THE PLANNED PROMOTION OF FEEDER AIR TRANSPORTATION

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The Civil Aeronautics Act in its Declaration of Policy makes it plain that the duty of the Civil Aeronautics Board is more than that of a referee. The language is clear in requiring initiative and aggressiveness. It charges the Board with the responsibility for the “encouragement” and “development” and the “promotion” of air transportation. It says that the Board shall “foster” a sound air transportation system. These are dynamic words which place upon the Board the responsibility for leadership in this field. Therefore, it is clearly the statutory duty of the Board to encourage, to develop, to promote, and to foster a sound air transportation system, adequate not merely for the present but also for the future.

Pursuant to this mandate, and pursuant to the implications in the Statement of Policy issued by the Civil Aeronautics Board last year, I suggest that the next logical step in the orderly development of air transportation would be for the Board to announce, as soon as it could be agreed upon, the blueprint for over-all route pattern improvement. The piecemeal method of route pattern improvement which the Board must employ in order to reduce to manageable proportions the issues involved is a good method only when the Board is following an over-all plan. The only way whereby we can avoid a zigzag course of uncertainty is to chart the course in advance. The area method of determining route improvements may lead to haphazard results unless the Board is following a master plan. The announcement of such a blueprint by the Board would define its program and give direction to its efforts.

Now, the first question that arises in carrying out such a program is, What are the methods whereby the route pattern could be improved?

One method would be by mergers and acquisitions. There are four distinct advantages which would result from the consolidation of certain of the smaller carriers. They are (1) the elimination of possible uneconomic and harmful competition; (2) a better utilization of equipment; (3) greater convenience to the traveling public; and (4) an improvement of the competitive balance between the carriers. These four advantages would in turn result in substantial savings to the Government.

Unless the Board leads the way in recommending the merging of certain carriers, there are likely to be either no proposals at all for merging or else the wrong proposals. But the Board, because of its objective position, could recommend mergers that would be in the public interest and then assist in providing referees and arbitrators to effectuate agreements between the carriers.

Another means of route pattern improvement would be by the interchange of equipment. This device is in reality a change in the service pattern rather than the route pattern, but it offers an excellent method of improving service, increasing traffic, and generally developing a sound air transportation system.

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system. We have a number of so-called regional carriers whose routes terminate short of the destinations of many of the passengers. The Board is confronted with the alternatives of (1) either adding more routes to the already saturated air service pattern; or (2) allowing the passengers to be inconvenienced at junction points by having to change from one airline to another; or (3) requiring interchanges of equipment. Obviously, interchange is the preferable of these three alternatives in most cases.

Furthermore, in some cases interchange might well be the first step toward a desirable merger, because by the carriers working together they would constantly be reminded of the possibilities of eliminating overhead costs by merging, and the integration of the two systems would be emphasized by every passenger who bought a ticket to ride beyond the junction point. Here again the initiative of the Board could be helpful, not only in hastening interchange agreements, but in selecting them.

A third means of route pattern improvement would be the complete separation of air service into two distinct categories by the transfer of feeder towns to feeder routes. To this proposition I propose to direct the remainder of my remarks. One of the greatest contributions which the Board could make toward the improvement of domestic air transportation at this stage of its development is to take the initiative in separating more completely the trunk and local services, both of which are required by the public convenience and necessity. There are two questions I wish to ask and answer in this discussion. They are: Is there a need for two types of service? If so, should different carriers provide the different types?

In answer to the first question, there is general agreement that the public convenience and necessity does require two separate types of service. The Board recognized the need for two types of service in 1944 when after an investigation it concluded that it would be in the public interest to authorize local feeder service to the smaller communities. These two types of transportation are described in different terms. For example, as “express” and “milk run” operations, as “long haul” and “local,” as “trunk” and “feeder,” and occasionally as “primary” and “secondary.” But, no matter what they are called, they represent a public need for two distinct types of service.

The most ideal type of service is the nonstop flight between two points. It represents the highest level of convenience to the passenger as well as profit to the carrier. Improvement in air service means that it moves in the direction of the fast nonstop flight.

Already there is a marked difference between the requirements for equipment to perform this type of service and that required to perform the feeder service. As time goes on that difference becomes greater. Two things work constantly toward widening the gap between trunk and feeder service. They are: The increase in traffic and the improvements in equipment. With the ever-increasing volume of long-haul traffic, and the ever-increasing speed and range of planes, nonstop service will be justified between more and more pairs of cities. With the coming of jet-powered planes, the difference between equipment requirements for trunk and feeder service will be immeasurably greater than at present, and it is generally agreed that the need for two different types of service will be correspondingly increased.

On the next question, however—Should the different types of service be provided by different carriers?—there is not the same general agreement. There are those who believe that the trunks should provide all of the necessary air service. For example, they pose the philosophy that the fat should support the lean. They argue that only a few of the intermediate towns now certificated to feeders can justify air service and that they could be better

\(^1\) Investigation of Local, Feeder, and Pick-up Air Service, Order Serial No. 2203, Docket 857.
served by the trunks at less cost to the Government. This view is not held generally, but represents the thinking of some people in the air transportation industry. The Civil Aeronautics Board answered this question in the Rocky Mountain case when in preference to the already certificated trunk operators it selected for this new type of service two new carriers—Challenger and Monarch. In that decision the Board stated:

"The type of service we here visualize involves an entirely new type of service gauged to meet the needs of smaller communities and relatively short hauls. In view of the limited traffic potentialities of the points on the new system, an unusual effort will be required to develop the maximum traffic. Greater effort and the exercise of managerial ingenuity may be expected from an independent local operator whose continuation in the air transportation business will be dependent upon the successful development of traffic on the routes and the operation of the service on an adequate and an economic basis."

Adhering to this policy, with some compromises, the Board has certificated altogether 20 feeder carriers throughout the United States, and today 17 of them are operating feeder services over approximately 17,000 miles of routes.

