EVOLUTION OF THE COMMUTER AIRLINE INDUSTRY

Chapter 2

EVOLUTION OF THE COMMUTER AIRLINE INDUSTRY

The structure of the U.S. commercial air transportation industry and the level of service it provides to small communities have been influenced by the interplay of three principal forces. The first and by far the strongest of these influences is Government *policy and regulation:* this has largely been reflected in the economic rules and route awards of the Civil Aeronautics Board (CAB) and the airworthiness and operational certification rules of the Federal Aviation Administration (FAA). The second influence is the

development of *aviation technology:* this affects the cost and performance characteristics of the aircraft used in the air service system. The third influence is the *air transportation market:* this reflects the desire of consumers for air service, its costs, and their ability to pay for it. The purpose of this chapter is to outline the way in which these forces have evolved and are interacting to shape the future of low-density, shorthaul air service in this country.

GOVERNMENT REGULATION AND INDUSTRY STRUCTURE'

The Federal Government has exercised regulatory control over commercial aviation since the passage of the Kelly Air Mail Act of 1925, which authorized the Postmaster General to contract with air carriers and compensate them for transporting mail. Since almost no air routes at that time were profitable strictly on the basis of passenger revenues, the authority to award mail contracts gave the Government considerable power to determine which routes would be served, at what levels, and by which air carriers. This regulatory power was expanded when Congress enacted the Air Commerce Act of 1926. This act charged the Secretary of Commerce with the task of promoting air commerce and empowered him to issue and enforce air traffic rules, license pilots, certify the airworthiness of aircraft, establish airways, and operate various aids to air navigation. These responsibilities, which were primarily designed to promote greater safety, were similar to the functions of today's FAA.

The Civil Aeronautics Act of 1938 added economic authority to operational and safety au-

thority, thereby establishing the Federal Government as the economic regulator of the air transportation industry. This act created what is now CAB and required every air carrier to obtain a certificate from CAB authorizing it to serve a specified point or route. An airline that possessed such a certificate was thus a certificated airline. This authority gave CAB jurisdiction over who could offer air passenger service, where they could offer it (market entry), and when they could terminate service (market exit). CAB was also charged with approving the fares charged for all routes and for all types of service. One of CAB's first actions was to exempt nonscheduled aircraft operations from economic and safety provisions of the act, thereby establishing a precedent for future regulations that distinguish between scheduled and unscheduled airline services.

Trunk Airlines

At the time of the 1938 act, there were already 16 operating airlines, which immediately received certificates to continue the service they were already providing. These 16 carriers became the first trunk carriers; their number has subsequently fallen to 10 through mergers and

^{&#}x27;This chapter draws on the contractor report, "Federal Economic Regulation of Air Service to Small Communities: The Effect on Aircraft Development, " prepared for OTA by Samuel E. Eastman.

acquisitions. * In keeping with the broad and sometimes conflicting objectives of the act, CAB sought both to encourage the development of air service and, at the same time, to protect the economic stability of these trunk carriers. Since its congressional mandate was to promote competition only "to the extent necessary to assure the sound development of an air-transportation system" (sec. 102), CAB often granted different trunks exclusive access to newly authorized routes and, at least initially, refused to issue operating certificates to any new airlines.

World War II had a profound effect on the embryonic commercial aviation system. First of all, it accelerated the advancement of aviation technology and greatly increased the number of aircraft available. The war also accelerated the expansion of the market by whetting the appetite of smaller communities throughout the country for air service. In response to demands for increased air service from chambers of commerce, local governments, and prospective operators, CAB in 1944 established a new category of experimental "feeder airlines."²

Local Service Airlines

CAB recognized that this new small-community service would require subsidy, since many small communities could not generate enough ridership to cover costs. The trunks at that time were just on the verge of becoming profitable without dependence on the revenues from airmail contracts, and CAB was reluctant to jeopardize this hopeful trend toward financial self-support. Instead of imposing new complexities on their operations, therefore, it chose to create a new category of air carriers. Between 1944 and 1950, CAB awarded temporary operating certificates to 17 new or existing interstate carriers that were to become the local service airlines, and in

1955 these temporary certificates were made permanent at the insistence of Congress. *

In 1955, the primary difference between the trunk and the local service airlines was in their route structure. The trunks served some small communities, but they concentrated on the longer routes with higher ridership. The local service airlines, on the other hand, were given authority to operate only on low-density routes serving smaller communities, or on heavier routes only where they were required to make intermediate stops at smaller cities. These requirements, imposed by CAB in awarding certificates, were expressly to keep the new locals from competing with the trunks by preventing them from offering comparable service (an intermediate stop can add 30 to 45 minutes to a trip).

