U.S. Cabotage Policy

DAVID P. AGNEW

The continuing liberalization of the international aviation regime has forced the reexamination of many long-standing policies and accepted conventions. Cabotage, the right of a foreign carrier to transport domestic traffic within another country, has been almost universally banned throughout aviation history. Recently, however, cabotage has surfaced as a major issue in various international aviation forums. The regionalization of aviation, as evidenced by the recent moves toward unity in Europe, has given special force to calls for cabotage. As the most robust aviation market in the world, the U.S. market is an obvious target for foreign carriers and governments that want to share the enormous amount of U.S. air traffic. Calls from some European governments and carriers have been particularly strong and may, if the trend toward European integration continues, force an alteration of U.S. cabotage policy. There are significant legal, political, and practical barriers to such an alteration. Despite these barriers, however, U.S. policymakers should continue their recently revealed willingness to use cabotage at the bargaining table. The potential advantages of allowing foreign carriers to carry cabotage traffic in the United States include increasing competition in U.S. markets, providing international service to secondary U.S. gateways, and, perhaps most important, improving the negotiating position of the United States vis-à-vis other countries or regions. Potential costs of allowing cabotage, such as those to U.S. carriers, must also be a factor in the decision. An analysis of the potential impact of limited cabotage (allowing foreign carriers to operate only a limited number of domestic routes) suggests that allowing a limited form of cabotage would have neither an extremely negative nor an extremely positive impact on U.S. and foreign carriers, respectively. Because of the formidable level of U.S. carrier opposition and other factors, the foreign carrier market share would probably be minimal. The Quality of Service Index (QSI) model, when used to analyze potential European carrier limited-cabotage routes, clearly points to this outcome. In the routes most likely to be targeted by European carriers, the QSI model predicts market shares of less than 5 percent. U.S. policymakers should consider using cabotage as a negotiating tool with European countries. As the European Community becomes a more organized and effective economic region, this willingness may become a necessity. In the meantime, the potential benefits and costs of allowing limited cabotage within the U.S. market should be analyzed carefully. The winners and losers of the various altered scenarios should be identified. Scenarios should be tested with respect to the impact on U.S. carriers and consumers. Finally, the United States should take a proactive role in the worldwide discussion of cabotage and actively identify and pursue those ends that are of the greatest value to U.S. interests.

The institutions and policies of international aviation have undergone a dramatic restructuring in recent years. Worldwide, in domestic markets and in the international marketplace, deregulation and globalization have altered the assumptions that governed aviation for the past half-century. Deregulation in the United States has produced a level of competition and industrywide restructuring that would have been unthinkable 15 years ago. The forces of the European market are reducing the importance of national boundaries in the region and may force changes in the negotiation strategies of non-European Community (EC) countries. As some of these changes occurred, new aviation issues emerged in the international arena. Cabotage is one of these issues.

John F. Kennedy School of Government, Harvard University, Cambridge, Mass. 02138. Current affiliation: Price Waterhouse, Office of Government Services, 1801 K Street, N.W., Washington, D.C. 20006.

Cabotage, the carriage of domestic traffic within another country by a foreign carrier, has been banned almost universally throughout modern aviation history. Exceptions to the cabotage ban have been few. As regions band together for negotiating purposes and liberalization reduces the need to protect individual carriers, however, the logic behind a strict ban on cabotage begins to unravel. The EC, for instance, has started to realize that its market power would dramatically increase if its members were able to develop a coherent regional aviation community. The purpose of this paper is to consider U.S. cabotage policy, particularly in light of the important market events in Europe. After an examination of the current U.S. cabotage policy, the calls for change, the obstacles to change, and the implications of various alternative scenarios will be discussed.

First, the terms of discussion must be identified. As a general term, cabotage includes any form of domestic transport by a foreign carrier. Fifth-freedom rights are those that allow a carrier to pick up passengers from a state other than its own and transport them to a third state, also not its own. As explained subsequently, fifth-freedom rights are important because they are sometimes equated with cabotage rights by foreign carriers and governments. Beyond rights are those that allow a flight to operate an extension of an international route within the United States without being able to transport passengers on the domestic leg. Limited cabotage allows foreign carriers to transport domestic passengers on the beyond-right routes. Long-haul cabotage is limited cabotage that occurs on longer domestic flights, those that are often cited as potential targets.

U.S. CABOTAGE POLICY

The term *cabotage*, sometimes known as the eighth freedom of the air, has its origins in coastal shipping, also traditionally banned to foreign ships (*1*). (The term *cabotage* may derive from *cabot* or *chabot*, French terms for a small vessel. Alternatively, according to *Black's Law Dictionary*, it may be derived from the Spanish word *cabo*, meaning "cape," which was used to describe navigation proceeding from cape to cape along the coast without going into the open seas.) The current U.S. cabotage law has its roots in the proceedings of the Convention on International Civil Aviation (the Chicago Convention of 1944) and in several U.S. aviation statutes.

The Chicago Convention was called by Roosevelt and Churchill to "establish a workable and efficient international aviation system through the establishment of multilateral agreements for the exchange of commercial air rights" (*2*). Article 7 of the Chicago Convention has served as the international law on cabotage since 1944 (*3*):

> Each contracting State shall have the right to refuse permission to the aircraft of other contracting States to take on in its territory passengers, mail and cargo carried for remuneration or hire and destined for another point within its territory. Each contracting State undertakes not to enter into any arrangements which specifically grant any such privilege on an exclusive basis to any other State or an airline of any other State, and not to obtain any such privilege from any other State.

Signatory states decided to restrict cabotage for several reasons: (a) fully aware of aviation's military applicability and their territorial vulnerability, states sought to ensure national security; (b) cabotage prohibitions were employed to protect each nation's fledgling airlines; and (c) air transportation, unlike most sea transportation, involves deep penetraton into another state's sovereign territory, adding to the discomfort of those concerned with foreign access to interior markets and geography (*1*, p. 1061).