But before the feeder carriers were in existence, and when the DC-3 was the only plane available, the trunks had already been certificated to serve a number of small traffic points on their routes in the different areas of the country. Then, in addition to those traffic points, the Board, through compromises and as experiments, has certificated a number of other feeder towns to the trunks for service, with the result that today every trunk is serving a number of feeder towns in every area of the United States. There is no situation where a clean-cut test of having all the feeder towns served by feeder carriers is being made. The different areas represent varying degrees of the separation of the two types of service.

The Board has recognized this situation in certain areas, and undertaken to improve it by instituting proceedings looking toward a more complete separation of these two types of service.

It is this program of completing the separation of feeder from trunk service that I urge as the best contribution which could be made at this time toward the improvement of the domestic air pattern, because: "The transfer of the remaining feeder towns to the feeder routes would make the trunks self-sufficient and separate them from the subsidized service."

Senator Edwin C. Johnson, Chairman of the Senate Interstate and Foreign Commerce Committee, said that the testimony before his Committee revealed:

"... that the certificate requirement compelling the air lines to serve a large number of small stations, or to carry predominantly short-haul traffic absorbed most of the profits earned in the long-haul high-density business and was the basic cause why subsidy was required."

Let me explain that my definition of feeder towns would not necessarily include all of the traffic points referred to in these quotations as being served at a loss. I assume that a number of those are marginal towns which would have a chance of becoming profitable traffic points if and when the trunk-line carriers should be relieved of having to serve so many of the purely feeder towns. It is my thought that the Board, in determining the over all route pattern, would make a tentative judgment with respect to the transfer of each town, and that the regular legal procedure would be followed wherein

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2 Rocky Mountain States Air Service, 6 C.A.B. 695, 736, 737 (1946).
4 Interim Report of May 5, 1950, see page 333 supra.
5 Set forth in Interim Report, see pages 338-9 supra.
each transfer would be considered on its merits and decided accordingly. No doubt there would be a number of situations where the Board would want to modify its policy because of exceptional circumstances. However, the mere fact that a number of towns are marginal would not detract from the benefits which would result from transferring all of those feeder towns about which there would be no question.

If we are to believe these leaders in the air transportation industry whose testimony I have quoted, we must conclude that by relieving the trunks of the obligation of serving the feeder towns on their routes and by making certain readjustments in their route pattern the Board would make it possible for them to become self-sufficient and carry the mail at a service rate. The subsidized communities would then be separated from the communities which produce enough traffic to pay for the air service which they receive. It would be a distinct advantage to the industry to have all subsidized air transportation segregated in the operations of the feeder carriers. Their certificates are temporary and the legal process of eliminating any unjustifiable service would be simplified.

Furthermore, in having all of the subsidized towns segregated in the feeder systems the taxpayers could better understand where their money goes. People are usually against what they do not understand. As long as the subsidized traffic points are mixed in with the profitable traffic points and served together by the big trunk carriers, it is difficult to know who receives the subsidy. The people are told that it goes for air transportation, but that is so general and indefinite that there is a growing sentiment to cut down on subsidy to airlines. But if the subsidy payments were more closely identified with the communities that actually make subsidies necessary and with the airlines that serve those communities exclusively, then the people could decide if they want that service continued.

Last year rural delivery of mail cost the taxpayers of the United States $152,767,962, but the people would not hear of giving up that service, because they see the mail carrier every day when he delivers the mail to their boxes and they are satisfied that they get value received for that money.

The feeder airline is the air service closest to the people. In the small communities served by the feeders, there grows up an intimate relation between the people and the airline. The children and the storekeepers learn the schedules by heart. On Sundays and holidays people gather at the airport to watch the planes come in and depart. They learn to know the pilots by name and the flights by number. Farmers come to depend upon the air service to bring them parts for their machinery during the rush seasons of their farming.

The people who pay for this service are the ones who should be allowed to say whether they want to keep it. Therefore, by separating into the systems of the local carriers this part of air transportation which still needs subsidizing, it can be understood by the people who pay the taxes, and be appraised by them and their Congressmen for its worth. Congress has requested the Board to make a study separating subsidy from service mail pay. What would be a more practical method of doing that than the one here suggested?

Then again feeder towns should be transferred to feeder routes because more people could be given the type of service they need. It has been argued that an unprofitable town on a trunk would be an unprofitable town on a feeder, but that is not necessarily true because the feeder, due to the short-haul characteristics of its route, can gear its schedules to the needs of the people in the feeder towns who want to go to the big trade centers in the morning and return in the evening; whereas the trunk must provide schedules related to the long-haul needs of its traffic, which seldom coincide with the travel needs of the people in the intermediate towns. Therefore, a feeder
town that is a loss to a trunk whose scheduled plane comes through at 2:00 a.m. might easily become profitable to a feeder—at least less of a liability. Trunks find it difficult to adjust their schedules to the travel needs of feeder towns and at the same time provide convenient hours of departure and arrival for their more profitable long-haul traffic. But feeders have no long-haul traffic to consider. In other words, "What is one man's poison is another man's meat."

Furthermore, feeder carriers can develop more traffic from feeder towns because they give the passengers service to more destinations where they want to go than the trunks since the trunks find it necessary to serve the intermediate points on a skip-stop basis. While it is true that not a great deal of traffic moves between intermediate cities themselves, yet there is some; and this inter-city traffic—small though it may be—could easily be the difference between success and failure of air transportation to the smaller cities.

Furthermore, the feeders are able to provide more frequencies to the smaller communities than the trunks, because in some cases the trunk lines serve alternate legs of a route on different flights, thereby further diluting their service to the small intermediate towns. But the feeders have only the one route, and must serve it with a feeder-type of service. Notwithstanding good management on the part of the trunk operators, they find it necessary to compromise between nonstop service for their long-haul passengers and frequent-stop service for their local passengers, and that compromise, like most compromises, is not satisfactory to either group. The long-haul passengers do not like to have their flights brought down from high altitudes to serve so many intermediate points, and the local passengers in the intermediate cities are not satisfied with the infrequency of the schedules and poor scheduling of flights provided at their airports. This compromise type of service by the trunk-line operator is not calculated to develop the maximum amount of traffic. But the feeder carrier, because of more schedules to each intermediate town at more convenient hours would develop more traffic than the trunks are developing in many of the feeder towns now being served by them.