Local service operating losses on these low-density routes were compensated by Federal payments under section 406 of the Federal Aviation Act of 1958 ("sec. 406 subsidies"). Later, during the 1960's, as the industry prospered and CAB became more concerned with reducing subsidies, it tried to strengthen the locals by allowing them to withdraw from small communities and offer competitive service in more lucrative markets. This liberalized policy was reversed again during the recession and "route moratorium" of the early 1970's.

Commuter Airlines

At about the same time that the local service airlines were brought into existence, a third category of commercial air service had already begun to take shape as so-called "fixed-base" operators around the country offered various combinations of aircraft maintenance services, sales, rental, brokerage, on-demand air-taxi service, and flying lessons. They varied widely in size and financial stability, although most were small and operated on the ragged edge of success. In 1949, CAB created another experimental category-confirmed in 1952—for "noncertified irregular route" carriers; these regulations (referred to as the part 298 exemption) stated only that such operators could not operate aircraft of

[●] These 10 carriers are: American Airlines, Eastern Airlines, Trans World Airlines, United Airlines, Braniff Airways, Continental Airlines, Delta Airlines, National Airlines, Northwest Airlines, and Western Airlines.

^{&#}x27;D. Solar, "The Federal Interest in Local Air Service: A Study in the Evolution of Economic Policy" (Ph. D. thesis, Columbia University, 1963), pp. 29-30.

^{&#}x27;Civil Aeronautics Board Reports, vol. 6, July 1944 to May 1946, p. 3

^{&#}x27;G. C. Eads, The Local Service Airline Experiment (Washington, D. C.: The Brookings Institution, 1972), p. 84.

more than 12,500 lb takeoff gross weight (originally 10,000 lb), nor could they offer scheduled service between certificated points. This new class of carrier was known as scheduled air taxis or "third-level" carriers, and after 1969, as commuter airlines.

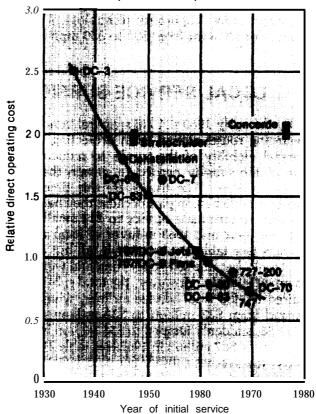
An aircraft of 12,500 lb is about half the size of a DC-3, the early workhorse of the certificated carriers. This weight limitation and the exclusion from certificated points were specifically imposed to protect certificated carriers-primarily local service airlines-from competition by this new class of air carrier. Exemptions were available, but few commuter markets were large enough to support larger aircraft; as a result, very few short-haul aircraft in the 20- to 50-seat range were bought or flown by commuters until 1973. Such aircraft were in use and in production overseas, however, giving foreign firms a head start when the size limit was later raised. CAB's 1969 size restriction thus seems to have contributed to the present dominance of foreign manufacturers in the domestic 20- to 50-seat commuter market (see ch. 4).

TECHNOLOGICAL EVOLUTION

During the early sorting out of industry structure and Government regulation, important changes were occurring in aviation technology. The conclusion of World War II made a large number of surplus aircraft available at relatively low prices. The 21- to 28-seat DC-3 had entered commercial service in 1936, 2 years before the Civil Aeronautics Act. By the end of the war, more than 10,000 had been built, and they had become by far the dominant aircraft in the fleets of both the local service and the trunk airlines. The trunk airlines, however, were ready for larger, faster, and longer range aircraft.

Here again World War II had already primed the pump. Not only had it given a tremendous impetus to the advancement of aircraft technology, but now the Nation's aircraft manufacturers, short on military business, were ready and eager to produce a new generation of commercial transport aircraft: in the late 1940's the DC-4 and the Lockheed Constellation, followed quickly by the DC-6, the Boeing Stratocruiser, and the Convair 240-with more to follow in the 1950's. Compared to the DC-3, these aircraft cut seat-mile operating costs by roughly a third (see fig. 1). They had greater range and essentially doubled both cruise speed and seating capacity. By the late 1940's, the trunks were expanding their fleets and replacing their now outgrown DC-3s with this newer equipment, which was

Figure 1.—Relative Direct Operating Costs From the DC-3 to the DC-10 (current dollars)



SOURCE: R.S. Shevell, "Selection of the Fittest: The Evolution and Future of Transport Aircraft," Israel Journal of Technology, Vol. 12, 1974.