Several U.S. statutes also prohibit cabotage. Section 6(c) of the Air Commerce Act of 1926 prohibited cabotage by stating: "No foreign aircraft shall engage in interstate or intrastate air commerce" (*1*, p. 1065). The Civil Aeronautics Act of 1938 amended Section 6(c) to read that "no foreign aircraft shall engage in air commerce otherwise than between State, Territory, or possession of the United States, or the District of Columbia and a foreign country" (*1*, p.1066). In 1953 the cabotage section of the Air Commerce Act of 1926 was altered to reflect the provisions of Article 7 of the Chicago Convention. Finally, the current Federal Aviation Act (P.L. 85-726), passed in 1958, incorporated Section 6 with only minor modifications. Section 402(a) of the Federal Aviation Act is also recognized as a further restriction on cabotage within the United States.

Despite the historical tenacity and virtually universal acceptance of the ban on cabotage, recent liberalization efforts have triggered new thinking on the issue. Although most countries remain concerned about protecting the interests of their own carriers and are unwilling to open up their markets to foreign competition, some have started to call for the use of cabotage within the markets of their bilateral partners. With the largest aviation market in the world, the United States is an obvious target for foreign governments and airlines interested in cabotage. Intriguingly, these calls for an altered U.S. cabotage policy have come from within the United States as well as from foreign governments and carriers.

CALLS FOR CHANGE

Within the United States

To some domestic observers of American aviation, cabotage appears to be an ideal way of injecting competition into post-deregulation markets. Proponents of the concept argue that on many routes dominated by the hub-and-spoke operations of a particular carrier, fares are higher and service quality is down. Cabotage, they argue, would increase competition, and thus benefit the consumer, without a commitment to re-regulation of the industry. A 1988 Congressional Budget Office report called for "allowing foreign carriers to provide domestic service" to increase competition (*4*). Some also view cabotage as a way of serving local economies with more connections, a benefit that groups such as USA BIAS (a group of U.S. airports seeking international service) would welcome heartily. Others cite the potential benefits to the U.S. economy from cabotage, because foreign carriers "would need to hire U.S. employees to man their local operations work, pay local landing and gate rental fees, and buy most of their fuel here" (*5*). The infusion of foreign capital into the aviation system might be substantial. Finally, supporters of an altered cabotage policy maintain that additional benefits would accrue to U.S. carriers and consumers by way of an improved negotiating position. U.S. carriers, they argue, would fare well in a deregulated world marketplace. As the argument goes, even if foreign carriers were allowed access to certain domestic U.S. markets, U.S. carriers would handle that challenge well and prosper in the markets around the globe that would open up as a result of the altered policy. Some see the relaxations as a way of getting Europeans to allow U.S. carriers the right of price leadership on fifth-freedom routes that they already operate (*5*, p. 36). The murmurings from within the ranks of U.S. carriers in support of an altered cabotage policy may be based on this type of reasoning. As a negative motivation, some international routes might be taken away from U.S. carriers in the event that bilateral or multilateral partners become angry enough over this issue to act.

In Foreign Countries

Foreign airline and government officials have direct incentives to push for a change in the U.S. cabotage policy. By all measures, the U.S. commercial aviation market is the largest and most robust in the world. Access to that market for a competitive carrier represents tremendous opportunity. Many foreign carriers complain that U.S. carriers are able to use their vast domestic route networks to feed their international flights and thus secure a substantial competitive advantage (*5*). Many foreign carriers would, of course, prefer unlimited access to all U.S. domestic markets. Barring that possibility, however, these carriers claim that even limited cabotage rights would enable them to justify some services that are now economically infeasible because of beyond rights. Some foreign carriers claim that they would be able to justify more routes of this sort if allowed to carry limited cabotage traffic.

The value of cabotage routes, however, is not universally recognized. According to those who doubt the significance of the issue, cabotage can be requested repeatedly with little chance of its actually being realized. These skeptics view the potential economic value of cabotage traffic as secondary to the value of perceptions of an intransigent United States. Thus, the claims of unfair treatment may be used in negotiations to exact concessions from the United States. Despite these misgivings about the motivations of foreign negotiators and the value of cabotage rights, the fact remains that cabotage is an issue that U.S. and foreign governments must deal with at some point in the future. As long as cabotage remains on the table, U.S. policymakers must develop a sound response either altering or reaffirming the current U.S. ban. The adopted or affirmed policy must balance the potential benefits and costs that will be experienced by both U.S. carriers and consumers.

The pro-liberalization entities within the European aviation community have been particularly persistent in their requests for a change in U.S. cabotage policy. As the prospect of a unified European aviation community has become more realistic, European officials have started to equate the fifth-freedom rights of U.S. carriers within Europe with cabotage rights for themselves in the U.S. market. If Europe comes to be viewed as a single entity, these officials ask, then why should European carriers not enjoy the same rights in the United States that U.S. carriers enjoy (i.e., present fifth-freedom rights) within Europe?

To fathom the impact of these changes in the European market, an analysis of the current dynamics, grounded in the history of the market, is essential. A brief summary of the recent history of the European aviation community will be followed by a discussion of the implications of the present situation on U.S. cabotage policy.

EUROPEAN MARKET: HISTORICAL PERSPECTIVE

The European aviation market is changing. After years of operating in a heavily regulated market, European government officials and commercial carriers are facing changes that will force them to rethink their operating assumptions. No longer will national flag carriers be able to depend on a government-guaranteed market share on particular routes. No longer will discount fares be ruled out when smaller carriers are trying to challenge the majors. Perhaps most important, no longer will the aviation community as a whole be able to depend on exemption from the rules of the European Economic Community as laid down by the Treaty of Rome. No one denies that change is on the horizon. The extent to which the market will develop and the pace of change, however, are still subjects of debate both inside and outside Europe.

In 1957 the Treaty of Rome established the European Economic Community (*6*). The treaty dealt briefly with aviation, and contained one article that pointed directly "towards the adoption of a common transport policy, another establishing a target of eradicating state boundaries for business, and six (articles 85–90) prohibiting cartels and doing away with anti-competitive practices" (*6*). These articles laid out an ideal that was unworkable in the air transport world. In 1961 air transport was removed from the Treaty of Rome with respect to competition rules. The ultimate decision on European Economic Community aviation policies was, in effect, postponed by Article 84, which dictated that "the Council would develop a policy on air transport eventually" (*7*). Since 1961, European aviation has continued to be governed by bilateral relationships negotiated between the governments of the member states. These "bilaterals nominated the airlines that could fly, the fares that could be charged, provided for pooling agreements under which departure timings were agreed, and revenue split under an agreed formula" (*6*). Airlines were therefore exempt from any procompetitive policies of the European Economic Community and could depend on a predictable regime that allowed them to exist without a great deal of competitive flexibility. The "interests" of the carriers were most often the prime considerations of the state transport officials. Pricing and flight availability were set primarily according to airline planning needs.