The appealing argument that a trunk carrier can serve an intermediate town at almost no cost at all "because its planes fly right over our airport" has misled the Board and the carriers more than once. Such an argument does not take into account the fact that the plane may be cruising at a very high altitude, already well loaded with long-haul passengers, or that the company would have to block out a number of seats and lose the revenue from some long-haul passengers in order to accommodate the short-haul passengers. Nor does such an argument take into consideration the fact that the plane may not be stopping at the points where most of the local passengers would want to go. It is equally as misleading to look on a map where a line represents the route of a trunk carrier. It passes right through a little city which is indicated on the map with a heavy black circle as large as the heavy black circles which represent other cities served by that trunk. It seems the most logical thing in the world to believe that this little city which is under consideration can have service practically free. This may have been true to a degree several years ago when the trunks were operating DC-3 equipment on their major runs. But today, with larger and faster aircraft, the trunk-line may not even fly over some of the smaller communities on a great many of its through flights. Thus, the truth is that there are situations where available feeders, due to the fact that their equipment is more adapted to the traffic needs of that little city, and due to the fact that their cruising altitudes are low, can serve that point at less cost than the trunk with larger long-haul equipment. Therefore, by transferring these towns to the feeders, both the trunks and the feeders will benefit by the transfer.
The feeder towns should be transferred to the feeder routes because the feeder carrier has a greater incentive than the trunks to develop the local short-haul business. There exists the same difference in incentive between the trunk and the feeder as between the dog and the hare in the fable. The dog when asked why he failed to catch the hare said, "I was running for only a meal, but the hare was running for its life." The trunks not only make more profit out of the long-haul operations, but in most cases serve the intermediate points at a loss. Therefore, it is only acting like businessmen for the management of the trunk lines to place greater emphasis upon the development of the long-haul traffic than upon the short-haul traffic. In fact, it is not unreasonable to assume that many of the small intermediate points are receiving no more than a bare minimum of service. Such an assumption is not based upon a doubt of the good faith of the trunk operators, but upon the normal behavior of business management.

The feeder carriers, on the other hand, are serving the feeder towns zealously. They have no profitable long-haul business to develop, but like the hare, have their business lives at stake. They must live or die as a result of the business they can generate from local short-haul traffic. Because of this strong incentive of self-preservation, the management of the feeder carriers has gone into the small communities with traffic-development campaigns of great intensity which have produced noticeable results. The "Use it or lose it" slogan of the feeders has been effective in increasing air mail poundage as well as passenger load factors. On the question of incentive, there can be little doubt where the interests of the trunk carriers have been since almost all of their technological improvements have been in the direction of long-haul equipment.

The feeder towns should be transferred to feeder routes because that would make possible the extension of air service to more people. In a few areas there are, no doubt, some scattered towns, not quite large enough for trunk service but which could be enjoying feeder service if the other feeder towns in that territory were transferred from the trunks and thereby made available to complete a feeder system. Furthermore, it is doubtful whether a number of feeder companies will be able to justify the continuation of their existence unless some feeder towns now being served by trunks are transferred to their routes in order to make their systems more complete.

If their systems are not made more adequate and their certificates are allowed to expire, the trunks will then be stuck with a number of feeder towns which they must continue to serve at a loss, and the other communities not now being served by the trunks will be left without air service at all. This situation could be avoided by a proper rearrangement of the route structures of both types of carriers to the advantage of both in a manner that would make their operations more profitable and more serviceable to more people.

The policy of separating the two types of service and having them provided by different carriers takes air transportation to more people, whereas the policy of having one carrier serve all of the trunk towns and the best of the feeder towns but not all of them, moves in the direction of keeping air service from communities which could be enjoying it. If we allow these feeders to fail for the want of slight route readjustments and become satisfied with providing air transportation only between those cities that are presently able to support it, with no program for extending it to other communities, then we will not, in my judgment, be fostering and promoting air transportation. If we limit ourselves to only those people already using air transportation, with no plan for penetrating the great majority who have never used it, we will be selling ourselves short. On the other hand, if we project air transportation into all communities which have a reasonable chance of developing enough traffic to justify the service, we will then be
accelerating the progress of air transportation. The foundation of air transportation is the number of people who are willing to patronize it and, in order to build a great air transportation business, it is essential that we rest it on the broad base of an air-minded public—not only in the big cities but in the smaller cities as well. The feeder airlines are today taking air service to the grass roots and thereby broadening the base of the traffic potential of the future. Therefore, this program of feeder airline improvement means air service for more people.

COULD THE TRANSFER OF FEEDER TOWNS TO FEEDER ROUTES BE ACCOMPLISHED?

The next question is, Could such a program as I have outlined be accomplished? I believe it could. The transfer of feeder towns to feeder routes is so mutually beneficial to all concerned that I would anticipate considerable help from the communities and the carriers, particularly when the entire plan would be known. That is where the announcement of an over-all plan by the Board would be useful. Not only would it help sell the idea; but it would be the means of coordinating the efforts of all interested parties.

State Aviation Commissions would, I am sure, cooperate with the Board in working out a route pattern in each state. Their first-hand familiarity with the traffic needs of their own states could be valuable in determining which towns could be better served by the feeders than by the trunks. Maps showing their recommendations sent in beforehand would be very helpful to the Board in making its tentative judgment with respect to the pattern to be announced. These State Commissions could help secure the cooperation of the communities within their several states. I am sure that a thorough understanding of the complete plan by the communities would result in a cooperative effort by all concerned.

