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A CRITIQUE OF PROPOSALS TO SEPARATE SUBSIDY FROM AIR MAIL PAY

By D. PHILIP LOCKLIN

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THE steady increase in the amounts paid to commercial airlines for carrying mail has led to increasing demand that the subsidy element and a "reasonable compensation" for the service performed by the airlines in carrying mail be separated.

It will be observed from Table I that for the years 1945 and 1946 the ton-mile yield of the mail rates was not greatly in excess of that of passenger fares and express rates for the trunk lines. In other years the

TABLE I
AVERAGE TON-MILE REVENUES FROM PASSENGER, EXPRESS, FREIGHT, AND MAIL
TRAFFIC, DOMESTIC AIRLINES, 1938-1950¹

	Average revenue per ton-mile			
	Passengers ² (cents)	Express (cents)	Freight (cents)	Mail (cents)
<i>Trunk Lines</i>				
1938	52.6	58.00		208.00
1939	51.3	58.00		214.00
1940	50.9	60.00		210.00
1941	50.4	58.65		188.08
1942	50.3	54.56		149.05
1943	55.0	58.26		77.65
1944	51.7	47.97		64.92
1945	52.2	48.85		56.65
1946	47.1	41.98	32.74	54.73
1947	47.3	39.36	27.11	76.37
1948	53.8	33.70	20.69	112.23
1949	58.2	34.41	19.63	117.39
1950	56.4	32.72	19.41	109.30
<i>Feeder or Local Lines</i>				
1942		116.61		2,877.80
1943		111.78		2,083.71
1944		78.35		1,167.41
1945		72.48		873.52
1946	47.1	51.60		1,722.23
1947	48.1	41.93	55.87	3,875.39
1948	51.0	36.64	27.78	4,295.64
1949	54.1	37.60	29.77	2,897.69
1950	54.7	36.15	31.24	2,865.49

¹ From annual reports of the Civil Aeronautics Board.

² Average passenger fare per mile converted to ton-mile basis by considering passenger and baggage to weigh 200 pounds.

ton-mile yield of mail rates has greatly exceeded the yield from other traffic. The high ton-mile revenues received by the local and feeder lines for transporting mail arise from the fact that they are paid on a plane-mile basis but the weight of the mail transported is small.

It is clear that Congress, in enacting the Civil Aeronautics Act of 1938, intended that the payments to the airlines for transporting mail should be sufficient to keep them in existence and enable them to develop and expand air transportation service. In fixing "fair and reasonable" rates for the transportation of mail the Civil Aeronautics Board is required to take into consideration "the need of each such carrier for compensation for the transportation of mail sufficient to insure the performance of such service, and, together with all other revenue of the air carrier, to enable such air carrier under honest, economical, and efficient management, to maintain and continue the development of air transportation to the extent and of the character and quality required for the commerce of the United States, the Postal Service, and the national defense."³ As stated by the Board in 1942: "The Civil Aeronautics Act has established the rule that where the other revenues of an air carrier do not suffice to meet the expenses of developing and maintaining air transportation as required in the national interest, the air-mail compensation shall be given the marginal role, and shall be established at such a level as is necessary to build the total revenues up to the required level."⁴ It will be noted that the carrier's need is an important element in fixing "just and reasonable" air-mail rates, and that the Act does not distinguish between a subsidy element and a non-subsidy element in the rates to be fixed. Recent discussions of the subsidy question call for distinguishing between the subsidy element in the air-mail pay, and what is variously termed a "just and reasonable," "compensatory," or "commercial" mail rate, or "earned mail pay."

For several years the procedure for determining air-mail compensation under the Act was, in substance, as follows: estimate the expenses of the airlines for providing the service deemed necessary or desirable, add an amount to represent a fair return on capital invested, deduct anticipated revenues from non-mail sources, and then consider the remainder as the amount to be paid the airlines for transporting mail. By 1942, the larger carriers had attained an earning position which no longer required that mail compensation be determined in the traditional manner. In fact, to have determined their compensation in the usual manner would have resulted in no compensation, or even negative compensation, for transporting mail. Obviously, Congress did not expect the airlines to carry mail for nothing.