This regime was not challenged until recently. A European Court ruling in 1974 hinted that civil aviation was subject to the general rules of the treaty (including the competition provisions). Despite this ruling, real change did not become imminent until the early 1980s, when it became apparent to many that the European aviation structure simply had to change (*7*). The liberalization process was hastened by U.S. initiatives such as the extension of U.S. antitrust laws to the International Air Transport Association and the renegotiation of bilaterals with the United Kingdom and the Netherlands. The deregulation experience in the United States also spurred some proponents of European liberalization to argue that consumers had suffered under an aviation regime that sacrificed their interests in the name of carrier profitability and planning. These proponents received some valuable support in 1982 from the Competition in Air Services (COMPAS) report, which was issued by the European Civil Aviation Conference. The COMPAS report urged liberalization in several important areas, including route entry, capacity, and pricing.

The calls for liberalization fell on sympathetic ears within the EC as well. In 1984 the Commission issued its Second Memorandum on Air Transport, which proposed to maintain the bilateral regimes between member states but sought to loosen the restrictions on the industry to encourage efficiency and innovation on the part of Europe's airlines (*8*). Though this was certainly a modest step, it signaled an evolving attitude. As noted by Reed (*6*):

> By 1986 EC opinion had hardened to the extent that airlines that failed to rid themselves of cartel-like fares, pooling agreements and all the other trappings of the "bad old days" were being threatened with references to the European Court on the grounds that they were in violation of the competition clauses of the Treaty of Rome.

This was a radical departure from the days of regulation. These changes, however, represented a gradual shift in policy and attitude rather than a U.S.-style deregulation of the industry.

Proponents of a U.S.-style deregulation usually cited potential consumer gains, such as lower fares and improved flight availability, in a deregulated environment. The opponents cited a long list of reasons why this type of total deregulation would never work in Europe. The U.S. market, said the opponents, was larger and was unique in its uniformity of laws, consumers, and government institutions. The U.S. market was also free from the wide diversity of languages and cultures that would hamper European deregulation. The complexities of Europe were alluded to by Karl-Heinz Neumeister, Secretary General of the Association of European Airlines, in a speech given in May 1989 to the Airport Operators Council International: ". . .above all we are part of a political, economic, and social process of European integration" that ". . .goes much deeper and its scope far beyond the narrow aspect of just finding new rules for the airline business." The market also had a robust demand and a geographic size that made it special. Finally, and perhaps most important, the United States was not encumbered by the political considerations of flag carriers and the national pride of 12 independent states. This resistance by European officials and carriers to U.S.-style deregulation was based on a belief that reform should proceed by slowly introducing more freedoms into the existing system without shaking its foundations. These evolutionists carried the day. Thus, the European aviation market was never destined to undergo a one-shot, radical transformation.

Nevertheless, European reformers could learn a great deal from the U.S. experience. McGowan and Seabright (*7*) argue that deregulation can produce major gains for the European consumer as long as European officials deal effectively with air traffic control and airport congestion problems and maintain a vigorous competition policy, areas commonly perceived as failures of the U.S. goverment. They see the scarcity of landing slots at European airports and potential merger activity as tools with which the more established carriers would be able to keep out new entrants and abuse their dominant position. Their views represent some of the latest thinking on how to apply the U.S. deregulation experience to European liberalization.

In December 1987 the EC Council of Ministers, concerned with the state of competition in European skies, clarified the rules of procedure for European Economic Community competition rules and their application to the air transport sector. This package started the formal process of change but was viewed by many as a poor first step in the liberalization process. A representative of the Federation of Air Transport Users said that the plan was (*9*) "the very minimum step forward in the process of liberalization" and that "any action to limit the liberalization plan would be resisted by consumer groups." In spite of these criticisms, the package did, at least, begin the process of liberalization, not an insignificant event in a market dominated by heavy regulation for nearly half a century.

Specifically, the 1987 reform package contained elements pertaining to tariffs, capacity, multiple designation, and fifth-freedom rights, such as:

- Allowing for "discount and deep discount zones within which fares would be automatically approved" (*10*) (fares outside these zones would be approved as long as it could be proved that the proposed changes were cost-related);
- Providing for a gradual movement away from the strict 50/50 percent capacity sharing agreements that have dominated for so long, lowering from 45 to 40 the percentage of a particular market share that a state can demand for its own carriers (*10*);
- Allowing for multiple designation of carriers on city pairs with more than 250,000 passengers annually; and
- Granting fifth-freedom rights between hubs and other airports as long as they were an extension of existing third- and fourth-freedom services and did not exceed 30 percent of passenger seats.

Thus, the 1987 Brussels package started the process of liberalization but stopped short of really reforming the system.

The EC Council of Ministers extended the liberalization of the European market during a June 1990 meeting held in Brussels. The new measures replace the 1987 package and became effective November 1, 1990. Though not likely to transform the face of European aviation in a radical fashion, the 1990 package represents significant progress for those who envision a European transport market with no barriers. The package contains specific provisions in the areas of market access and capacity sharing, passenger fares, and exemptions from EC competition rules.

The 1990 package reduces the traffic threshold at which member states must accept multiple designation to 140,000 in 1991 and 100,000 in 1992 and allows the capacity share to be increased periodically by 7.5 percent, with all restrictions on capacity share to be abolished in 1993. In addition, fifth-freedom traffic is now allowed on all routes with a limit of 50 percent of all seats. The restrictions on discount fares are also relaxed, allowing for additional zones of automatic approval and removing certain restrictions. Though not formally in the documents, true intra-EC cabotage is also introduced as a goal for 1993.

From the perspective of the United States, other interesting questions concern the likely positions to be taken by the EC in its aviation relationships with non-EC countries. The internal market changes are certain to bring about fundamental shifts in attitudes and institutions in this area. But what effect will these changes have on the bilateral regimes now in place between the EC member states and non-EC countries? Will these existing bilaterals be replaced altogether? Will the member states of the EC ever surrender their negotiating powers to an EC institution? If any of these hypothetical situations do come about, at what pace can they be expected? These are the questions that should be considered in a discussion of U.S. cabotage policy.