The trunks would have no less reason than the feeders to give enthusiastic support to a plan that would give them a chance to get rid of their weakest traffic points, and thereby improve their service, unless some of them still have apprehensions that the feeders may be allowed to evolve into trunks. Most of them, however, are today relying upon the Board's assurances that it has no intention of allowing feeder carriers to expand their services into trunk-line operations. As recently as November 10, 1949, in the Bonanza-TWA Route Transfer case the Board specifically pointed out:

"We would like to emphasize again that we have neither the disposition nor the intention to permit local air carriers to metamorphose into trunk-line operators competitive with the permanently certificated trunk-lines. The local service carriers were certificated by us as an experimental effort to bring useful air transportation services into the smaller communities and the isolated or sparsely populated areas of the country and to feed connecting traffic to long-haul carriers. We recognize that some competition between local service carriers and trunk-line carriers is inevitable but we intend not only to minimize such competition but to prevent its development to the greatest feasible extent."

It should also be noted that the certificate which was issued to Bonanza Airlines was a special feeder certificate authorizing that carrier to engage in "local air transportation service." Furthermore, the Board at that same time agreed upon the policy of inserting such language in all feeder certificates hereafter issued, in order to distinguish them from the certificates of trunk-line carriers.

Since the Board's strong statement of policy in the Bonanza case, together with other clear indications that the Board intends to hold the line and keep feeders from competing with trunks, many of the trunk carriers

6 Bonanza Airlines, Inc.—TWA Route Transfer case, Docket 4053.
have already, upon their own initiative, moved for the separation of feeder towns from trunk routes. Northwest has asked to be relieved from serving Green Bay, Wausau, Eau Claire, and Beloit-Janesville, Wis.; American has asked to suspend service at Abilene and Big Spring, Texas; and TWA, in addition to its willingness to turn over to Bonanza its local routes between Las Vegas, Boulder City, Kingman, Prescott, and Phoenix, asked that it not be required to provide service to Findlay, Springfield, and Lima, Ohio, and Richmond, Indiana. Furthermore, the Board itself has taken the initiative and issued show-cause orders to determine whether certain other of the smaller cities in California, Washington, Oregon, New Mexico, and Texas, should be transferred from the trunk-line routes to feeder systems.7 Therefore, it appears that the Board could expect cooperation from the trunk lines in transferring feeder towns to feeder carriers, particularly if the Board should adopt an over-all route pattern so the trunks would know what the Board has in mind.

RECORD OF FEEDER AIRLINES

Next, I would like to direct attention to the record of the feeder airlines in order to determine whether they have justified their existence up to this point. Before an experiment is worth anything it must be given a fair chance. No one knows how many experiments have failed because they were approached with mincing steps and half measures, but it is known that many experiments which have resulted in great progress would have failed and been discarded if those who were making them had not had the courage and patience to see that the conditions surrounding the tests were favorable to their success.

In the case of the feeder-line experiment, the carriers have been operating under three handicaps. These handicaps are considerable and must be taken into consideration in any fair appraisal of the results. Furthermore, unless they are removed, the results will be inconclusive. These three handicaps to which I refer are: (1) Poorly adapted equipment; (2) short-term certificates; and (3) inadequate route patterns.

With respect to the first handicap; namely, the need for a feeder-type plane, the manufacturers have not felt that the potential market for such a plane has been sufficient to justify the expense necessary to develop it. The Board, however, has in the past indicated to Congress its approval of legislation looking toward the development of a plane especially adapted to the feeder type of service. The possibility that enough savings can be effected in the operation of feeder equipment to materially affect the total results has been questioned, but let me point out that the feeders in one year operated approximately 22 million plane miles with DC-3 aircraft and the saving of only one cent per mile would amount to $220,612. Therefore, I do not discount the possibility of substantial improvements in this direction.

The feeder carriers themselves, at their own expense and as a result of their own ingenuity have made considerable progress in adapting the DC-3 to the feeder service, with the result that today most of them are using it. While it is not the complete answer to their needs, it is being used to serve feeder routes with a fair amount of success.

With respect to the other two handicaps, the Board alone has the power to remove them. I refer to the short-term certificates and the inadequate route patterns. Already the Board has renewed some of the feeder certificates and has in process cases for considering the renewal of others. While this will extend the life of these certificates, it will not and cannot make up to the carriers the difficulties of financing with the resulting delays and losses which

7 See footnote 3, supra.
their certificates limited as they were to only three years instead of five have already caused them. The main part of the damage caused by the short-term certificates has already been done but it should be borne in mind, in appraising the accomplishment of the carriers, that an allowance should be made for the difficulties which they have surmounted in financing the purchase of equipment and in keeping their planes in the air.

It is with respect to the third handicap, however, that the Board can make its greatest contribution toward a successful test on the feeder experiment. The Board is likewise studying this problem with that very purpose in view. When we read the history of the expansion of the railroads across the continent and realize that it was accomplished only by courage and faith on the part of those responsible for Government aid, as well as those pioneering railroaders who invested great sums of money in the construction of railroad beds, including expensive trestles, bridges, and tunnels, it should make relatively easy the willingness to grant an airline a route through the air which involves no outlay of money for a road bed, and which if not successful will automatically terminate within a short period.

While we are thinking of the problems which confronted the railroads I believe it would be interesting to quote a few words which I found in the minority report of Congressman Kidwell of Virginia, made in 1856 on the impracticability of constructing a railroad from the Mississippi River to the Pacific Ocean. In that report he said:

"Who expects a population of half a million souls, including men, women, and children, to supply business enough to support three railroads, each 2,000 miles long, running over mountains covered with snow and across deserts of sand? . . . To properly support that hydra-headed road alone, the united support of the entire industrial interests of the whole British Empire would prove utterly inadequate . . . ."\(^8\)

No doubt there were many others besides Congressman Kidwell who wondered where the traffic would come from to support one railroad, much less three, all the way across the United States.

It is evident from the record that the feeders which are showing the best results are those with the most nearly adequate route patterns. My idea of an adequate feeder route, is one that originates at a good traffic center and proceeds in a reasonably straight direction to another good trade center, serving a number of smaller communities as intermediate points thus connecting the several intermediate communities with their trade centers in such a manner that there will be a strong traffic pull at each end of the route which grows progressively weaker toward the middle. Such an arrangement as I have in mind contemplates that virtually all of the terminal-to-terminal traffic would be carried by the trunk or trunks certificated between those two points. But the two strong terminals would have sufficient community of interest with the intermediate towns served by the feeder as to make it possible to develop respectable loads in both directions from the local traffic. But without a strong traffic pull at both ends of a route, there is not much possibility of developing enough traffic to justify the existence of the carrier.