Under these circumstances the Civil Aeronautics Board evolved what it called a "service rate," as distinguished from a "need" rate which continued to be determined in the traditional manner. Ori-

³ Section 408 (b).

⁴ *Pennsylvania-Central Airlines, Mail Rates*, 4 C.A.B. 22, 51 (1942).

nally, the "service" rates were based on cost allocations, plus certain allowances. Costs incurred solely for mail or for non-mail services were segregated, and the costs incurred in common for mail and commercial services were allocated on the basis of relative pound-miles of mail and of non-mail traffic. The allowances in excess of costs so determined were based on a number of considerations, among which were (1) the difficulties encountered in attempting to make estimates of future revenues and expenses, particularly under changing conditions; (2) the accentuated effect which errors would have on profits or net income — a condition which results from the small amount of capital employed in relation to the volume of business; and (3) expenses attributable to various priorities accorded mail; and (4) uncertainties resulting from the war.⁵ The allowances may therefore be said to be in the nature of a safety factor and provision for immeasurable elements. The "service" rates first prescribed were on the basis of 60 cents per ton-mile. Later, rates for four airlines were established at 45 cents per ton-mile. Post-war difficulties of the airlines have since required substantial increases in mail rates.

The Board considered that the "service" rates established by it contained no element of subsidy. Mr. Branch, a member of the Board, believed that the "service" rates were higher than they needed to be, and that they still contained an element of subsidy.⁶ Although it may be debatable whether "service" rates contain any subsidy, it is generally considered that "need" rates do. As will be pointed out later, however, it may be argued that under some circumstances even the "need" rates do not contain a subsidy.

IS THE SEPARATION OF THE SUBSIDY ELEMENT FEASIBLE?

There are two major arguments for separating from air-mail pay any subsidy that may be contained therein. First, it is undesirable to have the budget of the Post Office Department burdened with subsidies to airlines. The Post Office Department budget should include reasonable payments to the airlines for the services which they perform in transporting mail. To include in its budget, however, the amounts which constitute subsidy to air transportation improperly burdens and distorts the budget, and makes the Post Office deficits larger than they would be if the air-mail payments contained no element of subsidy. Secondly, the separation of the subsidy element from the air-mail payments would bring the subsidies into the open. This would presumably invite a closer scrutiny of them and a re-examination of the question of continuing them.

The arguments for separation of subsidy from the air-mail payments commend themselves as reasonable, and the proposal has re-

⁵ See *Pennsylvania-Central Airlines, Mail Rates*, 4 C.A.B. 22, 43 (1942).

⁶ See separate opinions of Branch in *Eastern Air Lines, Mail Rates*, 3 C.A.B. 733 (1942), and in other cases decided in 1942 and 1943 in which service rates were prescribed.

ceived wide support. It was recommended by the staff report of the Board of Investigation and Research,⁷ by the Hoover Commission,⁸ and by the Department of Commerce in the so-called Sawyer Report.⁹ Separation of the subsidy element from air-mail payments was advocated by President Truman in his message to Congress on the 1951 budget. The Civil Aeronautics Board, although in agreement with the principle of separation, has until recently resisted legislative efforts to compel it to make such a separation. It has expressed a willingness to study the problem however, and in the "Big Four" mail rate proceeding now before it, the Board is attempting to determine a "fair and reasonable" rate exclusive of any subsidy payments to which the carriers may be entitled under the provisions of the Civil Aeronautics Act.¹⁰

Although there is widespread agreement that it would be desirable to separate the subsidy element from air-mail payments, the difficulty comes in making the separation. The subsidy element in air-mail compensation may be defined as the amounts paid the airlines in excess of a fair and reasonable compensation for the carrying of the mail based on commercial considerations. The problem of determining the subsidy in air-mail payments is therefore the problem of determining a fair price for the service performed.

We will now turn to a consideration of various approaches to the problem of separating the subsidy element from air-mail compensation.

