

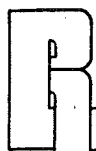

ALTERNATIVE METHODS OF ALLOCATING AIRPORT SLOTS:
PERFORMANCE AND EVALUATION

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EXECUTIVE SUMMARY

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This study analyzes alternative methods of allocating scarce airport capacity (slots) among competing airlines. The findings are as listed below.

1. The method of allocating slots at airports can substantially influence the competitive structure and the efficiency of the air transportation industry.
2. The current method of allocating slots at the four high-density airports (the slot committee process) is inadequate in almost all dimensions of economic efficiency.
 - The allocations are very sensitive to the regulatory political climate. The current climate is fostering the following tendencies.
 - The process places downward pressure on the carriers with the largest number of slots at a given airport.
 - The process prevents the growth of large and medium-sized firms even if the economics suggest growth.

- Entry is allowed independent of the efficiency of the entering firms and possibly at the expense of more efficient firms.
- The ability of committees to coordinate operations at the systems level (the multiairport level) is not good.
- The committee allocations are generally unresponsive to changing economic conditions.
- The committees provide a forum in which possible anticompetitive agreements can be forged and enforced.
- The committees provide no vehicle for the economic expansion of airport capacity.

3. The study surveys several alternative methods of allocating slots.

From these a process is recommended with the following features.

- A primary market for slots organized as a sealed-bid one-price auction operating at regular, timely intervals,
- a computerized aftermarket with "block transaction" capabilities,
- special provisions for small communities,
- special provisions for changes in the definition of a "slot,"
- provisions requiring that the funds be used for expanding airport capacity,
- the possibility of "negative bids" for off-peak periods at airports for which a "zero-sum" feature is appropriate,
- sanctions to prevent the "non use" and/or monopolization of slots,
- a gradual introduction.

While this process has never been used to allocate airport slots, various aspects of it have been used successfully to allocate critical resources in other industries. It meets the goals of the 1978 Airline Deregulation Act and all experiences with the

process within controlled environments suggest that the process will operate at economic efficiency levels near 100 percent.

5. The above process is recommended on the assumption that some problems can be solved which are not addressed in this study.

The problem of how slots are to be defined is left open even though some guidelines are suggested. The funds from the sale of slots should be used to provide additional airport capacity. The study makes no recommendations about how this will be guaranteed. While the study recommends a vehicle for the establishment and maintenance of service to major hubs for small communities, no attempt was made to define such areas.

6. Among the options considered, aside from the one recommended,

the one with the second most favorable features is a slot lottery with an aftermarket. This process itself involves several problems which are referenced in the text.

CHAPTER I
INTRODUCTION

I. INTRODUCTION

A. The Slot Problem

Four major airports, La Guardia, Washington National, John F. Kennedy International Airport, and O'Hare International have been operating in accord with a high-density rule initially adopted by the Federal Aviation Administration (FAA) in 1968. This rule establishes operations quotas to control airspace congestion at these airports. The so-called airport "slot problem" has two parts. First, under what conditions should operations quotas be placed on an airport? The FAA anticipates that by 1985 as many as thirty-five airports may have serious airspace shortages. In addition, other constraints (gates, ticket counters, terminal space, community values regarding noise, pollution, etc.) operate to limit the capacity of an airport to accommodate additional traffic. The second problem is to determine a method of allocating slots at airports where quotas exist, in a manner which is consistent with the goals of the Airline Deregulation Act of 1978. These goals include the development of an air transportation system reliant on competition, and the maintenance of satisfactory air service to small communities.

This study deals with the second aspect of the slot problem. Limited airport capacity has been widely recognized as having potential anticompetitive effects on the industry. Without access to airport services, firms operate at a competitive disadvantage if they operate at all. This problem is complicated and involves many dimensions of airport capacity and much uncertainty about the consequences of alternative methods of allocating this capacity among competing airlines. This

study focuses upon those methods of allocating slots which are "decentralized" in the sense that the decision rests with the airlines themselves with a minimum of governmental or administrative involvement in the actual allocative decisions.

