day—maybe for business, maybe for pleasure, maybe because of an emergency. But, however you figure it, they've been sold transportation.

So famous has the Sky Room—a restaurant specializing in sea food flown from Seattle, and southern fried chicken—become that it is packed as long as it is open. It's becoming internationally famous and is winning airport fame and airline customers at the same time.

When Steele came to Union Air Terminal in December, 1937, the second floor of the administration building was a wind-swept deck. There was a small bar and a coffee shop. The garage was painted an unattractive olive drab and was pumping 4,400 gallons a month. Now it pumps four times that amount and will have to be doubled in size to take care of the storage of cars by passengers.

Steele has only started. He sees in the future a need for an airport which will serve the private pilot. In a year or so—perhaps longer—all of the airlines will go over to the Los Angeles Municipal Airport. Landings will be made only at Union when weather conditions make them necessary.

"Our main objective when the airlines move," says Steele, "will be long range and will be to make Union the finest airport in the United States for the private flyer. To accomplish this we must have facilities which are second to none."

Steele has in the back of his mind an expanded restaurant, a swimming pool, badminton and tennis courts and other amusements.

Another problem which Steele has been battling is parking. This is a major issue in airport operation. Steele has thought only of the public and has had all employees in the terminal move their cars to outlying parking places so that the public may park close to the administration building.

Green lawns, ample opportunity for the public to view operations, shade trees, dustless surroundings and a general "open door" policy which runs from benches on which spectators can sit to excellently maintained rest rooms have all been a part of Steele's campaign to win the public to flying.

Anyone who has stumbled into the average airport can appreciate the conveniences which Steele has afforded—

conveniences which have made Union Air Terminal pay its way and have returned dividends to the operating company. Spectators have been forced to drive over rough, even dangerous entry roads, denuded of shrubbery; have been dusted by plane blasts; have found it impossible to find even a drink of water; have found inadequate sanitary conveniences, of poor quality (if any); have had no place to park, let alone store a car—usually have been "shooed away" at any point of vantage. Passengers waited in cold, draughty waiting rooms; have found poor taxi service to and from fields; have had little or no baggage service and have suffered countless unnecessary inconveniences.

In each one of these spots there's a man who has the interests of aviation at heart, who knows how to meet the needs of all those people who, day, each month, each year, are coming in closer and closer contact with transport and with aviation. As far as the service to private pilots is concerned—every pilot knows what aviation is. On some of today's airports it is impossible to get even gasoline. There are fields which offer food of any kind without a trip to town and there are too many fields which don't even offer telephone service to the visiting pilot. It's an open opportunity.

You probably will never have the specifications which Dudley Steele has. Steele is a combination crusader, campaigner, manager, promoter, aviator, business man. He's carried on a campaign against the gasoline tax levied by various states on aircraft; he's fought for the removal of obstructions around airports; he's been instrumental in the establishment of the first aerial beacons, a public enterprise and he's promoted air mail.

Steele was born in Omaha, Neb., 18, 1892. After five years at Central Brothers College, he turned himself out on the world. He abandoned his father's business—that of wholesale grocery in Omaha and in St. Joseph, Mo., sold out, worked in banks and, at times, even errands. He was selling shoes in San Antonio and trying to get into a trading expedition into Mexico—Perez was looking for Villa—when a Lieutenant Harmon at Kelly Field offered him a job in a Curtiss JN4D. This was in 1915.

Immediately, he tried to get into the Signal Corps. He was told that he should get a commission in the Officers Reserve Corps and be transferred to Signal Corps—a jump in rank. This didn't work so he resigned his commission, started

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over in Signal.

He soloed at Ellington, was transferred to Camp Dick, Dallas, where he and Lieut. Wendel Brookley introduced the Gosport system of instruction. He then went to Scott Field, Belleville, Ill., as post athletic instructor—he'd been a swimming and diving star and was outstanding in all forms of athletics—and shortly thereafter introduced a "first."

The "first" was an air show at Scott. Steele talked his commanding officer into opening the field, arranged a series of air stunts and athletic events, commandeered enough cars to make up a special train from St. Louis, played to 45,000 people and \$12,351 in paid admissions. This was his first real promotion.