THE ALTERNATIVE COST APPROACH — NEED RATES

One claim, as previously suggested, is that there is no element of subsidy in air-mail payments under present methods of computing even the "need" rates.¹¹ This contention is based on the belief that when airlines are paid on the "need" basis the cost to the Government is less than if the Government transported the mail itself, or possibly had it transported on a contract basis in planes devoted exclusively to this service. According to this view there is no subsidy in the "need" rates unless the cost to the Government exceeds the cost that would be incurred by the Government if it transported the mail itself or contracted out the job.

What it would cost the Government to transport the mail itself is purely speculative. What it would cost to contract out the service over particular routes might not be beyond reasonable approximation. The cost to the Government of getting the mail transported by the latter method might be very low on routes having a sufficient volume of mail to utilize fully, or nearly so, planes of such size and type as were suited

⁷ *Public Aids to Domestic Transportation*, 79th Cong., 1st Sess., House Doc. No. 159 (1944), p. 49.

⁸ See Report on the Post Office Department.

⁹ *Issues Involved in a Unified and Coordinated Federal Program for Transportation* (1949), p. 17.

¹⁰ Civil Aeronautics Board, *Annual Report*, 1950, p. 12.

¹¹ For this view see Putnam, Carleton, "The Illusion of Air Subsidy," 17 *J. AIR L. & C.* 32 (1950).

for the task. The rates might not vary greatly from air cargo rates charged by common or contract carriers by air. On light mail routes, however, the cost would be high if reduced to a ton-mile basis.

The contention that "need" rates do not contain an element of subsidy as long as they do not result in payments that exceed the cost of getting the air mail transported in other ways rests upon the assumption that the transportation of the mail is the primary and all-important service, and that the transportation of passengers and property may be treated as a by-product. Any contribution which the non-mail services can make to the revenues of the carrier above any direct expenses incurred especially for those services lessens the contribution which air mail must make toward meeting the expenses incurred for all services together.

For this theory to be valid three conditions must be fulfilled. First, the mail service must be one which the Government would deem worthwhile and would provide either by carrying the mail itself or by hiring it transported on a contract basis. It is possible that some of the air-mail service now provided, particularly by local or feeder lines, would not be provided if its provision were not tied up with the promotion of local and feeder air service generally. A second condition which must be fulfilled for the no-subsidy contention to be valid, is that the non-mail services contribute as much as possible, up to their full share, of the expenses of the airlines incurred in common for carrying mail, passengers, express, and freight. A third condition which must exist to make the no-subsidy theory valid is that the equipment, facilities, and scale of operations conducted by the airline are not so greatly in excess of the requirements for carrying mail that non-mail revenues do not really reduce the cost of carrying mail. If these three conditions are fulfilled, the "need" rates paid the airlines could be considered as containing no element of subsidy.

There is danger that acceptance of the no-subsidy contention would lead to indiscriminate approval of "need" rates without a careful check against the cost of getting the mail transported in alternative ways. It is quite likely, however, that on some routes the "need" rates contain no element of subsidy. This might well be the situation when the non-mail business is simply sharing with mail the costs of flying planes of a size and type suitable for light traffic routes. The "need" method of determining air-mail rates, however, would become incongruous when applied to large airlines operating huge and luxurious passenger planes, and maintaining an expensive organization and elaborate facilities for the benefit of a large number of passengers, but handling a comparatively small amount of mail. To saddle upon air mail the responsibility for making up any deficiencies in revenues arising from unprofitableness of the non-mail business under such conditions would result in air-mail rates that were unreasonable. Air-mail revenue now constitutes only about 10 percent of the revenues of the trunk lines —

9.5% in 1950. To throw on this business the burden of making up deficiencies in revenues from the much more extensive passenger, express, and freight operations, as may result from the fixing of mail rates on a "need" basis, shows the absurdity of assuming that under all conditions the revenue from non-mail services is reducing the cost of carrying mail.

Our conclusion is that "need" rates, determined by the methods currently in use, do not always result in subsidy. On the other hand, the traditional method of fixing "need" rates can result in huge subsidies where it forces the mail to carry extensive losses for non-mail services, or where it makes the mail support much more extensive air transport facilities than are necessary for carrying the mail.