To the airline companies the airport capacity represents resources such as gates, customer service areas, and other facilities all of which are necessary for effective operation. Without these services at an airport, new firms will not be able to operate over the route on which the airport is located and existing firms will not be able to expand. Thus to the extent that companies desiring entry or expansion at a given airport do not have the opportunity to compete for these resources or are denied the use of these resources on the same bases as are other established companies, one of the major sources of competitive pressure cannot be operative in the market. The method of determining the utilization of airport capacity looms as a major factor in shaping the industry's economic efficiency.

B. Study Overview

The study is organized into ten chapters plus five appendices. Some of the materials are related to the structure and performance of the existing process of allocating airport capacity -- the slot committees. Other materials are related to an exposition and evaluation of alternative methods of allocating capacity use. Because the study utilizes experimental techniques as a means of demonstration and exposition, several pages of explanation are included in the text and the appendices. These explanations of the experimental techniques are almost self-contained but anyone wishing to replicate the results should contact the authors for additional material regarding experimental procedures, equipment, etc.

Since the study is an evaluative study, the criteria are set forth in Chapter II. These criteria are generally those used to evaluate the efficiency with which scarce economic commodities are allocated. In Chapter III is a brief outline of several alternative methods of allocating slots. A table there indicates a section of the study in which some discussion of the process can be found.

Chapter IV reviews the structure and decisions of the existing process. The procedures are reviewed and the nature of the committee decisions are reviewed and interpreted. Chapter V continues the evaluation of the committee process and applies experimental techniques to demonstrate the nature of the conclusions.

The study resulted in the identification of a particular process (or combination of processes) which seems capable of achieving the goals of the Airline Deregulation Act of 1978 and of avoiding the problems inherent in other methods. This general process is outlined in Chapter VI. In the

following Chapter VII the performance of this recommended process is then compared with the performance of a committee process which followed the rules used by the existing committees. The comparison is conducted within a controlled environment which imposed an allocation problem with many of the prominent economic features of the existing slot problem.

In Chapter VIII several alternative processes are reviewed. Some of these have features incorporated into the recommended process. Others could be dismissed for various reasons revealed in the chapter.

Chapter IX is used to address some specific problems which seemed to fit no particular category. Chapter X is a summary of conclusions. The appendices contain supporting materials.

C. Controlled Environment Processes: Structure and Interpretation

Controlled environments can provide an opportunity for those who are not technical experts to gain experience with the predominant behavioral features of decision processes which operate (or will operate in the future) in the more complex natural social environment. The advantages are the same as with any application of experimental methodology. In controlled environments, process decisions can be studied under a variety of parametric conditions, slight institutional variations and levels of individual motivation; and the operation of the behavioral principles which govern the processes can be seen without the aid of highly mathematical models.

Several applications of controlled environments are included in the following study. They are intended to serve only as simple

demonstrations of the operations of the general propositions used in the text and the policies advanced. Naturally the examples are purposely simple so the relevant points can be clearly observed. For those who want any of the claims to be demonstrated within more complex environments we have the technical capabilities available. A major advantage of the controlled environment is that doubts or questions can be resolved by replications of old demonstrations and the design of new ones.

Controlled environment studies rely upon the same financial incentives which are operative in the economy at large. By providing individuals with the opportunity to earn relatively (to their economic position) large amounts of money through successful dealings with each other in an organized way, it is possible to study the effects of the organization itself on the resulting pattern of participant income. Perhaps, without resort to methodological jargon, the easiest way to explain how such studies work is by a very simple example.

Six individuals labeled 1, 2, 3, 4, 5, and 6 are told they will have the opportunity to participate in a market. Anything an individual earns through buying and selling activities in this market will be his/hers to keep. The specific terms of this opportunity are as follows.

