Scheduling - A Vital Company Service

A Challenge . . . A Headache

First in a two-part series on airline scheduling, based in part on information supplied by the Air Transport Association.

Every airline employee has surely at some time or other been asked questions like these:

"Why does this flight leave at 5:11 instead of an easy-to-remember time like 5:00?"

"Why doesn't that flight go non-stop instead of making two stops?"

"Why do you have four flights between 5 and 7, but only one flight between 2 and 4 o'clock?" service, in both quantity and quality, consistent with the financial health of the operator."

Preston Wilbourne, Director of Tariffs and Schedules, is Piedmont's expert in the art of scheduling.

"The aims of a schedule are simple," says Wilbourne. "We're in business to carry passengers. We try to come up with a schedule that will carry as many passengers as we can, as far as we can, and as economically as we can."

However, that, as the cliche goes, is much easier said than done. It is obvious that each departure from every city is scheduled to the maximum convenience of that point so that it might generate the maximum traffic.

Total Needs Studied

We cannot always consider each city



Questions such as these might appear to be trivial and detailed, but they strike at the very heart of one of the most important functions of airline management — scheduling.

Scheduling is a complex process. A detailed description of the steps taken to develop Piedmont's schedules would fill a large-size book — and it would be confusing to anyone unless he were willing to give it long, hard study.

The principles of scheduling are not so complicated, however, and they should be understood by each airline employee so that he might be able to explain to his friends and neighbors how our schedules are the finest possible in terms of the long-range needs of our passengers, the communities we serve, and our country.

To Serve the Public

The two words that best describe the why's and wherefore's of airline scheduling are "public service."

Almost any question that can be asked a b o ut our schedules — frequency of flights, departure and arrival times, number of stops en route, type of airplane can be answered by the statement that it is the service required by the public. separately, nor can we consider schedules from the requirements of aircraft maintenance and overhaul and other operational considerations. Also departure times, obviously, are related to arrival times, and on some routes the arrival time might be more critical than departure time. Furthermore, departures and arrivals must be related to connecting service. And so it goes.

City X is not a problem in itself. The requirements of that city for service must be related to the demands of other cities, and our complete schedule must be developed from the standpoint of optimum service over our entire system.

The overriding consideration, however, is public service because again, as we better serve the public, we prosper.

Load Factor

A high load factor (high percentage of seats occupied) is a major objective in schedule planning because it is a sign that we are operating flights at times, and to the places, and when and where, most people want to go. It is an indication that we are performing a good publie accurate. study of our boarding and traffic flow reports. Also useful, says Wilbourne, is the CAB Domestic Origin-Destination Survey of Airline Passenger Traffic. The survey is a ten per cent sampling of passenger traffic between cities. It helps determine if traffic flow between points is steady, and is an aid to our scheduling department in planning frequency of service to given cities.

An airline must take advantage of "fill-in" and connecting opportunities whenever possible in schedule planning. It is one means whereby an airline can provide a service which otherwise would be grossly imprudent.

Often, however, it is impossible to create traffic flow opportunities. By its very nature, traffic flow varies from case to case, depending on geography, airline route structure, and other services available. So you cannot generalize that City A can support a certain type of service simply because City B receives it.

Must Know Market

Schedule planners must angle like fishermen. They must (1) know when and where the fish are running, and (2) use the attractive lures.

Translation:

1. To the greatest extent possible, you must schedule flights when and where most people are on the go, and

2. You must try to offer the most appealing service from the standpoint of departure and arrival times, type of equipment, etc. Remember, if you don't, your competitors will.

Time Is Chief Selling Point

Departure and arrival times are vital when it comes to sales appeal. It's the very speed of aviation that causes this. The difference between a 5 p.m. and a 6 p.m. departure was unimportant on a three-day coast-to-coast train trip. But one hour makes a big difference in the air age, when for example, a jet spans the nation in less than six elapsed hours.

As a result, schedule convenience ranks high when it comes to influencing a passenger's choice of airline.