^{&#}x27;Code of Federal Regulations, title 14, pt. 200 to end, 1971, pp. 364-378

tailored to their evolving high-density, longer stage-length route structures.

For the local service airlines, however, the DC-3 was too big, not too small: many of the points they served generated too few passengers to provide break-even loads on a 21- to 28-seat aircraft. Nonetheless, DC-3s were attractive to the local service airlines. First, they had been operated successfully by the trunks and carried with them the image of those more prestigious carriers. Second, they were available at reasonable prices when capital was difficult to raise; removing the locals' experimental status in 1955 and making Government-guaranteed loans available in 1957 also helped with this problem. So, during the 1950's, the DC-3s moved from the trunk fleets to the local service airlines, and it was only in the last half of that decade that the locals started moving toward larger aircraft.

The Jet Era

The first commercial jet aircraft represented an even more important technological milestone. Speeds went from 300 to 350 mph to 550 mph. Seating capacity increased from 50 to 60 seats to 125 or more. More to the point, direct operating costs per seat-mile dropped another **30** percent from the most modern propeller craft (see fig. 1). Jet equipment revolutionized the operations of the trunks. Their greater size and speed and higher cruising altitude boosted productivity and profitability of the trunks' longer and more heavily traveled routes.

The acquisition of these new jet aircraft gave the trunks a stronger economic incentive to abandon their low-density markets. As the trunk airline fleets evolved more and more toward jets, it would have been natural and efficient for them to modify their route structure by progressively dropping service to small communities on their shorter and more lightly traveled routes, in order to concentrate on the longer, more heavily traveled segments. The trunks were not free to make this adjustment in their route structure without specific permission from CAB, but as it happened CAB was willing to accommodate this shift in trunk route structure in order to strengthen the routes and finances of the local service airlines.

LOCAL SERVICE SUBSIDIES AND ROUTE-STRENGTHENING

By the early 1960's, CAB's central concern in awarding routes shifted from protecting the financial viability of the trunks to reducing the size of the subsidy needed to sustain the local service airlines. The trunks by this time were firmly established, in part because they had been allowed to terminate service to 211 small cities between 1948 and 1963 in favor of local service carriers (see table 1). As a result, all but one of the trunks became self-supporting and were able to go off subsidy. However, the total subsidy required by the local service airlines, which had ranged from \$22 million to \$33 million during 1954-58, suddenly jumped to \$55 million in 1960 and almost \$67 million in 1962 (see table 2). Similarly, the average subsidy per passenger, which had declined in the mid-1950's, rose from about \$7.60 per passenger in 1958 back to nearly \$10.00 per passenger in 1961. One factor in these increases was the replacement of many of the

now-obsolete DC-3s with larger 35- to 60-seat aircraft such as CV-240s and 440s, M-202s and 404s, and F-27s. A far more important factor, however, was the large number of small communities to which the locals were required to provide air service.

The subsidy for each local service carrier was computed on the basis of both its losses on unprofitable service and its overall profitability compared to the industry average. The idea that some of the carrier's losses should be covered through internal cross-subsidy from its profitable routes was implicit in the determination. The exact formula changed from time to time in response to changing conditions, but the principle behind the subsidy determination remained the same: to compensate the carrier for losses above what might be considered a reasonable level of internal cross-subsidization, given the carrier's mix of strong and weak route segments.

Table 1.— Points Served by Certificated Carriers: 48 Contiguous States

	Trunk carriers ^b			Local	service carrie	ers°	All carriers		
Year	Points authorized	Points suspended	Points served	Points authorized	Points suspended	Points served	Points authorized	Points suspended	Points served
1948	—	_	454	_	_	_		_	_
1955	376	27	349	381	18	363	583	44	539
1956	373	23	350	380	13	367	575	35	540
1957	368	25	343	387	9	378	579	33	546
1958	361	21	340	415	14	401	581	34	547
1959	332	23	309	468	29	439	610	52	558
1960	328	13	315	497	38	459	618	51	567
1961	309	13	296	494	28	466	601	39	562
1962,	302	16	286	499	22	477	599	38	561
1963	251	8	243	475	11	464	562	19	543
1964	247	8	239	468	5	463	552	13	539
1965	231	8	223	472	4	468	536	12	524
1966	230	7	223	466	5	461	530	12	518
1967	229	5	224	466	7	459	526	12	514
1968	230	5	225	468	5	463	527	10	517
1969	228	5	223	469	4	465	526	9	517
1970,.	228	18	210	467	34	433	524	50	474
1971	228	18	210	466	34	432	522	52	470
1972	222	15	207	455	32	423	508	47	461
1973	221	19	202	445	40	405	497	56	441
1974	208	16	192	432	49	383	481	64	417
1975	198	18	180	433	53	380	464	70	394
1978,	_	_	_	_	_	_	_	_	380
1980	–	_	_	_	_	_	_	_	248