THE COST ALLOCATION APPROACH

Air-mail subsidy is most commonly considered to be the excess of air-mail payments over the cost to the airlines of transporting the mail as determined by cost-accounting methods. Costs attributable solely to mail and non-mail services are first determined, and the remaining or common costs are allocated to mail and non-mail services on some basis that commends itself to the cost accountant as sound. This was the method used in the study made by the Federal Coordinator of Transportation,¹² and later by the Board of Investigation and Research.¹³ The allocation of common costs in both of these studies was based on the ratio of pound-miles of mail and of non-mail traffic to the total pound-miles.¹⁴

As previously noted, the cost-allocation method of fixing air-mail rates was used by the Civil Aeronautics Board in 1942 when it first prescribed "service" rates for the airlines which had become self-supporting from their commercial operations. If the cost-allocation approach is considered sound, and if it was properly applied in those cases, there was no element of subsidy in the "service" rates there prescribed, except such as may have resulted from the generosity of the Board in making liberal allowances for unforeseen factors. The cost-accounting approach to the subsidy question, however, will show substantial subsidy to airlines which are paid "need" rates.

It may be questioned, however, whether the cost accounting approach to the subsidy question, or what is the same thing, to the determination of reasonable air-mail rates, is entirely sound. We are brought squarely to the same question that arises when an attempt is made to prescribe rates for common carriers or public utilities on a strictly cost-allocation basis. The problem is well illustrated by recent

¹² *Public Aids to Transportation*, vol. I (1940), p. 134.

¹³ *Public Aids to Domestic Transportation*, 79th Cong., 1st Sess., House Doc. No. 159 (1944), pp. 450-452.

¹⁴ The amount of "public aid" or subsidy to the domestic airlines for the years 1938 to 1948, according to this method of calculation, are set forth on page 259 of an article by M. G. Goodrick, who applied the B.I.R. method. "Air Mail Subsidy of Commercial Aviation," 16 J. AIR L. & C. 253 (1949).

cases involving railroad freight rates and passenger fares. The passenger service of the railroads has resulted in "passenger deficits" for many years, except for a time during World War II. The "passenger deficit" is the amount by which passenger revenues have fallen short of covering passenger expenses determined by an allocation of common costs on what appears to be a reasonable basis according to cost-accounting standards. Does this mean that passenger fares are too low, and that shippers of freight have been called upon to pay higher rates than they should? The answer obviously depends on whether conditions of demand will permit higher passenger fares without reducing revenues therefrom. If passenger service cannot be made to contribute any more to common costs, either the freight service must contribute it, or the carriers will fail to recover their full costs.¹⁵ Similarly, air-mail rates of the airlines may have to contribute more to the common costs incurred in transporting mail, passengers, freight, and express, or the airlines will not recover their entire costs. We must conclude therefore that if value-of-service considerations may properly affect the rates for transporting passengers, property, and mail by the airlines, mail rates that exceed allocated costs do not necessarily contain a subsidy.

Value of Service in Determination of Air-Mail Rates

A difficulty is encountered in permitting value-of-service or what-the-traffic-will-bear considerations to enter into the determination of air-mail rates or into the measurement of air-mail subsidy. The purchaser of the transportation of air mail is the Government; the Government appears willing and able to pay almost anything for the service. In the past it has been willing to pay whatever has been necessary to enable the airlines to continue their operations, namely, the difference between air-line costs and the revenues from non-mail services. If the Government is willing to pay this price it may be argued that almost any rates are justified. To depart from allocated costs and permit value-of-service considerations to enter into the determination of reasonable mail rates would therefore seem to deny that there is or could be any element of subsidy in the rates so long as the Government was willing to pay them.

Admission of the value-of-service principle into the determination of reasonable mail pay, however, does not necessarily lead to the denial of a subsidy element. The real users of air-mail service are those who send letters and parcels by air mail. The value-of-service concept is meaningful only when related to its value to those who use the service. The situation could be seen more clearly if the Post Office Department did not impose itself between the users of air-mail service and the airlines which transport the mail, however impractical such an arrangement might actually be. Thus, if the airlines transported letters and

¹⁵ For a discussion of the railroad "passenger deficit" see "Are Passenger Service Costs Illusory?" 127 *Railway Age* 871 (1949).

parcels for individuals directly and the airlines were paid directly by the sender, it would be clear that under traditional methods of fixing transportation rates value-of-service considerations might properly be considered in determining the airline's charge, irrespective of allocated costs.