There are other carriers with inadequate route structures, who, although they have reduced their costs to a level fully as low—and in some cases even lower than those attained by the more successful feeder operators—or I should say more fortunate ones, have been unable to build up respectable load factors, not because of any lack of zeal or efficiency on their part, but because their route patterns are inadequate. In most cases the inadequacy has been the lack of logical terminals to their routes. However,

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there are some cases where the feeder's routes are inadequate because there
are not enough feeder towns on them since some of the feeder towns in
their territory were already being served by the trunks when they were
certificated.

But in spite of these three heavy handicaps and many other difficulties
incident to the initiation of new service, the feeder carriers have made a
creditable record. I shall discuss the record of the following twelve carriers:
All American, Challenger, Empire, Monarch, Piedmont, Pioneer, Robinson,
Southern, Southwest, Trans-Texas, West-Coast and Wisconsin Central.

These twelve feeder operators provide small communities with air trans-
portation to their trade centers in every section of the country. The amount
of temporary mail pay received by them for the twelve months ending Sep-
tember 30, 1949, was $12,945,000. While this amount is substantial, I think
it worth while to bear in mind that the initial stages of any experiment
always entails many costs of a non-recurring nature. Furthermore, it should
be borne in mind that these carriers have, without exception, been able to
reduce the recurring costs consistently and continuously. It should also be
borne in mind that they have consistently increased the non-mail revenues.

Now let us see what the public has received in return for this mail pay
of $12,945,000. These small airlines carried in one year a total of 3,179,525
pounds of mail. That means, when translated into pieces of mail, that these
twelve carriers in one year carried over 60,000,000 letters or other pieces
of first-class mail. If we figure 6 cents for each piece of mail, we would
arrive at a figure of $3,624,658 which was paid to the Government for
carrying and handling that mail. While the expense of collecting and de-
levering must be taken into account, and while allowance should be made for
the fact that other carriers participated in carrying a part of this mail, and
no doubt on a mileage allocation basis the trunks would be entitled to
most of the credit, yet it must be remembered that much of this mail would
not have moved by air if the feeders had not served the communities where
it originated or terminated, and the fact remains that over $3½ million
was paid into the Treasury of the United States for the mail carried by
these twelve feeder carriers.

Now, if instead of figuring 6 cents a letter, we should figure 21½ cents
a letter the amount would cover the entire mail-pay bill for these twelve
carriers. And 21½ cents is not an unreasonable charge for carrying a piece
of mail by a pioneering method of transportation: People paid considerably
more than that for mail carried by the Pony Express. That is a much
fairer way of looking at the mail-pay than to divide it by the number of
passengers thereby implying that the resulting figure is a subsidy from
which no one benefits except those passengers.

Not only did these feeders carry 60 million letters in one year, but they
also carried nearly 6 million pounds of cargo. That is—express and freight.
Most of this cargo consisted of small important items, in some cases emer-
gency items to which the time saving through air transportation is of so
great a benefit as to make it difficult to estimate its value in dollars and cents.

Furthermore, these twelve little airlines are serving a total of 322 cities,
representing a population of more than 41 million people. But of greater
significance than the total population is the fact that in the smaller inter-
mediate towns on these feeder routes there are 1½ million people who are
being given air service for the first time.

Then again, these twelve airlines have activated and are serving a total
of 129 airports which would not otherwise be served. It is difficult to esti-
mate the value to the United States in national defense of having 129 air-
ports kept in operation instead of being allowed to grow up in weeds, particu-
larly when it is realized that many of these airports were built at great
expense by the Government during the war. Furthermore, as a result of these feeder operations, a total of 64 airports have been enlarged. That means 64 more airports have been made available for larger equipment. This too adds substantially to the transportation and distribution facilities of the nation, all of which contribute to a state of national preparedness. Furthermore, as a result of these feeder operations, a total of 92 airports have been provided with night lighting facilities. These 92 airports which can be served at night increase our national defense.

Furthermore, approximately 9,000 miles of new airways have been established for the operation of these feeder routes, and much of this new airway mileage has been established by the airlines themselves, thereby accounting for some of the non-recurring costs referred to above and further increasing our national security. Furthermore, a total of 76 "H" facilities have been installed. Here again the carriers themselves have participated at their own expense to a substantial extent in the establishment of these facilities; and here again we have another example of non-recurring costs as well as 76 steps forward in air safety and national defense.

Furthermore, these twelve feeders employ 3,000 people, of which approximately 2,000 are former service men and women. Approximately 16 per cent of these employees are pilots or a total of 480. I am advised that the National Defense Department spends approximately $2,100 to give a reserve pilot two months training. Although that training is very intensive, yet no one would seriously contend that a pilot with only two months training would be as well prepared as one of these airline pilots who is kept in constant practice. But in order to be conservative, let us assume that if the National Defense Department should give the reserve pilots six months a year training, they would then be as well prepared as these airline pilots.

On that basis, it would cost the Government $3,024,000 to keep 480 pilots up to as high a level of training as the 480 pilots who operate these feeder routes. Approximately 22 per cent of the 3,000 employees are mechanics, and 15 per cent are other technical personnel, I am advised that it costs the Defense Department $1,110 to give a mechanic two months training a year. On that basis, it would cost the Government $3,330,000 to keep 1,110 mechanics and other technical personnel as well trained as the 1,110 who work for these airlines. Adding those figures together, the cost to the Government for the training provided by these feeder airlines for 480 pilots and 1,110 mechanics and technical personnel would be 6 1/2 million dollars. Now bear in mind that this takes into consideration only 53 per cent of the employees of these feeder carriers, and obviously the training provided by these carriers for the other 47 per cent, which includes traffic men and the operations personnel, would all, in case of war, be of considerable value to the Government in setting up another Military Air Transport Service such as that organized during the last war.