aAs of December each Year.

"Includes points served jointly with local service carriers cincludes points served jointly with trunk carriers."

SOURCE CIVII Aeronautics Board, Office of Facilities and Operations

CAB's primary response to the rising cost of subsidy, therefore, was to allow the locals to modify their route structure in an attempt to strengthen their financial performance, a policy change welcomed by the industry. Specifically, CAB allowed locals to replace trunks at some points, relaxed the requirement that the locals stop at every intermediate certificated point on every flight, and became more lenient in permitting the locals to drop service to points that generated less than 5 passengers per day on average. The latter "use it or lose it" policy alone resulted in the elimination of 108 previously subsidized small communities from the local service route map between 1956 and 1968, to be replaced by larger points dropped by the trunks. This routerestructuring increased local service revenues and, after a delay, improved industry profitability. It also allowed CAB to begin reducing subsidy payments: after peaking in 1962 and 1963 at \$67 million, total subsidy payments declined to

\$62 million in 1964 and had fallen to \$34 million by 1970.

By the mid-1960's the trunk airlines had moved almost entirely out of low-density air service, the few exceptions being cities that fit well in their route structures or fed "captive" passengers into the longer and heavier traveled routes. There is a marked similarity in the growth pattern of local service airlines: economic and technological forces have driven their evolution in the same direction. For both, there has been a strong economic incentive to move to larger and more modern aircraft that can yield the most profit on the strongest routes. CAB route-strengthening and FAA equipment loan guarantees further reinforced the logic of moving toward larger aircraft, and by the mid-1960's the locals were ready to start acquiring jets. By 1970 more than a third of the local service fleet was jets and nearly all of its piston-powered air-

Table 2.—Section 406 Subsidy Payments to Carriers, 1954-82

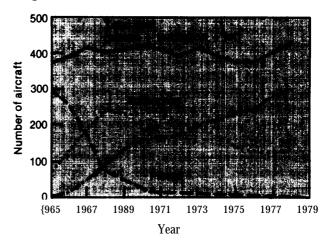
Fiscal					Local		Domestic	Grand
year	Alaskan	Hawaiian	Helicopter	Regional		International		total
1954	8,303	689	2,574	_	24,299	18, 7 14	3,822	58,401
1955	7,902	293	2,656	_	22,358	3,757	2,773	39,739
1956	7,619	291	2,735	_	24,122	6,632	1,790	43,189
1957	7,707	216	3,771	•	28,444	6,903	1,572	48,613
1958	8,179	45	4,419	_	32,703	4,911	2,283	52,540
1959	7,337	168	4,860	_	36,450	_	1,201	50,016
1960	8,818	330	4,930	_	51,498	_	_	65,576
1961	9,313	505	5,538	_	56,300	_		71,656
1962	9,058	338	5,781	_	64,835	_		80,010
1963	9,690	520	5,000"	_	67,700	_	_	82,910
1984	9,411	802	4,300	_	65,482	_	2,566	82,561
1965	8,163	995	3,358	_	64,412	_	3,475	77,403
1966	6,509	1,124	1,170	_	58,671 ^b	_	3,089	70,563°
1967	5,939	567	_	_	$55,240^{\scriptscriptstyle b}$	_	2,477	64,223 ^b
1968, , .	5,894	_	•	_	47,982	_	1,343	55,219
1969	5,421	789	_	_	40,513	_		46,723
1970	4,898	_	_	_	34,830	_	_	39,726
1971	4,499	_	_	_	55,940	_	_	80,439
1972	4,394	_	_	_	62,160	_		66,554
1973	4,385	_	_	_	60,206	_	_	64,571
1974	4,339	_	_		68,619	_	_	72,958
1975	4,345	_	_	1,812	57,563	_	_	63,720
1976	4,360	_	_	4,017	64,658	_		73,035
1977	4,261	_	_	4,391	70,561	_		79,213
1978	3,878	_	_	4,840	69,097	_		77,815
1979	3,427		_	5,894	66,132	_	_	75,453
1980	7,993	_	_	9,404	63,387	_	_	80,844
1981	8,409	_	_	8,502	72,897	_		89,568
1982 (estimated	d)							94,400C

a T_{run}kli_{neaccrua} 1₉ for 1964-68 _{re}fl_{ec}t local service operations in the New England area.

craft had been replaced by large turboprops; this transition is illustrated in figure 2.