Since the Post Office Department, however, does necessarily impose itself between the ultimate user of air-mail service and the airlines which transport the mail, the value of service can be related to the air-mail user only through comparison of air-mail payments and air-mail postage receipts.¹⁶ If air-mail postage receipts should exceed air-mail payments, to the airlines plus other costs incident to air-mail service, we would have to conclude that air-mail payments were not higher than could be justified on value-of-service considerations. If, however, we found that the air-mail postage receipts fell short of air-mail payments to the airlines plus other costs associated with air-mail service, we would not be sure that the service was worth its cost, but we would know that the service was not self-supporting under the particular level and structure of air-mail postage rates in effect.

To suggest that value-of-service considerations may justify higher rates for transporting mail than are received by the airlines for transporting passengers and property is not necessarily to justify rates for transporting mail as high as the traffic will bear. It only justifies rates as much higher than allocated costs as may be necessary to offset the inability of the non-mail services to meet their allocated share of common costs. Value-of-service considerations justify rates above allocated costs only to the extent that they are absolutely necessary. If passengers, freight, and express can contribute their share of costs, they should do so. If value-of-service considerations do not permit this, then the services with a higher value of service may properly carry the additional burden, but not more than is necessary. Air-mail rates should not subsidize passenger, freight, and express services if the latter can carry their share of common costs.

We must conclude that if conditions of demand would not permit passengers, express, and freight to contribute a pro rata share of the common costs of providing airline service, it is not unreasonable to ask mail rates to contribute what is necessary to defray the rest of the costs. If this is true, the difference between air-mail payments and costs assigned to air mail by cost accounting techniques is not necessarily a measure of subsidy. The point should be reiterated, however, that when passengers, freight, and express can be made to contribute their share of airline costs, they should do so. This was the situation existing among the larger airlines when the Civil Aeronautics Board first prescribed "service" rates for the transportation of mail.

¹⁶ We are not here contending that air-mail subsidy is to be measured by the relation of air-mail payments to air-mail receipts, but only that an excess of receipts over payments indicates that the service was worth more than its cost to the Government.

Our conclusion with respect to the cost-allocation method of determining air-mail subsidy is therefore as follows: (1) When non-mail services can carry their fully allocated costs, air-mail rates should not exceed the costs assigned to air-mail service. To make air-mail payments cover more than air-mail costs under such circumstances would mean either that the airlines were reaping excessive profits, or that the non-mail services were not contributing what they could to defray expenses incurred in common with mail service. When non-mail services can carry their fully allocated costs, air-mail rates in excess of fully allocated costs represent a subsidy. (2) When conditions of demand do not permit non-mail services to bear their fully allocated costs, an excess of air-mail payments over costs is not necessarily a subsidy, but only an indication that value-of-service or what-the-traffic-will-bear considerations had to be considered in fixing rates. Such excess payments could be considered a subsidy, however, if they exceeded what is, or could be, collected in the form of air-mail postage from the ultimate users of the air-mail service.

THE ERNST & ERNST METHOD OF RELATING EARNED MAIL PAY TO THE PASSENGER-FARE STRUCTURE

The Senate Committee on Interstate and Foreign Commerce recently employed Ernst & Ernst, an accounting and management firm, to develop methods and techniques for separating "earned mail pay" and subsidy in the air-mail payments. Ernst & Ernst issued a report on the subject in January, 1950.^{10a}

The report advocates a mail-rate structure consisting of two parts: (1) a fixed element to cover the handling and terminal costs incident to the loading, handling, and unloading of the mail by air-line personnel, and (2) a variable element to compensate the airlines for the "line-haul" transportation of the mail. The variable element would be related to the passenger-fare structure in a manner more fully described below. The basic mail rate, covering both the handling and transportation of the air mail, would be applied to a minimum weight per trip, with additional compensation for weight in excess of the minimum. When the total revenues of a carrier were insufficient to cover the costs of efficient operation, auxiliary payments, or subsidies, would be paid. These auxiliary payments would be paid out of appropriations made for the purpose, and not from the Post Office Department appropriations. The auxiliary payments would not be based on the actual financial needs of the airlines, but on standards of efficient operation to be established by the Civil Aeronautics Board.