Furthermore, these 12 carriers are today operating a total of 84 aircraft an average of approximately 24 million miles a year. Seventy-eight of these are DC-3's and 6 are Lockheed Electras. That represents approximately half the number of transport planes turned over to the Air Force by the airlines at the beginning of World War II which, with such military and naval planes as were available, became the nucleus around which General Harold E. George built the Air Transport Command.

Furthermore, these 12 feeder lines carried in one year a total of 624,660 passengers which represents $6,900,000 in passenger revenues. By dividing their total mail pay bill of $12,945,000 by the 624,000 passengers carried by them, the result would be a figure of $20.72. Now instead of saying as some have that for every passenger carried by these feeder airlines, Uncle Sam paid a subsidy of $20.72, it would be fairer to say that these 624,000 passengers contributed $6,900,000 toward our national defense, because every
dollar of non-mail revenue which these carriers receive reduces the amount which the Government must pay in order to have available as the backlog of national defense 84 operating transport planes, 129 activated instead of closed down airports, 64 enlarged airports, 94 lighted instead of dark airports, 9,000 miles of new airways, 76 new "H" facilities, and 3,000 trained up-to-the-minute additional personnel.

To what extent the feeder operations have resulted in encouraging air travel over the trunks is not known, and would be very difficult to determine; however, it is reasonable to believe that where a passenger could make his entire journey by air because of the feeders which provide a convenient connecting service with the trunks, the chances of his making the journey by air would be much greater than if he had to make part of his journey by surface transportation, either at the beginning of the trip or at its termination.

These feeders have in one year received from the trunks and carried to their final destination 154,536 passengers. Unquestionably, some of these 154,000 passengers were influenced to travel by air because of the added convenience of their feeder service.

Furthermore, these carriers, true to their name as "Feeders" did in one year deliver to the trunks 100,844 passengers. This means that in one year, a total of 254,880 passengers either began or completed their journey on these feeders. Obviously, these would be mostly long-haul passengers because for a short trip a passenger would not likely go to the trouble of changing planes and carriers. It is also more than likely that of the majority of these passengers, the trunks received the larger share of the fare and, therefore, estimating the figure of $40 as the trunk lines' share of the ticket we would have a figure of approximately 10 million dollars which would be the trunks' share of these joint passengers. That, I submit, is a very respectable figure, and no one would argue that the added convenience of being able to complete their journey by air due to the services provided by the feeders did not contribute substantially to producing that revenue.

These twelve feeder carriers have made many contributions to the fast developing industry of aviation, contributions which may not have been made for many years if we had depended upon the trunkline operators to make them. But fortunately, the Board entrusted the development of this short-haul business to small independent carriers instead of to the trunk line carriers. It was felt that the trunks would be giving their attention to the more profitable part of their business—the long haul, and would not devote the intensive effort to the development of the short-haul business that it required. Time has proved that decision to be good. The oneness of purpose of these feeder carriers is responsible for the impressive list of contributions which in a comparatively short period of time they have made to this industry.

One of the important contributions which the feeder carriers have made to the aircraft industry generally, and which has had a wide-spread influence on operators of DC-3 equipment, both trunk and feeder, has been a flight equipment conversion plan which has improved the interior arrangement of the DC-3 aircraft and has made it more suitable for airline use, especially for short-haul service. This plan has eliminated the costly time and manpower consuming use of a multitude of mobile ramp vehicles and has reduced loading time from the usual 15 minutes required with a conventional DC-3 plane to two minutes. By shifting the cargo space to the back of the plane, substantial economies have been effected in loading costs. By installing a stairway passenger door which is operated by the cabin attendant and self-service baggage racks, the loading and deplaning of
passengers have been greatly expedited and the services of a number of ground personnel dispensed with.

An important contribution of the air carriers is the use of carrier personnel to make weather observations. For example, Southwest has 27 stations on its system, only ten of which are served by the Weather Bureau's Airways Service. At the remaining stations this carrier's personnel make weather observations every hour from 6:00 a.m. until departure of its last flight. This amounts to more than two hundred observations daily. The information is collected in sequence by means of a private teletype system. In addition to serving the company's operations, the weather information is furnished to the Weather Bureau for distribution in regular sequence reports. Based upon the Weather Bureau's pay scale of as much as $1.00 per observation to individuals for similar observations at points where there are no regular weather stations, this represents a contribution of $200 per day by this carrier to aviation generally. During a two week survey made by Southwest, direct requests for weather information at this carrier's stations exceeded 500, or an average of 36 per day. These requests included such agencies and individuals as Army Air Force pilots, Navy Air Transport Service, Civil Aeronautics Administration Control Towers, Forest Service pilots, scheduled air carriers, airport managers, flying schools and private pilots. All feeder carriers are rendering a similar service in various sections of the country.

Southwest operates a route which crosses large areas of valuable timber land. This carrier has worked out fire reporting procedures with U. S. Forestry division supervisors wherein fire reports are relayed by radio from flight crews to the carrier's ground stations and thence via telephone to the nearest Forest Service Station. In one National Forest alone the supervisor has estimated that millions of dollars worth of timber have been saved by this carrier's fire reports and that during the fall of 1949 in which there were a series of fire outbreaks, this carrier spotted 17 unreported fires within a 24 hour period.

Southwest developed the operating procedures and pilot training program for the first commercial all weather operation at Arcata, California. This operation utilized FIDO, GCA, High Intensity Lights, and ILS. This carrier's use of these facilities marked the first time a scheduled air carrier used manufactured weather in regular operations. The information and experience gained from this operation has been of material value to the aviation industry, military and civilian. This carrier has recently developed procedures utilizing High Intensity Lights as a prime landing aid, and has been approved for minimums of 100 feet and one-quarter mile, the lowest minimums approved for any certificated carrier.

The feeder carriers have made important developments relating to communications. One of these is the development of an integral radio junction box which eliminates much of the time necessary for radio technicians to be in the cockpit, thus decreasing the time required for aircraft radio maintenance.