The transition to larger, faster aircraft had a negative effect on small communities (who needed good short-haul, low-density air service) because it offered local service as well as trunk operators a much more profitable alternative—the ability to supply good long-haul, high-density service. Between 1968 and 1978 an additional 125 cities were suspended or deleted from local service routes, and it was becoming obvious that a major gap in air service was once again emerging. Service to small communities was decreasing and something was needed to fill the role CAB had originally assigned to the local service airlines in 1944. This role was to pass to the commuter airlines.

Figure 2.—Local Service Airlines Aircraft Fleet Mix



SOURCE: National Aeronautics and Space Administration, Small Transport Aircraft Technology, fig. 2.

Revised pursuant to order 77-12-106, Dec. 20, 1977, in accordance with provisions of sec. 120 of Public Law 95-163. For this report, fiscal years 1976-80 are considered to be the 12 months ended June 30 of these years. clf legislative changes t. 406 are adopted, a ceiling of \$28 million would be imposed.

COMMUTER AIRLINE GROWTH AND FLEET

Out of several thousand air-taxi operators in January of 1964, only 12 offered scheduled services, all to noncertificated points. By the end of 1968, there were over 200 scheduled air-taxi operators. This explosive early growth in what has become the commuter airline industry resulted in part from the economic opportunity created by the service gap left by the withdrawing locals. Another important factor was the availability of new aircraft that were small enough to be exempt from CAB economic regulation, yet large enough to carry economic loads in scheduled short-haul operations.

Market Opportunities

Regulatory and economic changes in the 1960's improved the climate for the growth of scheduled air taxis. In 1964, FAA promulgated Federal Aviation Regulation (FAR) part 135, which defined the operational and safety rules of the industry. In 1965, CAB amended its regulations to allow these carriers to transport mail and to provide service between certificated points, often as replacements for trunk or local service airlines. In 1964, American Airlines contracted for Apache Airlines to replace it in serving Douglas, Ariz.; this was the first "air taxi replacement agreement. "In 1967, Alleghenv Airlines (now USAir) greatly expanded this concept by contracting its unprofitable points to 12 independent commuter contractors operating under the name "Allegheny Commuter;" this network continues today. CAB officially recognized the commuter industry in 1969, defining a commuter air carrier as an air-taxi operator that either: 1) per forms at least five round trips per week between two or more points and publishes flight schedules that specify the times, days of the week, and origins and destinations of such flights; or 2) transports mail by air under a current contract with the U.S. Postal Service. By August 1978, 26 commuter airlines were providing replacement service for certificated carriers at 59 points, mostly without direct financial assistance.

The number of passengers on commuter airlines grew at an annual rate of slightly over 13 percent from 1970 to 1979, compared with a 7-percent growth rate for the combined trunk and local service airlines and a 3-percent annual growth rate in real gross national product. Commuter air cargo growth has averaged over 26 percent annually, reflecting the growth of small parcel shipments by Federal Express and other carriers. 'Only mail activity has dropped, as the U.S. Postal Service has deliberately withdrawn patronage. These trends are shown in figure 3. Between 1970 and 1979, the number of aircraft in the commuter fleet grew by 8 percent annually, from 687 to 1350 aircraft.'

There are a number of reasons for the rapid growth of commuter air service. First, the speed and convenience of air travel are more attractive as incomes rise, and the rising number of businesses moving to smaller communities has also increased the demand for short-haul air service. The number of communities served by commuters, for example, has almost doubled over the past decade. Second, the withdrawal of the local service and trunk airlines from smaller communities results in a faster growth rate for commuter airline ridership than normal growth in the demand for air service would imply. Third, entry into the commuter airline business has been relatively easy: less capital was needed to acquire or lease the smaller aircraft appropriate to this type of service, and until 1978 entry and exit were unregulated. Fourth, integration with the primary air transportation system has been improving in recent years as the trunk and local service airlines, to whose longer routes the commuters customarily feed passengers, have begun to share ticket counters, gate space, baggage handling, and reservation services at reasonable cost. A fifth and perhaps more important reason for commuter growth, however, was the availability of suitable new aircraft in the late 1960's.