In this article we are concerned only with that phase of the Ernst & Ernst proposal which relates to the determination of the "earned mail pay." The establishment of a fixed element to cover handling and ter-

^{10a} Reprinted, 16 J. AIR L. & C. 86 (1950).

minimal costs commends itself as logical and desirable. The crucial question in the plan is the propriety of relating line-haul compensation to the passenger-fare structure.

The proposal is that, except for certain adjustments that would have to be made, the line-haul compensation to the airlines for carrying mail be made to yield the same revenue per ton-mile as the passenger business. The report, however, recognizes that adjustments would need to be made to allow for the fact that some airline expense pertains exclusively to passenger service.

The Ernst & Ernst method of separating air-mail subsidy from a "just and reasonable" air-mail rate has the advantage of avoiding attempts to separate costs between mail and non-mail services. The report considers cost separation to be impracticable and points out some results of a strictly ton-mile allocation of expenses, the fairness of which might be questioned. The report states three reasons why compensation for carrying air mail may properly be based on passenger fares. These are as follows:¹⁷

1. The passenger rates represent amounts that the public is paying for a measured amount of service.
2. The passenger rates represent the selling price of the industry's major source of revenue. The percentage of mail ton-miles to total ton-miles for the years 1946, 1947 and 1948 has approximated only 5% for each of these years.
3. A direct relationship of this kind is easily understood by the public.

It is submitted that the first reason given is irrelevant; the third is a weak reed to support the scheme unless reinforced by other considerations also. The second reason has validity, as will be pointed out shortly, only under very special conditions.

The assumption that mail pay should be related to passenger fares requires careful examination. If air-mail rates should, in fact, be related to passenger fares as proposed, that is, if each of the services should, in addition to meeting its special costs, contribute the same ton-mile revenues, one of three things would necessarily occur: (1) the total revenues of an airline would be just sufficient to cover all costs including a return on investment; or, (2) the total revenues of an airline would be inadequate to cover total expenses and a return on capital; or, (3) the total revenues would be more than sufficient to cover expenses and a return on capital.

Only under the first of these conditions would equal contributions per ton-mile from passenger and mail business be warranted. If passenger business and mail business yielded the airlines the same revenue per ton-mile, in addition to their special costs, and all costs were covered, the situation would be the same as that previously described in connection with the cost accounting approach in which each service

¹⁷ *Ibid.* p. 89.

could and did contribute its share of common costs. Just as we there maintained that when each service can contribute its share of common costs it should do so, so here, we can say that when each service can contribute the same revenue per ton-mile to common costs it is proper that it should. Under these conditions there is no reason why each should not contribute equally, on a ton-mile basis, to those costs; there is no reason why any service should contribute less than such a share; there is no reason why any service should contribute more.

Under the second of the three possible conditions that would result from making air-mail rates contribute the same revenue per ton-mile as passenger fares, that is, when the total revenues of the airline would not equal total expenses and a return on investment, the situation is quite different. If total costs were not covered it would be either because the passenger fares were lower than they ought to be, or because they had to be that low on account of the limitations imposed by conditions of demand, that is, because concessions had to be made to what-the-traffic-will-bear considerations. If the passenger fares were too low, there is no reason why mail rates should also be too low. If the passenger fares were low because concessions had to be made in order to get the traffic, there is no reason why mail rates should be as low, since value-of-service considerations might not impose a similar limitation on mail rates. In the situation described it is to be assumed that the passenger revenues cover the costs incurred solely for that service and make some contribution to common costs. Under the circumstances we have just described, that is, when total revenues do not equal total expenses under rates determined by the Ernst & Ernst method, it cannot be assumed that the mail rates are properly fixed, hence it cannot be concluded that payments necessary to make up the deficiency in the earnings of the airline are properly a subsidy.