What if you were not in the airline business? Instead you worked for some "outside firm?" Would you sit around an airport for an extra hour waiting for our airline when another airline has a departure in ten minutes?

All Phases Considered

All this leads to a logical question: "Why not then just shift flights around to make sure each one gets top sales appeal?" This is often impossible, because in an effort to plan the best possible service, our scheduling department runs headlong into a host of operational and traffic complications.

In the first place, many phases of op-

erations are governed by Civil Air Regulations. In some cases, physical limitations — such as the lack of an aircraft gate position at an airport terminal dictate what you can and cannot do.

Moreover, the total schedule pattern is a tightly woven inter-related structure because of flight connections, the routing of aircraft for maintenance, and so forth. Therefore, a change of only 15 minutes could create serious conflicts in any one or all of these areas.

One Flight Change

Take the case of the flight operating from City A to City B to C and on to City D. If you were to alter this flight, you would open up a good many changes in other flights to preserve connections, avoid gate problems, and so forth.

This flight receives connections from eight flights at City A. When it gets to City B, it delivers connections to seven more flights. In addition, its arrival and departure timing at City B dovetails closely into a gate occupancy cycle with other planes.

When it gets to City C, it connects with three more flights. Finally, upon arrival at City D, it delivers connections to seven flights, and the airplane then turns back out as a schedule to the west.

Requirements To Meet

Traffic and sales objectives, maintenance, flight operations, and ground operations requirements must all be considered when planning a schedule. Each is dependent on the other, but seldom can all the needs of every department be met.

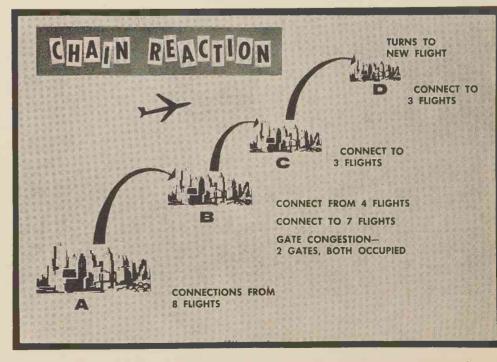
In a presentation before the Civil Aeronautics Board, Melvin A. Brenner, Vice President of Schedules and Equipment Utilization for American Airlines, outlined some of the problems facing today's schedule planners.

"At the outset," said Mr. Brenner, "let us realize the sheer impossibility of developing a schedule pattern which will simultaneously satisfy all desirable objectives. Many of these objectives are inherently in conflict with one another. "... Probably the schedule planner's most important function is to evaluate these varied and partially conflicting objectives, and come out with the optimum balance between these several goals."

Getting closer to home, Piedmont's scheduling department experiences the same conflicts. "It affects the whole economy of the company," says Wilbourne.

"Every proposal submitted by the home office and from the field is carefully checked with every major department to assure as nearly perfect coordination between them as possible."

Next month — Constructing A Schedule.



Minutes Are Important

You can be sure our company does everything possible to serve the public's travel demands. If, for example, a flight is scheduled to leave at 5:11 p.m. instead of 5 o'clock, you can be certain that those 11 minutes are important to the success of that flight. If a 5 o'clock departure were more suitable and would produce more passengers, you can be sure Piedmont would do all possible to make the switch.

Schedule Goals

Just what is scheduling? ATA President Stuart Tipton has defined it as "... the art of designing system-wide flight patterns that provide optimum

- ne service.

What's more, we are enhancing our chances for profitability; and profitability is a vital element in public service, since an economically sound and growing air transport system is essential to the welfare of communities, the country as a whole, and the national defense. It is essential also to each employee from the standpoint of job security and career opportunities.

Careful Analysis

Through market research, analysis of traffic studies, and years of operating knowledge and experience, an airline can judge market potential — including connecting and through passengers — with a rather high degree of accuracy.

Piedmont determines traffic flow in and out of the points served by careful