The feeders have developed a packaged ground station unit containing power supply, transmitter and receiver. Instead of having technicians touring the system, these units are forwarded to the radio shops for service when they become defective. Spare replacement units are then shipped to the station having radio trouble, thus putting the station back in operation in a minimum of time and eliminating the costly item of traveling expenses heretofore required to have roving radio technicians constantly touring the system in order to repair and check station radio equipment.

An important development by Piedmont is an ILS test set with a single unit instead of three test units previously used and which required three
technicians at the same time to make the test. This single unit incorporates both the glide path and the localizer test set, and requires only two technicians to complete the necessary daily checks.

Piedmont has contributed substantially to the development of a new type of DC-3 engine priming system. The earlier system utilized numerous small brass lines running to several different cylinders, these lines being in the fire zones of the engines and creating a constant fire hazard. This carrier's new system requires only two lines, neither of which goes to the cylinders. Instead, the prime is put directly into the induction blower of the engine. In addition to being considerably safer, the new method effects substantial savings in installation and maintenance expense. This development has been of sufficient importance that Pratt & Whitney has issued a service bulletin setting forth the method developed by Piedmont for making the change.

Practically every one of the feeder carriers has made some contribution to the air transportation industry. Among these are procedures, methods, and devices for easing the inspection, maintenance, technical, and operating burden, which have been important items of expense. In addition, refinements in the accounting and stock inventories, and the introduction of multiple activities for personnel have streamlined these feeder companies into highly efficient units of our air transportation network. These are just a few of the contributions which the feeder carriers have made to the air transportation industry. There are, of course, many others which I will not go into at this time.

This program which I have outlined would require the cooperation of all parties concerned in order to achieve the fullest benefits. The key to achieving it, of course, would be an over-all route pattern. There may be those who would hesitate to give their support to such an effort because they fear that it is not feasible since it strives for too great a degree of perfection.

I do not subscribe to such a defeatist attitude; neither do I subscribe to that other defeatist attitude which is that we cannot do anything because we cannot do everything. I realize that the Board might not succeed in securing all of the route improvements which it would recommend, but even so, I believe we should set up the ideal route pattern as our goal and strive to achieve as much of it as possible.

NASAO ACTIVITIES

INTER-RELATIONSHIP between international, federal and state activities in aviation matters and the resultant impact upon concepts of law and procedure has been brought to the forefront in recent months. The Taormina redraft of the Rome Convention on Damages to Third Persons and Property on the Ground,—H.R. 8126 introduced by Congressman McGuire of Connecticut on April 20, 1950 in the Congress proposing to require proof of financial responsibility from all aircraft owners and operators,—and efforts on the part of the state aviation directors members of the NASAO to secure elimination from state laws of 13 states of “absolute liability” for aircraft owners and operators, indicate the more or less interdependence of processes at work.

POSSIBILITY OF DIVERGENT FEDERAL AND STATE LIABILITY THEORIES

If the trend of the thinking expressed during work on the redraft of the Rome Convention should result in compromise on the part of the United States to accept the “absolute liability” theory, then we have a change in
the basis of liability in general practice in the states, by process of international agreement. While there may be given the argument that such compromise is justified in order to have an international agreement adhered to by the member nations of ICAO, and that it would cover only international flights, there yet remains the unalterable fact that we would have an absolute liability theory at the federal level and a divergent theory at the local level.

An interesting and novel approach to the evidently preponderant thinking of the Air Coordinating Committee membership respecting the Taormina redraft of the Rome Convention was made by Leander I. Shelley, General Counsel of The Port of New York Authority in an address before the annual meeting of the Airport Operators Council at Cleveland on April 25, 1950. His Address was entitled "Legal Matters Involving Questions of Policy for Airport Operators," and reads in part as follows:

"The second question which will arise in Montreal is whether they should indicate a willingness to approve the proposed treaty in substantially its present form, and nothing more. This question I believe should clearly be answered in the negative. If exonerating foreign aircraft operators from their obligation to pay in full all damages caused by their wrongful acts is justifiable, it must be because of considerations of nationwide importance. Under such circumstances the loss should not be imposed upon the innocent persons who suffered the actual damage, but should be borne by the Nation as a whole since the agreement is made for the benefit of the entire Nation. (Italics by writer.)"

"This raises the third question, which is, assuming the desirability of the treaty because of controlling reasons of national policy, can it be entered into without imposing an unjust burden upon innocent persons suffering damage. To my mind this result can be accomplished. If for the benefit of the nation as a whole, it is desirable to limit the amounts which may be recovered from foreign aircraft operators, then it necessarily follows that the nation as a whole should foot the bill and that Congress should ratify the treaty only if at the same time it adopts a statute placing the duty upon the federal government to pay any excess of the just claims of residents and citizens of this country over and above the amount which might be collected from the foreign airline under the treaty. . . ."

"The problem of protecting United States flag aircraft, against what has been called 'catastrophic risks abroad', (absolute liability with certain high limitations) might also be solved if in lieu of ratifying the proposed treaty, our government undertook to insure our airlines against such risks by insurance analogous to war risk insurance at reasonable rates. . . ."

The distinguished General Counsel for The Port of New York Authority, as so many other persons in federal policy-making posts, concentrate their attentions upon the scheduled airlines and their needs, and fail to take into consideration the increasing non-airline air transportation of private and industrial aircraft. The intent of the international agreements is to cover all aircraft since the definition of terms for "aircraft operator" or "operator of aircraft" covers all aircraft owners or operators of a signatory Nation, and not only the certificated scheduled carriers.