^{&#}x27;Civil Aeronautics Board, Glossary of Air Transportation Terms, 1st cd., February 1977.

^{&#}x27;For further information on this subject, see OTA'S forthcoming background paper, The Air Cargo System.

^{&#}x27;Commuter Airline Association of America, 1980 Annual Report (Washington, D. C.: CAAA, November 1980), p. 116.

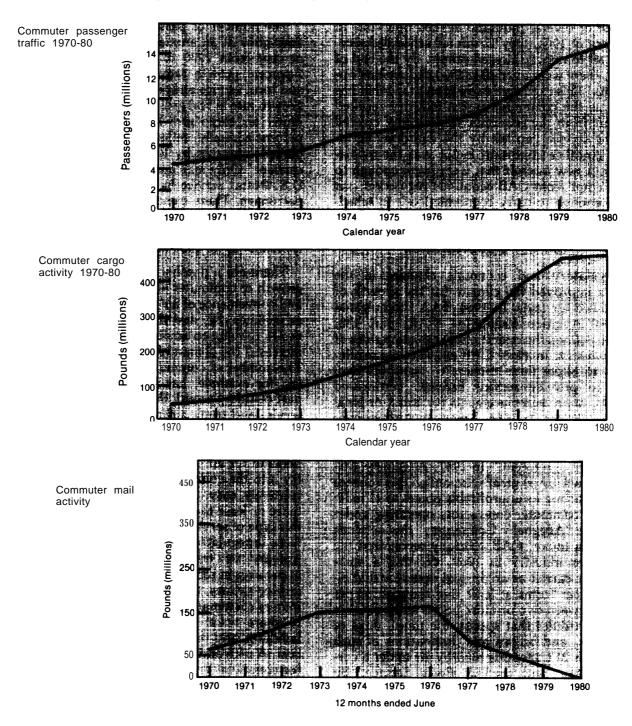


Figure 3.-Commuter Passengers, Cargo, and Mail, 1970-80

SOURCE: Passengers and cargo data from Commuter Airline Association of America, 1980 Annual Report, Washington, D. C., 1980; mail data from Civil Aeronautics Board, Commuter Air Carrier Traffic Statistics, 12 Months Ending June 30, 1979, Washington, D. C., 1979.

Commuter Aircraft and Fleet Mix

In 1964, Pratt & Whitney of Canada, an engine manufacturer with a history of successful aircraft engines, announced a new turboprop engine, the PT-6, which was highly suitable for aircraft in the 12,500-lb commuter category, A year earlier the Low-Cost Plane Design Committee of the Association of Local Transport Airlines (ALTA), the trade association of the local service airlines, had issued a report calling for a new aircraft designed specifically for low-density air service-a so-called "DC-3 replacement."9 The availability of an appropriate engine, along with the impetus of the ALTA report, contributed to the development of two new twinturboprop airplanes in the 15- to 19-seat range that were well suited to commercial low-density markets: the Canadian DHC-6 Twin Otter, made available in 1966 and designed primarily as a general-purpose bush airplane; and the Beech 99, first produced in 1967 for the corporate and air-taxi market. By 1970, commuter operators had purchased 134 of these two aircraft, representing about 75 percent of the over-15-seat aircraft in the commuter fleet. 10

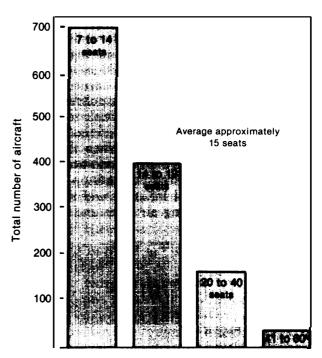
CAB originally restricted commuter airlines to aircraft smaller than 12,500 lb gross takeoff weight—about 19 passengers—for the express purpose of confining their operations to service that would not compete with the trunk and local service airlines. As the threat of such competition passed, this limitation was changed in 1973 from an aircraft size limitation to a maximum payload limitation—either 30 seats or 7,500 lb of cargo. At that time, however, permission to fly so-passenger aircraft was less significant than it might appear. For one thing, there were no modern aircraft available in this size range that were specifically tailored to the economic and operational requirements of the commuter market. In addition, FAA operating regulations required the addition of a cabin attendant at 20 seats or more, which represented an economic barrier to seating capacities only slightly above this thresh-

"Eastman, op. cit.

old. More importantly, however, few commuter markets in 1973 were large enough to support larger equipment, and internal disputes prevented the commuter airline industry from endorsing a new 30-seat aircraft. " U.S. manufacturers, lacking a firm commitment from the domestic market, decided not to develop any new commuter aircraft.