At the very least, continued liberalization of the European market must overcome significant legal, structural, political, and economic barriers. To name a few of the most striking:

- Each member state has its own interests in terms of the division route rights and other benefits of negotiation and member states are still tied to the concept of flag carriers.
- Until the EC irons out its own internal aviation policy, hopes for a united external policy are diminished.
- It is still not clear which institution will carry the torch of European aviation policy.

Before the internal aviation market proceeds with reforms, the answers to these questions must crystalize.

Despite the uncertainty surrounding the previous questions, the fact remains that if the EC unites, the region could demand treatment as a single aviation entity. This declaration could transform existing U.S. carrier fifth-freedom rights into European cabotage. As of January 1, 1990, U.S. carriers had rights to 84 intra-EC routes (Table 1). European officials would have to decide whether to renew or extend these routes. Though they are bound by international treaties to allow current routes to continue operation, it is possible that they would be willing to grant additional cabotage rights to U.S. carriers either within the EC or individual European countries. The United States must therefore be prepared to pay for its fifth-freedom traffic in Europe (both existing and future) or to consider a liberalization of U.S. cabotage policy.

TABLE 1 U.S. CARRIER TRAFFIC IN EUROPE

U.S. Airline	Weekly Flights Scheduled to or via EC States	Flights Using Intra-EC 5th-Freedom Rights
American	105	14
Continental	29	0
Delta	53	0
Northwest	26	0
Pan Am	122	42
TWA	133	28
USAir	7	0

SOURCE: International Civil Aviation Organization (Based on scheduled traffic January 1, 1990).

CHANGE IN U.S. CABOTAGE POLICY

Because of the likelihood of European change, the United States should be prepared for a new negotiating scenario with the European aviation community. If Europe does reach the point of a unified negotiating position, the United States should have at least considered potential scenarios ". . .so that whatever policy it does create will still provide benefits to its citizens, no matter how large the negotiating partner" (*11*).

The United States has been deflecting demands from the Europeans for cabotage rights for several years. The basis for these refusals has been outlined at length by U.S. officials, who doubt both the legitimacy and value of these claims. The ability of Europe to suddenly declare itself a cabotage area is questioned, as is the value of cabotage rights for foreign carriers.

Despite these misgivings, the United States should explore cabotage as a possibility, perhaps by experimenting with limited cabotage on certain routes. The outright ban, though well founded historically, does not maximize potential value for the United States. U.S. interests would be best served if cabotage were at least prepared for as an option. The costs and benefits of an altered policy for U.S. carriers and consumers should be weighed against the likely impact on negotiations with the EC. Even if the EC aviation community does not organize to the point at which it can demand cabotage rights for several years, the United States should be prepared for the occasion. As this reality becomes more established in the minds of Europeans, the necessary changes and assignment of powers are likely to be subjugated to the realization of these potential benefits.

Barriers to Change

Before the type of cabotage policy the United States might adopt can be addressed, the barriers to change are worth discussing. The potential hurdles to cabotage are significant:

- The political realities of striking unions and angry carriers would not be a welcome sight for most aviation officials or politicians.
- Legal barriers still exist, both in U.S. domestic law and in international law.
- European carriers might find that even with the route rights they would be unable to compete with the powerfully based and more efficient U.S. carriers.
- Potential logistical difficulties exist, which include slot limitations on the requested routes and European airframe and pilot shortages.

Political realities being what they are, any change in the current U.S. cabotage policy will be met with fierce resistance. The Air Line Pilots Association (ALPA), for example, threatens, ". . .if cabotage is ever adopted, we would shut down the U.S. air system in protest" (*12*). Of these types of threats by unions such as ALPA, a member of the TRB Aviation Economics and Forecasting Committee states, "The threat of striking unions and angry carriers has often been put on the table, but has seldom really achieved anything. It is a tactic which will be used no doubt, but it will probably not be effective" (V. Golich, unpublished data). (Indeed, cabotage will soon be on the table in the U.S.-Canadian talks, which represents a positive sign.) There are ways that the U.S. negotiators might reduce the likelihood of such all-out opposition. Phasing in the changes or trying out an altered policy for a trial period represent two possibilities. Also, cabotage as an issue might lose some of its emotional charge as it becomes discussed more frequently.

As to the legal barriers, domestically, a change in the U.S. cabotage policy would require congressional and presidential approval. Given the opposition of the unions and most of the carriers at the present time, this is not likely to be an easy task. Though congressional opposition to a change has traditionally been intense, this opposition might subside after the debate on the issue became commonplace. In addition, changes in the regulatory framework must comply with existing U.S. antitrust legislation.

In terms of international law, questions still exist about the legality of cabotage with respect to the rules of the 1944 Chicago Convention. The language in Article 7 of the Convention on International Civil Aviation suggests that any cabotage offering must immediately be extended to all other signatory states, thus removing any potential for using cabotage as a bargaining tool. Such an interpretation would be compatible with the prevailing philosophical guidelines that informed international agreements following World War II, namely, multilateral governance and commitment. These principles are evident in the General Agreement on Tariffs and Trade mandate and operating rules (V. Golich, unpublished data).

The proponents of cabotage, however, argue strenuously against this interpretation. Several alternative approaches to dealing with the wording of Article 7 have been stressed. The first opposing view hinges on the interpretation of the words "specifically" and "exclusive" and holds that a country should be able to grant cabotage rights as long as the possibility is held open for grants to other countries at a later date. In other words, a country would not be able to grant exclusive cabotage to any one country. A country granting cabotage must, in good faith, hold open the possibility that cabotage might be granted to other countries at a later date. This interpretation would allow a given country to grant cabotage to another country without opening its market to every country in the world, thus preserving the value of cabotage as a negotiating tool.

The second approach has been used effectively by the Scandinavian countries in structuring their cabotage agreements: "The Scandinavian agreements remain in force as long as no hostile bid to carry cabotage traffic is received. Any non-approved seeker of cabotage can only play 'spoiler' by ending all cabotage; in no event can it obtain cabotage for itself, which removes the main reason for attempting to intervene" (*13*, p. 714). This second approach might face more difficulty in the United States, however, given the fierce competition to enter the world's largest market. Some excluded countries might not mind playing spoiler.