**FEDERAL REQUIREMENT OF FINANCIAL RESPONSIBILITY**

H.R. 8126 proposes to amend the Civil Aeronautics Act of 1938 empowering the Civil Aeronautics Board to require proof of financial responsibility as a condition precedent to operation of aircraft in air commerce. The Board is to make rules and regulations in the subject and there are no limitations nor other guiding criteria in the Bill, nor standards which the CAB is to follow. The provisions in effect require "compulsory insurance." Indirectly, it would establish absolute liability in practice, even though it is not spelled out in so many words. The NASAO has been cognizant of the need for greater coverage of civilian flying with some form of protection to third persons and property on the ground as an adjunct of the enforce-
ment problem for several years. As has been reported, this past year, attention has been given to the various state laws of liability of aircraft owners and operators, resulting in the appointment of a Special Committee of the NASAO for Revision of state laws. That Committee has under very active study the matter of a financial responsibility model law under the general subject of liability. Its efforts thus far, still in the working study stage, reflect the industry's leaning toward financial responsibility laws at the state level rather than compulsory insurance law at the federal level. Experience had in the one state, Massachusetts, in the motor vehicle field, indicates that the majority of claims lead to awarding damages irrespective of the normal defenses which the insured could invoke. That is the indirect manner of effecting absolute liability.

The Bill attempts to place at the federal level a responsibility which should be administered at the local level, both from the standpoint of legal precedence and efficiency in administration. Unless greatly increased appropriations are made available to the CAB for the additional personnel and equipment to keep records of the financial responsibility coverage on each of the owners of the 90,000 aircraft presently registered with the CAA, not mentioning keeping such records in current condition on various changes in ownerships, cancellations or renewals of policies, accidents requiring recording against individual registration, it would appear that the intent of the Bill would not be fulfilled. Cases in courts would be delayed to such an extent that recoveries would defeat the distress needs of the injured and damaged persons.

The State of Illinois enacted in 1949 two new aviation laws on this subject. Section 83 of the Illinois Aeronautics Act is known as the Guest Act, and Section 42 of the Illinois Aeronautics Act is known as the Aircraft Financial Responsibility Law. In the latter section, the owner of every aircraft which is involved in an accident within the State of Illinois, in which any person is killed or injured, or in which damage to property is sustained in the excess of $50.00, must report such accident in writing to the Department of Aeronautics within ten days after such accident. The Department then determines whether the accident is such as to require deposit of security for satisfaction of any judgment for damages resulting from such accident. Evidence of coverage may be in the form of aircraft liability policy of insurance, bond, or evidence of ability to act as self-insurer. Registration of ownership and operation of aircraft at the state agency, is a fundamental requisite for insurance coverage.

Since compulsory insurance has not fulfilled its purpose in cutting down reckless operation of motor vehicles, but on the contrary has increased violations of safe operating standards as experienced in Massachusetts, the NASAO Committee is giving full consideration to that aspect of any proposed coverage for aircraft owners and operators. The results of the studies of the NASAO Special Committee will be presented to the NASAO annual meeting at Minneapolis, Minnesota, on October 2-4, 1950. It is hoped that no legislation at the federal level will be enacted in this subject until the NASAO views are available.

**STATES MODIFY ABSOLUTE LIABILITY RULE**

Indication of the efforts of state aviation directors to achieve elimination or some modification of the "absolute liability" provision of the early model Aeronautics Act Section 5, is found in 1949 amendments to the aviation laws of South Dakota, Maryland, and Wisconsin. They are quoted in part as follows:
SOUTH DAKOTA—Amending Section 2.0305 of the South Dakota Code of 1949, relating to Aeronautics.

"2.0305 Damage on Land. The owner and the pilot, or either of them, of every aircraft which is operated over lands or waters of this state shall be liable for injuries or damage to persons or property on the land or water beneath, caused by the ascent, descent, or flight of the aircraft, or the dropping or falling of any object therefrom in accordance with the rules of law applicable to torts in this state.

"As used in this section, 'owner' shall include a person having full title to aircraft and operating it through servants, and shall also include a bona fide lessee or bailee of such aircraft, whether gratuitously or for hire; but 'owner' as used in this section, shall not include a bona fide bailor or lessor of such aircraft, whether gratuitously or for hire, or a mortgagee, conditional seller, trustee for creditors of such aircraft or other person having a security title only, nor shall the owner of such aircraft be liable when the pilot thereof is in possession thereof as a result of theft or felonious conversion."

MARYLAND—Chapter 422, paragraph 9, Laws of 1949:

"Damages on Land. The owner of every aircraft which is operated over the lands or waters of this State is prima facie liable for injuries to persons or property on the land or water beneath, caused by the ascent, descent or flight of aircraft, or the dropping or falling of any object therefrom, unless the injury is caused in whole or in part by the negligence of the person injured, or of the owner or bailee of the property injured, or unless at the time of such injury the said aircraft is being used without the consent, express or implied, of the owner....

The presumption of liability on the part of the owner, or of the owner and lessee, as the case may be, may be rebutted by proof that the injury was not caused by negligence on the part of such owner or lessee, or of any person operating such aircraft with the permission of the owner of lessee, or of any person maintaining or repairing such aircraft with the permission of the owner or lessee. An airman who is not the owner or lessee shall be liable only for the consequences of his own negligence...."

WISCONSIN—Chapter 539 of 1949 Wisconsin Laws, repealing and recreating 114.05 of the statutes, relating to liability for damage caused by operation of aircraft:

"114.05 Damages by Aircraft. The liability of the owner, lessee and pilot of every aircraft operating over the lands and waters of this state for injuries or damage to persons or property on the land or water beneath, caused by the ascent, descent or flight of such aircraft, or the dropping or falling of the aircraft or of any object or material therefrom, shall be determined by the law applicable to torts on land, except that there shall be a presumption of liability on the part of the owner, lessee or pilot, as the case may be, where injury or damage is caused by the dropping or falling of the aircraft or of any object or material therefrom, which presumption may be rebutted by proof that the injury or damage was not caused by negligence on the part of the owner, lessee or pilot and the burden of proof in such case shall be upon such owner, lessee or pilot to show absence of negligence on his part."

It would appear that in view of local conditions in some states the intermediate steps of "presumptive liability" has had to be taken in revision of laws for aircraft, but continuing efforts will be made at the state level to achieve acceptance of the general principles of liability based on negligence in general tort law, for aircraft, similar to other chattels, rather than singling aviation for special rules of liability.

M. C. D.