As a result, the commuter airline fleet (fig. 4) remains dominated by small aircraft—not a surprising circumstance, given the industry's regulatory history and the markets it currently serves. Nevertheless, the fleet is shifting toward larger aircraft and-given the new size freedom under the Airline Deregulation Act of 1978 and the higher profit potential of larger aircraft on the higher ridership routes—this shift would probably be even more marked if greater numbers of suitable aircraft were currently available. The real growth of the commuters began in the

Figure 4.—Commuter Airline Fleet by Aircraft Size



[&]quot;A few airlines counted as commuters are technically very small regionals, and have been permitted larger aircraft

SOURCE: Data from Commuter Airline Association of America, 1980 Annual

^{&#}x27;Association of Local Transport Airlines, "Recommendations of the Low Cost Plane Design Committee Re: The Development of an Airplane Designed to Provide Economical Short-Haul Operations Over Low-Density Routes, "Feb. 20, 1963.

^{&#}x27;Ken Cardella, president of Cochise Airlines, interview, July 31, 1981.

1960's with the advent of new small transport aircraft suitable for short-haul service. The commutes' future, and the future of air service to small communities, seems likely to be equally sensitive to the further evolution of small transport aircraft (see ch. 4).

DEREGULATION AND COMMUTER EVOLUTION

The passage of the Airline Deregulation Act in October 1978 formalized a number of significant changes in Federal policy and regulations aimed at making the air transportation system more efficient. These changes promise to have profound effect on the future of both the airline industry and air service to small communities. In many respects, however, the act has merely accelerated already existing trends in airline route and fleet development and confirmed the process of administrative deregulation that was already in motion at CAB.

In the evolution of the airline industry, all classes of air carriers have tended to acquire larger aircraft and concentrate on their longer and higher density markets. This has usually meant dropping their service to small communities or transferring these short-haul, low-density routes to the next class of airlines. As the industry prospered, CAB became more disposed to authorize competitive service in high-density markets, and CAB's efforts to reduce local service subsidies in the 1960's led to particularly liberal route award policies. These policies in turn had the effect of enabling the locals to go after more lucrative markets and to terminate service to many small communities. When this policy was reversed during the "route moratorium" of the early 1970's, reduced competition (in combination with general inflation and rising fuel costs) led to increasing air fares and declining airline profitability.

Congress considered but failed to pass airline deregulation legislation in 1975. Pressure for regulatory reform continued to grow, however, with an emphasis on increasing competition in order to improve service and reduce fares. In 1977, CAB began to approve fare discounts and gradually relaxed the restraints on market entry and exit. By 1978, CAB appeared to be firmly committed to deregulation, and in the 3 years

since passage CAB has been extremely prompt as well as liberal in approving the new routes and terminations permitted by the act. The current administration has proposed dismantling CAB 27 months early, on September 30, 1982, rather than waiting for the January 1, 1985, date mandated by the legislation.¹²

Provisions for Small Communities

The Airline Deregulation Act of 1978 is far more explicit than its predecessor, the Federal Aviation Act of 1958, in specifying the nature of the desired air transportation system and the means by which this system is to be developed. Where the 1958 act called for "competition to the extent necessary to assure the sound development" of the system, the 1978 act directs CAB to promote "the availability of a variety of . . . services by air carriers" through "maximum reliance on competitive market forces . . . to provide efficiency, innovation, and low prices." Where the earlier act emphasized "sound economic conditions" for existing carriers, the new act calls for "the encouragement of entry into air transportation markets by new air carriers . . . and the continued strengthening of small air carriers so as to assure a more effective, competitive airline industry." And where the 1958 act simply instructed CAB to "preserve the inherent advantages of . . . [air] transportation," the 1978 act specifically directs CAB to promote "a comprehensive and convenient system of continuous scheduled airline service for small communities and for isolated areas, with direct Federal assistance where appropriate" (sec. 3[a]).