European carriers are likely to find that, even with the right to provide service, they would face stiff competition from U.S. carriers, which are, after the consolidation that followed deregulation, "in an excellent position to compete with any carriers that enter the market, foreign or domestic" (*13*, p. 716). There is little doubt that foreign carriers would be hard pressed to compete effectively, because, according to G. James in an address given at the 15th Annual FAA Aviation Forecast Conference in March 1990, they "must still face severe competition from U.S. carriers who have the strength of their domestic hub-and-spoke systems to counter this new, foreign competition." Foreign carriers would, at the least, be faced with the competitive disadvantages of relatively few offerings and lack of name recognition and customer loyalty. This is realized by many Europeans as well, including H. A. Wassenbergh, who stated in 1988, "It should be noted that U.S. cabotage rights have limited value for European carriers as the competition from U.S. domestic carriers would be very strong" (*14*).

Likely logistical difficulties include slot limitations on the requested routes and European airframe and pilot shortages. Many destinations in the U.S. market would be hard pressed to accommodate an influx of additional carriers because of the lack of airport capacity. Because the slots have already been divided among U.S. carriers, it appears that the foreign carriers might face some difficulties obtaining the necessary slots.

Possible Changes

If these barriers are overcome, the question of possible changes must be addressed. The United States could alter its cabotage policy in a variety of ways. First, the United States could maintain the status quo. Second, the United States could open its skies completely to foreign carriers. Third, limited variations of cabotage could be allowed. Finally, U.S. policies that forbid foreign ownership and control could be changed, thus diminishing the relevance of foreign calls for cabotage. How specific changes in foreign ownership and participation regulations would affect the cabotage policy debate merits additional discussion in the appropriate policy forums.

Status Quo

The United States may choose to maintain the status quo. By not changing policy, the United States would risk losing rights that it now possesses and would definitely never gain the additional route rights that an altered policy would make available. In the 1977 Bermuda II Agreement, U.S. carriers lost fifth-freedom rights from the United Kingdom to many European cities. A failure to yield to demands for cabotage could theoretically result in similar losses, though the value of these routes appears to be relatively small because the revenue from true fifth-freedom traffic within Europe accounts for a relatively small portion of the entire route revenue. Perhaps more important, however, the United States would be missing out on certain route opportunities that might be offered by other countries or groups of countries if the status quo were maintained. Finally, by maintaining the status quo, the United States would be passing up the opportunity to create some benefits for U.S. consumers. On the other hand, by maintaining the present laws, the United States would not be upsetting the unions and some U.S. carriers opposed to any type of relaxation on cabotage.

Open Skies

At the other end of the spectrum, the United States could allow foreign carriers unlimited access to U.S. skies. The obvious drawbacks are the substantial political difficulties and uncertainty. After the many unforeseen developments that accompanied U.S. deregulation, U.S. and foreign carriers and government officials are wary of all-out change. No one can predict precisely what might happen in the U.S. market if foreign carriers were allowed to function as domestic carriers. For this reason, many U.S. carriers would prefer not to face a round of imported competition.

On the other hand, open skies would be likely to have some positive impact for the U.S. consumer in the form of additional domestic competition and more international route availability. If pursued multilaterally, open skies might benefit U.S. carriers in the form of more international route availability. Consumers would benefit if such a deregulated environment allowed foreign carriers to inject competition into hub-dominated routes. Proponents of open skies decry the consolidation of the industry and argue that foreign competition within the United States is a logical extension of U.S. deregulation. The addition of a foreign carrier on particular routes may indeed benefit U.S. consumers marginally. Though predictions about what might happen have limited value, the important point is the feasibility of such policy changes at this time. Barring major upheavals, piecemeal changes in U.S. cabotage policy appear much more realistic than an all-out reversal.

Limited Cabotage

A third possibility is to alter the U.S. policy slightly and allow limited cabotage in the form of fill-up rights on the U.S. leg of flights entering the United States from Europe in one U.S. city and continuing to another. For example, three European carriers currently operate eight flights that have a leg entirely within the United States but do not pick up domestic traffic on the U.S. segment. Presumably, the additional fill-up rights would make these types of routes more economically feasible for European carriers to operate and might open up service to additional gateways. This policy would have benefits similar to those of opening the market to foreign carriers but would be much more workable. Specifically, this type of change would have several implications:

- The negotiating position of the United States would probably be improved vis-à-vis the European countries (assuming that U.S. negotiators pushed for concessions in return), thus benefiting some U.S. carriers.
- U.S. consumers would benefit from the additional competition on domestic routes, however small, and would have the additional international flights on their list of possibilities.
- The incremental nature of this change would not carry with it the uncertainty of all-out change and would be more politically feasible than a drastic change in the status quo.
- Such a change would continue the process of opening up the international aviation order and could thus represent a step toward longer-term gains for U.S. carriers and consumers.
- By making an incremental change, the United States would force the hand of European carriers on the issue of cabotage without risking too much in return.

Given these advantages, it appears that this is the type of cabotage that U.S. policymakers should, and will be likely to, consider. On the assumption that the limited fill-up rights policy is the most likely type of U.S. response, it is necessary to determine which foreign carriers are interested in cabotage and decide what they expect to gain.

LIMITED CABOTAGE: IMPACT ON THE MARKET

To begin the analysis of an altered cabotage policy, a look at existing gateways, carriers, and route operations is instructive. To determine which routes might be candidates for limited fill-up rights by European carriers, several different possibilities should be examined. If allowed limited fill-up rights, European carriers are likely to target two types of routes:

- Routes that currently exist as beyond rights for European carriers (Scenario 1).
- Routes that are logistically convenient extensions of existing international services (Scenario 2).

To assess the potential impact of allowing limited fill-up rights to European carriers, both of these scenarios should be examined by using the Quality of Service Index (QSI) methodology.

QSI Model

The QSI model was developed in pre-deregulation days to predict the market share that would be captured by a carrier that introduced an additional flight in a particular city-pair market. Although no model can account for all of the factors that influence a consumer's decision to take the flight of a particular carrier, the QSI model correctly identifies many of the most significant.