Under the third of the possible conditions resulting from the Ernst & Ernst method of fixing mail rates, that is, when total revenues of the airline exceed total expenses and a fair return on investment, we cannot rest assured that the mail rates were properly fixed. Passenger fares might well be too high. If so, there is no reason why mail rates should yield the same revenue per ton-mile.

In conclusion we may say that the weakness in the Ernst & Ernst method is the assumption that mail rates should be related to passenger fares. Only when total airline revenues under mail rates so fixed cover total expenses plus a fair but not excessive return on investment can it be said that there is justification for equal ton-mile revenues from mail and passenger service. Under other conditions it cannot be said that air-mail rates based on passenger fares are proper. We cannot therefore measure subsidy by the difference between the revenue needs of the airlines and what they are paid for carrying mail under rates so fixed.

COMMUNITY IDENTIFICATION OF SUBSIDY NEEDS

The Senate Committee on Interstate and Foreign Commerce, in an interim report on "Separation of Air-Mail Pay from Subsidy" which was released on May 5, 1950, has proposed that air-mail subsidy be identified by communities.¹⁸ The plan seems to have been inspired by the fact that airlines would be self-supporting if they could confine their operations to service between points which originate or terminate a substantial volume of business. In other words, the need of the airlines for subsidies appears to arise from the unprofitableness of service at points which originate or terminate very little business. It is therefore proposed to allocate air-line revenues, including mail payments at a "compensatory" rate, and also airline expenses, to the various communities served, thus arriving at a sort of income statement or "profit and loss statement" of the business at each point served. The Senate Committee then proposes that the subsidies needed to support the airlines, broken down into the amounts required because of unprofitable operations at particular points, should be presented to Congress in annual requests for appropriations, and paid out of funds so appropriated.

The allocation of needed airline subsidy to the communities served, if it can be done satisfactorily, might serve certain useful purposes. First, it would make clear that the real beneficiaries of airline subsidies are not the airlines themselves, but those who benefit from airline services, particularly from those services which are not self-supporting. Although it ought to be obvious to anyone that those who benefit from airline subsidies are those who benefit from the services which airlines provide, the truth is given emphasis in the public mind by relating the subsidy need to the unprofitableness of service at particular points.

A second possible advantage of the plan is that identification of the subsidy need with the operations at particular communities might give rise to a more critical examination of the subsidies to determine whether they were justified, and if justified, whether part of the cost might not well be shifted to the communities benefited.

A third advantage of the plan is that it would reveal what services of the airlines are particularly unprofitable. This, in turn, might lead to the abandonment of the most unprofitable services, particularly if the subsidy were not forthcoming.

Certain difficulties and certain weaknesses of the proposal should be examined before steps are taken to make such a plan effective. In the first place, it will be noted that the plan first requires that a reasonable or "compensatory" mail rate be determined. The first part of this article reveals the difficulties of determining such a rate. In partial answer to this objection it might be stated that the *relative* unprofitableness of service at particular communities could be determined by the use of an

¹⁸ Reprinted, 17 J. AIR L. & C. 333 (1950).

approximately compensatory rate, or even of a mail rate that deviated considerably one way or another from a reasonable rate. But since the mail rate used in the calculations is to be the mail rate paid by the Post Office Department the impression would be created that this was, in fact, a reasonable rate, and that any additional payments required to maintain airline service constituted subsidy. Actually, the air-mail rates might be greater or less than reasonable, and the real subsidies to the airlines might be greater or less than the amounts paid under the name of subsidy.

A second difficulty with the plan is that it involves cost allocation problems in addition to those that may be involved in determining the reasonable or compensatory mail rate. The proposal requires the allocation to communities of costs incurred in moving persons and property *between* communities. How Ernst & Ernst have handled this problem, in their study for the Senate Committee on Interstate and Foreign Commerce, is shown elsewhere in this issue of the JOURNAL. It is clear, however, that the allocation of costs, and of revenues as well, to particular communities in order to determine a "profit-and-loss" statement of the results of operations at particular points is subject to limitations similar to those encountered in most cost-allocation undertakings.