To accomplish this last objective, section 419 of the act guarantees "essential air service"

¹²Carole Shifrin, "Reagan Bill Would End CAB in '82," Washington Post, June 25, 1981, p, B1.

(EAS) for at least 10 years to all eligible communities (those receiving certificated service on the date of passage, or whose authorized service had been suspended—a total of 555 communities, 316 of them in the 48 contiguous States). The act directs CAB to determine the level of EAS for each community to establish a new subsidy program (the "419 subsidy") for payments to carriers that provide EAS. Congress defined EAS broadly as a level that "satisfies the needs of the community concerned . . . and ensures access to the Nation's air transportation system. " Subsequent guidelines developed by CAB specify that EAS will consist of a minimum of two welltimed round trips per day (one on weekends) to one or two hubs, with no more than two intermediate stops, using aircraft with two engines and two pilots, with a maximum combined capacity of 160 seats per day (80 outbound and 80 inbound at a 50-percent load factor, or 40 passengers each way).

CAB's EAS standards are clearly near the minimum permitted by the language of the act, and they are viewed by many cities and states as too restrictive to support services at any but the smallest communities (see ch. 2). However, CAB feels that market forces will attract and support air service when demand is above these levels. and that such service should not be subsidized-EAS is not a market-development program. '3 Congressional participants in the development of the act claim that CAB is correct in interpreting the intent of section 419 as a minimum guarantee.

Future Role of Commuters

Responsibility for providing EAS to small communities will increasingly fall to the commuter airlines, particularly after the current section 406 subsidies to local service carriers expire in 1985. Although eligibility for section 419 subsidies is not limited to commuter airlines, CAB issued a policy statement a month before deregulation indicating that the local service carriers are no longer structured or equipped to serve small- or even some medium-size communities. 4 CAB has also issued several reports indicating that small communities generally receive more frequent and more responsive service from unsubsidized commuters than they had from subsidized locals. 15

Nevertheless, some small communities have been unable to attract reliable commuter replacements, and States and regions that lack a well-developed commuter airline network may be vulnerable to a deterioration of service to small communities even before the expiration of section 419 in 1988. Commuter airlines, for their part, sometimes complain that the EAS program is poorly designed, and some operators are unwilling to bid for new EAS communities when they become available (see ch. 4).

It should also be noted that the Airline Deregulation Act did not "deregulate" the commuter carriers as it did the rest of the industry. It did just the opposite—the commuter airlines now operate in a much more constrained regulatory environment than they did before 1978. For example, they must now comply with more stringent reporting requirements and operating regulations; their pilots must hold "airline transport pilot" certificates, the highest level of FAA license; and even their smallest aircraft must now comply with the stricter FAR part 135 safety rules. In addition, although commuters can terminate service to nonsubsidized points on 30 days' notice, on subsidized EAS routes they may not terminate service on less than 90 days' notice to the affected communities and States and CAB. CAB also has the power to require them to continue service (with subsidy) until a replacement carrier can be found. There have already been many cases in which commuters have not wanted to offer (or continue) service in particular markets, even with subsidy, because the subsidy level was too low to provide the profit they

[&]quot;Earlier Civil Aeronautics Board and Department of Transportation studies had shown that points enplaning 17 or more passengers per day would support commuter replacement service without the need for subsidy. Civil Aeronautics Board, Bureau of Domestic Aviation, A Review of the Office of Technology Assessment's report entitled, "Air Service to Small Communities," October 1981; see also Department of Transportation, Office of Transportation Regulatory Policy, Air Service to Small Communities, March

[&]quot;Civil Aeronautics Board, Statement on Improving Service to Medium and Small Communities, Sept. 18, 1978.

^{&#}x27;See Civil Aeronautics Board, Aircraft Pressurization and Commuter Airline Operations, June 1979, app. B.

could make with the same aircraft in an alternative unsubsidized market. About 130 points have had commuter replacements; but 13 points have experienced more than one turnover and 20 points have a second turnover pending.

The act also allows commuters to operate larger aircraft (up to 55 seats, later increased to 60 seats) that would enable them to serve larger markets. Even though the availability of new-

technology aircraft in this size range will remain limited until the mid-1980's (see ch. 4), the opportunity to operate larger aircraft on more profitable routes could well tempt successful commuters, in the pattern of their predecessors, to abandon their less lucrative service to smaller communities. This eventuality, and the general outlook for service to small communities, is discussed in chapter 3.