The QSI model employed in this paper predicts the probable market share of a carrier that introduces a single flight to an existing market on the basis of the aircraft size, the number of stops, the number of connections necessary, and the weekly frequency. First, a value is assigned to each variable for every flight that currently operates on the given route. The flights are assigned values according to the following inputs:

Variable	*Value*
Aircraft size	Average capacity/100
Number of stops	
Nonstop	1.0
One	0.5
Two	0.25
Three	0.125
Number of connections	
Direct	1.0
one change	0.5
two changes	0.25
Weekly frequency	
Seven days	7.0
Six days	6.0
Five days	5.0
Four days	4.0
Three days	3.0
Two days	2.0
One day	1.0

The totals for each flight and the entire market are then computed. Finally, the total value for the additional flight is divided by the total value of flights currently operating in the market, giving the predicted market share of the added flight.

For example, say the route in question was Paris-Washington, D.C. Air France currently operates a flight from Paris that stops in Boston, unloads passengers, and continues to Washington, D.C. What market share would the Air France flight capture if allowed to transport additional passengers from Washington to Boston? According to the previous variables, the total value of the current operating schedule is 544.98, with the Air France flight operating a 747 aircraft 7 days a week with no stops and no connections. The parameters give the Air France flight a value of 12.5. The QSI methodology predicts that the Air France cabotage flight would capture 2.29 percent (12.5/544.98) of the Washington-Boston market.

Limitations

The limitations of the QSI methodology merit discussion. The QSI methodology was developed during the days of regulation and therefore does not take into account the effect of price on the market share. Also, the market share predictions might be biased upward for European carriers, because the model does not take into account the factors of convenience and customer loyalty. The offerings of the U.S. carriers would be much more convenient than the once-a-day offerings of the European carriers. Also, assuming that the U.S. carriers have been able to develop some sort of customer loyalty through frequent-flier programs, the market share of an additional carrier, particularly a foreign one, on a domestic U.S. route would not be as large as that predicted by the QSI model. Finally, the market share of the foreign carriers on these routes would be limited because of the inherent disadvantages associated with international flights in a domestic market setting. These foreign-carrier-operated domestic flights are only offered once a day, suffer from worse on-time records, have different staffing and airport needs, and arrive and depart at times that are not convenient for many domestic U.S. passengers.

Thus, although the QSI model predicts the general effects of allowing limited fill-up rights on particular routes, its output is somewhat limited in predictive value, given the important variables omitted. A more useful model would include price, convenience of flight times, and customer preference of domestic carriers. A model developed specifically for the assessment of the effects of cabotage would be extremely beneficial in evaluating potential changes.

The limited ability to predict what carriers might do if allowed limited fill-up rights also complicates prediction. Though Alitalia, KLM, and Scandinavian Air Systems (SAS) do not currently operate beyond-right routes, they might very well begin if limited cabotage were made available. Also, these and other carriers might attempt to develop some sort of international feeder network in the United States. This change might make a difference in the economic viability of certain routes. The QSI methodology, despite these limitations, is useful because it provides a general first cut at predicting what might happen in the event of an altered cabotage policy.

Application to Scenarios

Scenario 1, in which European carriers target their existing route networks, provides a useful starting point for analysis. A review of the international flight schedules of seven major European carriers (British Airways, Lufthansa, Air France, Alitalia, KLM, SAS, and Swissair) reveals that these carriers currently operate 14 beyond-right flights during the course of the year. British Airways operates five such trans-Atlantic flights serving four gateways: London-Philadelphia-Pittsburgh, London-Washington, D.C.-Miami (Concorde flight), London-Los Angeles-San Diego, London-Newark-Philadelphia, and London-Washington, D.C.-Pittsburgh. Air France operates four such flights: Paris-New York-Washington, D.C., Paris-New York-Philadelphia, Paris-Washington, D.C.-Boston, and Paris-San Francisco-Los Angeles. Lufthansa operates one such flight: Frankfurt-Boston-Philadelphia, and Swissair also operates one such flight: Zurich-Boston-Philadelphia.

Alitalia, KLM, and SAS do not offer any flights that have stops in two North American gateways. All of their service in the United States is point-to-point from Europe. The QSI methodology predicts uniformly low market shares for a foreign carrier operating on the above routes (Table 2).

As a secondary approach, a review of the U.S. gateways of European carriers might also reveal the routes that would be targeted by European carriers if they were allowed limited cabotage (Scenario 2). Once limited fill-up rights were made available, it is quite possible that European carriers would simply extend some of the flights that are currently operating, thus adding another leg to the existing service. The ability to transport the cabotage traffic might make an extension economically viable. Assuming that these extensions would originate in existing gateways allows certain routes to be identified as potential targets and analyzed using the QSI methodology. Two gateways were selected for seven European carriers (British Airways, Lufthansa, Air France, Alitalia, KLM, SAS, and Swissair), for a total of 14 additional gateways. A logistically convenient extension was then selected for each of the gateways. The QSI methodology was applied to each of these routes to arrive at a predicted market share for the additional European carrier operation. The results of the exercise also point to extremely low market share for European carriers operating a domestic U.S. route. Again, the QSI methodology predicts uniformly low market shares for the carriers (Table 3).