"The idea," he says, "was to let the public in on what the Air Corps was doing, get them enthusiastic and then sell them patriotism."

Maj. A. W. Robbins, his commander, wanted to reward him for his contribution to the athletic fund and asked him at a banquet what his wishes were. They were to "fly overseas." He was sent to Miami, Fla., to learn flying boats which, Major Robbins contended, with a smile, was "flying over seas."

Duty at Carlstrom and Dorr fields, in Florida followed, with discharge in February, 1919. Steele's next promotional adventure was with the Roy Nafziger bakeries, serving Missouri, Illinois and Oklahoma. He got Nafziger to buy a "Canuck" Jenny, used it to ferry Nafziger around to his various bakeries. He was "first" again with a successful idea of putting tickets for free airplane rides in bread loaves, developing other advertising and exploitation ideas.

In 1921 he promoted an air show in Kansas City with the Kansas City Flying Club, which he had organized, for the national convention of the American Legion. Then, in 1922, he helped Inglis M. Uppercu run the Pulitzer races, established the Washington offices of the N.A.A. and was the first contest chairman.

From 1922 until 1926 he took a fling at selling shoes and doing exploitation for California theaters, which resulted in his accepting the job of organizer and manager of the aviation department of the Richfield Oil Company in 1926. Under his supervision Richfield, using its own money, established the first aerial beacons, a route which extended from San Diego to Vancouver. This beacon route antedated the Federal Airways system and was used extensively by both private pilots and Pacific Air Transport.

Steele helped various communities on the west coast to establish airports, handled the gasoline arrangements for Richfield at various air races including the nationals at Cleveland for several years—one year Richfield was used in 95 per cent of all participating planes—and campaigned for more private flying.

When Richfield's aviation department was disbanded in 1937 it had owned nine airplanes, had flown 2,100,000 miles and had carried thousands of passengers with a record of no accidents—a mark which has not been equalled by any other oil company. In the Nafziger days, Steele

had established precisely the same record.

As chairman of the aviation committee of the American Legion in 1935 and 1936, Steele launched two drives—one to get various states to either use money secured from taxes on airplane gasoline for the improvement of aviation facilities or make the refunds on such taxed gasoline easier to secure. The other was to eliminate hazards around airports such as telephone poles, wires and high trees. With the assistance of his long-time secretary, Margaret Heckman, he sent out 15,000 pieces of literature on the subject in a single month. Both drives were eminently successful.

"But there is still a lot to be done," Steele says.

Today, Steele receives letters from airport managers in all parts of the United States asking for information on the operation of concessions, police and traffic regulations and many other problems. He answers them all, from San Diego to Maine and from Washington to Florida.

"I definitely feel that there is a great future in airport management," he declares. "The time has come at last when airports of any size, if intelligently managed, can be put on a paying basis. The first step is to make an airport attractive by offering conveniences and facilities to the public. Then the public will start coming to the field and from then on patronage will increase.

"But an airport manager must be on his toes. He has to remember at all times that he must serve both the public and private flyers as well as the airlines themselves. He must watch all the angles, all the time. The public only indirectly feels efficient management. It becomes directly concerned with mismanagement. And the manager will attract only the type of people to which he caters. If his service is high class, he'll find responsible people coming to his airport and will genuinely increase interest in aviation."

Steele looks forward to the development of Union Air Terminal under Lockheed management after the airlines have left it. He sees an opportunity to prove his theories and practices in winning and holding much of the private flying business in Southern California.

"More airplanes will not be sold until service is built up," he says. "The battle is not to get a private flyer to buy an airplane but to offer him facilities which, after he buys it, will make him want to keep it and sell the idea of private flying to others."

END

Hey, Seaplane Owners!

A FIRE recently occurred in which the pontoons of a plane—being used as a landplane at the time—were destroyed. According to Aero Insurance Underwriters, the owner found to his dismay that he had insured his ship as a landplane and had neglected to add coverage for the pontoons. So pilots are cautioned to insure both wheels and pontoons if they have them. There is a different rate for seaplane insurance and insurance policies must be properly endorsed when shifting from landplane to seaplane.