If the calculations showed that services at a particular point were unprofitable and in need of subsidy, and if Congress decided to withhold the subsidy, it would by no means follow that the airline would find it advantageous to withdraw service from the point in question. The additional revenues from traffic originated or terminated at the point might more than offset the extra or additional costs associated with the traffic, although they did not cover all the costs assigned to the community under the method of allocation employed. Stated in another way, the airline might find that the revenues lost by abandoning service at the point would exceed the savings that would be effected. Community identification of subsidy needs, therefore, might lead to unwarranted conclusions concerning the desirability of abandoning particular services.

A question that might well be asked concerning community identification of subsidy needs is whether it is worth all the trouble. Just why is it important that a subsidy, if one is needed, should be allocated to communities served? We have already suggested that it might be of some advantage to know what airline operations are the most unprofitable, but there are other ways by which management or the Civil Aeronautics Board could determine what services are profitable and what are unprofitable. It certainly does not require a radically different method of air-mail payments to bring these facts into the open. Although we have also suggested that it might be desirable to let communities know that they are obtaining airline service that is not self-supporting, the allocation of subsidy needs to communities raises the

question whether the communities themselves should pay the subsidies, or at least a part of them. Perhaps they should, but if, on the other hand, subsidies are paid to airlines for national defense purposes, or to promote commerce, or to provide adequate postal service, all federal responsibilities, then it would seem that the subsidies might appropriately be paid by the Federal Government as they have been in the past. If so, there seems to be little point in allocating the subsidy needs of the airlines to particular communities.

In conclusion, it appears that the community identification of airline subsidy needs, if practicable, has certain advantages, but that the importance of identifying subsidy needs with the unprofitableness of services at particular points is perhaps overemphasized, and may in fact lead to unwarranted conclusions concerning the desirability of abandoning airline service at particular points, and by emphasizing local benefits derived from air transportation service, may divert attention from the larger national ends which are the main justification for Government expenditures in aid of this form of transport.

CONCLUSIONS

The problem of separating the subsidy element from air-mail payments is not a simple one. We have noted objections to the concept that "need" rates are entirely free of subsidy; we have criticized strict adherence to the cost-accounting approach to the problem; we have characterized as unsound the assumption that reasonable air-mail rates are rates that yield the same ton-mile revenues for line-haul service as are yielded by passenger fares; and we have raised questions concerning the proposal to set up a "compensatory" mail rate and then compute the profitableness or unprofitableness of airline service at particular points for the purpose of allocating subsidy needs to particular localities. The conclusions of the discussion might therefore seem to be negative rather than positive in character.

On the positive side, however, we have noted that under some conditions "need" rates do not contain a subsidy; we have recognized that the cost-allocation approach is appropriate for use where non-mail services can be made to contribute their special costs and their allocated share of common costs, and that where this is not possible some accommodation to value-of-service or what-the-traffic-will-bear considerations is not unreasonable; we have recognized that under special circumstances the short-cut approach to determining reasonable mail rates which assumes that mail rates should be on substantially the same level as passenger fares is valid; and we have recognized some benefits from community identification of subsidy needs found to exist.

We are led to the conclusion that no single formula for determining reasonable air-mail rates, or for isolating the subsidy element in existing air-mail payments, is possible. The situation with respect to each

airline, and possibly with respect to each mail route, must be carefully examined before the reasonableness of the rates can be determined, or before any conclusions can be drawn as to whether existing air-mail payments contain an element of subsidy.

It would be possible, of course, to establish rates for carrying mail which were based on assumed operating conditions, types of equipment, load factors, and the like, and to make these rates applicable to all carriers, or to carriers within a group. Deficiencies in revenues that might occur could then be made up in the form of subsidy payments.

The extent to which this would be possible without doing violence to the concepts of reasonableness usually recognized in rate making would depend on the extent to which similarity of conditions exists among different airlines, or among airlines in a group or class, and also on the extent to which a system of rates can be devised which takes into consideration many of the variables which affect the costs of providing the service.