TABLE 2 PREDICTED MARKET SHARE: SCENARIO 1

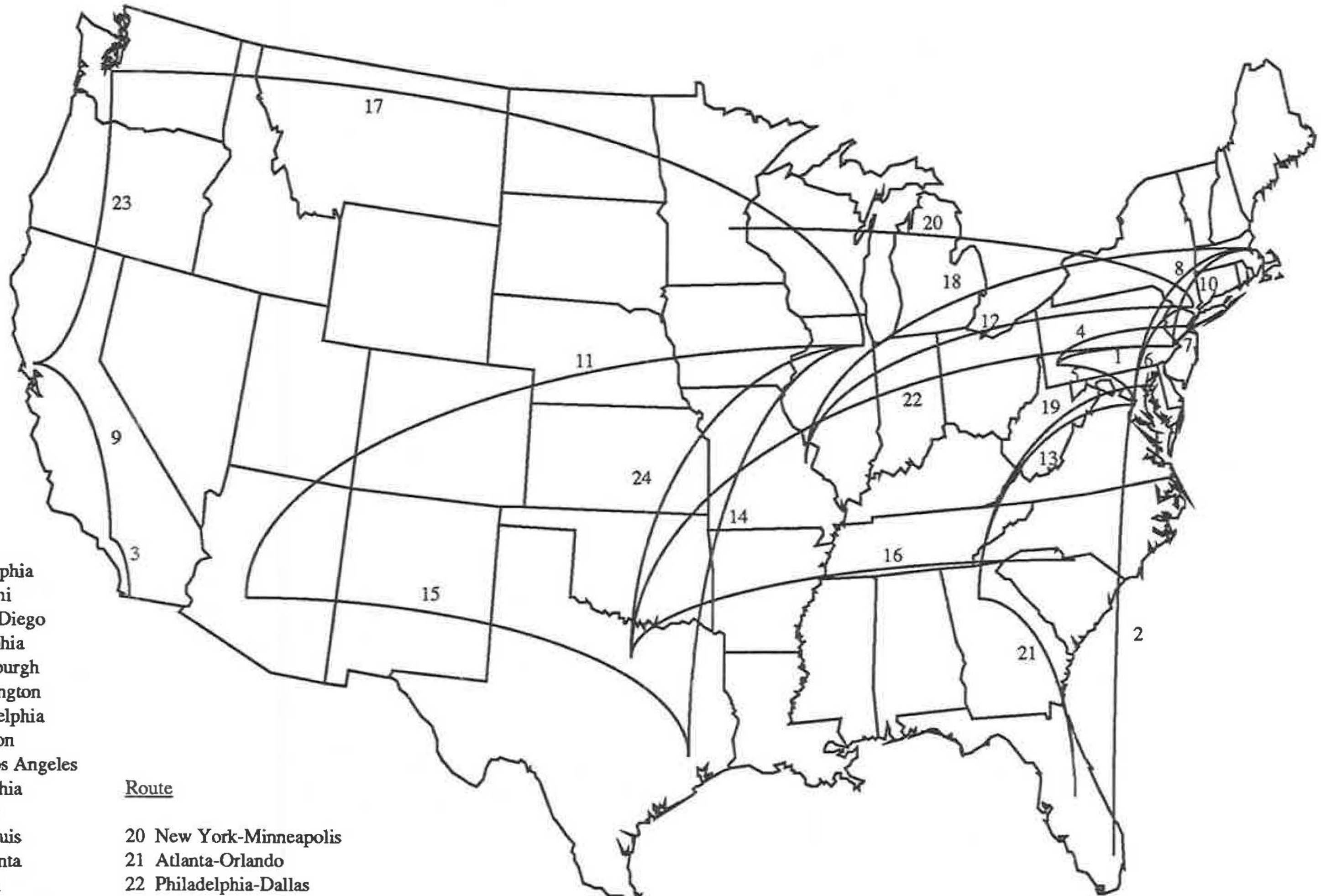
Airline and Route	Predicted Market Share (%)
British Airways	
London-Philadelphia-Pittsburgh	8.99
London-Washington-Miami	5.40
London-Los Angeles-San Diego	1.45
London-Newark-Philadelphia	3.52
London-Washington-Pittsburgh	5.18
Air France	
Paris-New York-Washington	0.88
London-New York-Philadelphia	3.59
Paris-Washington-Boston	2.29
Paris-San Francisco-Los Angeles	0.62
Lufthansa	
Frankfurt-Boston-Philadelphia	3.05
Swissair	
Zurich-Boston-Philadelphia	3.05

Summary of Conclusions

The QSI model, when applied in both of the preceding scenarios, predicts that allowing a very limited form of cabotage to selected routes would result in small market shares for foreign carriers and, of course, slight losses for U.S. carriers. The analyzed were diverse (Figure 1). Of the 24 routes analyzed, the average predicted market share for a single European

TABLE 3 PREDICTED MARKET SHARE: SCENARIO 2

Route	Predicted Market Share (%)
British Airways	
London-Chicago-Phoenix	2.61
London-New York-St. Louis	2.14
Air France	
Paris-Washington-Atlanta	2.71
Paris-Chicago-Houston	2.36
Lufthansa	
Frankfurt-Houston-Phoenix	2.88
Frankfurt-Charlotte-Dallas	4.81
Alitalia	
Milan-Chicago-Seattle	3.37
Milan-Boston-St. Louis	4.00
KLM	
Amsterdam-Baltimore-Atlanta	9.50
Amsterdam-New York-Minneapolis	3.01
Swissair	
Zurich-Atlanta-Orlando	4.89
Zurich-Philadelphia-Dallas	2.76
SAS	
Copenhagen-Seattle-San Francisco	3.35
Copenhagen-Chicago-Dallas	3.05



Route

1 Pittsburg-Philadelphia
2 Washington-Miami
3 Los Angeles-San Diego
4 Newark-Philadelphia
5 Washington-Pittsburgh
6 New York-Washington
7 New York-Philadelphia
8 Washington-Boston
9 San Francisco-Los Angeles
10 Boston-Philadelphia
11 Chicago-Phoenix
12 New York-St. Louis
13 Washington-Atlanta
14 Chicago-Houston
15 Houston-Phoenix
16 Charlotte-Dallas
17 Chicago-Seattle
18 Boston-St. Louis
19 Baltimore-Atlanta

Route

20 New York-Minneapolis
21 Atlanta-Orlando
22 Philadelphia-Dallas
23 Seattle-San Francisco
24 Chicago-Dallas

FIGURE 1 Routes analyzed.

carrier flight was 3.5 percent, hardly the earth-shattering result predicted by many proponents and opponents of cabotage. This highlights the intense competition that a foreign carrier would face on any of the long-haul cabotage routes. Foreign carriers would be likely to pick up enough passengers to fill their one daily service between the two cities, an apparently small impact in most cases. The implications of this level of impact are discussed below.

Costs and Benefits of Long-Haul Cabotage

The value of an altered U.S. cabotage policy must be viewed in light of the potential costs and benefits to both U.S. carriers and consumers. U.S. negotiators have always been faced with the difficult task of forging agreements that recognized both of these competing claims. The issue of cabotage poses significant problems for negotiators, because an altered policy would entail a set of costs and benefits for U.S. carriers different from that for U.S. consumers. An appropriate U.S. policy must get beyond the rhetoric and attempt to realize each set of benefits to the fullest extent possible, realizing that gains in one area might be accompanied by losses in others.

From the standpoint of the U.S. consumer, limited cabotage appears to have minor potential benefits. If long-haul cabotage were allowed, U.S. consumers would benefit from the increased competition through the occasional super-bargain fare, somewhat lower prices offered by domestic carriers on the routes (probably a marginal difference), and increased availability of flights. Though these benefits to the consumer are not likely to be overwhelming, they must be factored in as an advantage of allowing long-haul cabotage. The quantification of these benefits would require a route-by-route analysis of the specific carriers to be affected.

From the perspective of U.S. carriers, the costs and benefits of allowing long-haul cabotage are more difficult to predict. On the cost side, the primary losses to U.S. carriers would occur on the domestic segment. As demonstrated previously in the QSI analysis, the impact on any single carrier is likely to be extremely limited because of the competition that any foreign carrier would face from U.S. carriers. Provided that the grants of cabotage were made strategically, U.S. carriers would have little to fear from the addition of a single flight with extremely limited capacity.

On the benefit side, U.S. carriers might receive additional international routes in exchange for the cabotage rights within the United States. Presumably, by altering its cabotage policy, the United States would open up more fifth-freedom and other international routes to its carriers. These gains would be achieved as along as U.S. negotiators used cabotage as a tool for opening foreign markets to U.S. carriers. The potential for this type of bargaining does exist. This stress on the value of international rights comes at a time in which international routes hold special significance for U.S. carriers. The U.S. Department of Transportation Secretary's Task Force on Competition noted in its report *International Air Service* (*15*) that international air services contributed a disproportionate percentage of the operating profits to U.S. carrier operations, more than 25 percent of the profits but never more than 25 percent in revenue passenger miles. The report noted that higher profit margins of the Atlantic market were particularly important. As noted by Golich, "With airline deregulation forcing razor-thin profit margins domestically, several U.S. airlines have targeted successful international expansion as critical to providing the passenger feed they need to survive" (*16*).

This observation leads to an important caveat: U.S. carriers have differing attitudes toward cabotage. These differences stem from differing corporate strategies, different existing route rights, and variance in the expected returns in the international marketplace. Some U.S. carriers, as noted by James in the address referred to earlier, "are rushing to gain access to Western European gateways before 1992." Although some larger U.S. airlines may support cabotage as a mechanism to expand their access to foreign markets, some smaller, less internationally focused carriers are inclined to believe that the removal of cabotage restrictions would siphon some of their domestic traffic with no commensurate benefits. Also, many opponents of cabotage will probably continue to oppose any form of cabotage because of the "foot in the door" syndrome, the fear that once the barrier has been broken, the U.S. market would eventually be open to foreign competition. Thus, it is not likely that U.S. carriers will reach consensus on the issue. Rather, there will be a gradual shift in the attitude of U.S. carriers who expect to gain internationally and continued resistance by those who plan to remain strictly domestic or those who are already satisfied with their international routes.

CONCLUSIONS AND RECOMMENDATIONS

U.S. aviation officials should view long-haul cabotage as a tool to achieve three basic goals:

1. Realizing limited gains for U.S. consumers;
2. Forcing the hand, in a fairly risk-free manner, of the European carriers and governments that have been demanding cabotage; and
3. Continuing the process of international aviation liberalization, a process that might hold significant rewards for both U.S. carriers and consumers in terms of additional competition and route networks.

To this end, U.S. officials should develop a clear picture of how particular routes might be affected by long-haul cabotage traffic. A better understanding of these potential markets would enable U.S. officials to grant cabotage on routes that are most in need of the additional competition or where U.S. carriers would not be damaged significantly by the additional competition. The analysis in this paper, although limited, does highlight the conclusion that limited cabotage holds neither benefits nor costs of great proportions. This is the realization that should inform future debate and analysis on the issue of cabotage. To exaggerate the implications of the issue is to diminish the constructive role that it might play in future negotiations. Policy discussions of the cabotage issue must develop around the costs and benefits that it realistically implies rather than the exaggerated claims of extreme potential costs and benefits.

To overcome traditional opposition to a change in cabotage policy, U.S. officials might consider an incremental approach in which limited grants with severe restrictions would be followed by more generous offers of cabotage if they proved advantageous to U.S. interests. An agreement with a single country might be viewed as an experiment and, if successful, be applied to additional countries later. Some in the industry believe that limited cabotage might be acceptable if accompanied by restrictions on the nature of the flights and the number of domestic passengers carried on the cabotage legs. If U.S. officials were to make a proposal spelling out these restrictions and stressing the limited nature of the cabotage grant, the path to change might be smoothed.

This strategy would also, presumably, be combined with aggressive attempts to open up the international aviation markets to U.S. carriers. One reason that carriers may be voicing their opposition so loudly is to ensure that U.S. officials do not give away cabotage rights without extracting European route rights in exchange. Long-haul cabotage rights in the United States should be traded on an incremental basis for rights of comparable value around the world. These long-haul cabotage rights might also be used as a way of encouraging the liberalization of international air transport to realize possible longer-term gains for U.S. carriers and consumers. The rights might be granted, for example, exclusively to countries with procompetitive aviation agreements with the United States. In the case of Europe, U.S. negotiators might be able to tie these rights to the continued liberalization of the European aviation market (i.e., until certain changes occurred with regard to subsidizing flag carriers, the U.S. would not grant long-haul cabotage rights to European carriers). These efforts by U.S. officials to open international skies should serve to benefit U.S. carriers and consumers and should not serve as a protective device for selected U.S. carriers.

Finally, the implications of an altered U.S. cabotage policy vis-à-vis other bilateral partners must be considered. Any grant of cabotage rights is important to all U.S. bilateral relationships. Assuming that questions of international law were resolved and a grant of cabotage affected only the U.S. negotiating position, it is quite possible, and even likely, that pressure on the U.S. government to continue to relax its cabotage policy would increase. That fact alone, however, does not diminish the potential value of limited grants of cabotage. If limited experiments with European carriers are successful, other useful experiments might include Pacific Rim countries, particularly on such routes as Honolulu-Los Angeles.

Cabotage appears to be an issue that will be of abiding interest in international aviation. To take full advantage of this interest and of its size and position in global aviation, U.S. officials should treat cabotage as a potential reality. If the grants of cabotage rights are made carefully, tied to equally valuable concessions from other countries, and used to encourage change in other, related areas, long-haul cabotage might very well prove to be a winner for both U.S. carriers and U.S. consumers.

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