Individual 1 is told (privately) that the first unit of the commodity he/she acquires can be sold (redeemed) to the experimenter for \$10 and the second unit acquired can be sold (redeemed) to the experimenter for \$6. Of course if individual 1 can acquire units at prices below these, a profit occurs which is his/hers to keep. Thus such profit opportunities generated by purchase and resale are the

income opportunities for the individual. The experimenter agrees to redeem only these two units from individual 1 and on the terms so designated. Individual 2 is provided with a similar opportunity only at \$9 for the first unit and \$7 for the second. Individual 3 is given the same deal only with redemption values of \$8 and \$5 respectively for the first and second units acquired.

Of course these individuals are motivated to acquire units of the commodity on the lowest possible terms because their own earnings are governed by the spread between the terms on which they acquire units and the redemption values which they receive from the sale to the experimenter. Because these individuals come to the process seeking to acquire units (in order to redeem them) they are called demanders.

Individuals 4, 5, and 6 (called suppliers) will come to the process (because of the special terms offered to them individually by the experimenter) seeking to sell units. The experimenter (privately) tells individual 4 that he/she can acquire units from the experimenter at a specified (marginal) cost. These units can then be resold to the demanders on whatever terms individual 4 can obtain in the market. Individual 4 will keep whatever profits he/she can manage to obtain [marginal] profit = price paid to supplier by demander minus [marginal] cost of the unit paid by the supplier to the experimenter). The (marginal) cost of individual 4's first unit is \$4 and the second is \$8. The example is limited to the case of two units. The costs to individual 5 for the first and second units respectively are \$5 and \$7 and for individual 6 they are \$6 and \$9.

The situation is a simple but a very real market. By replicating

the situation many times with the same individuals and same parameters it becomes analogous to markets which involve repeated purchases and sales over time -- a series of (almost) identical market days. For the participants the profits which result from trading over several time periods can be a very rewarding source of income.

Many questions exist. Who trades with whom? What is the pattern of prices? What is the pattern of income? Could trades be rearranged so that the income of all participants is increased? What happens if the parameters (costs or redemption values) are changed? Are such markets governed by any systematic principles at all?

The answer to the last question is "yes." The answers to the other questions depend upon how the market -- the decision process -- is organized. In fact the principles which underlie models of markets imply that the patterns of prices and income are very sensitive to the form of market organization.

If the market is organized as a "double oral" auction the patterns are very close to those predicted by the model in Figure 1. The curve DD is called the demand function and it is obtained by a linear transformation from individual redemption values (indicated above the curve). The curve SS is the supply function and it depends upon costs as shown (the individual index is below the curve). After this market is repeated a few times (a series of market days with stationary parameters), all transaction prices will be close to P_e . Four units will be sold at P_e by those individual sellers to the left of Q, and these will be sold to the individual demanders who are also

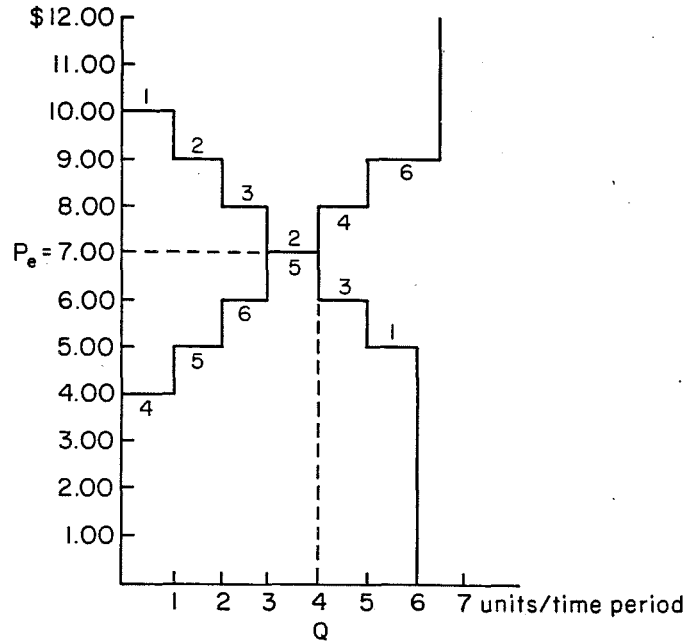


Figure 1

to the left of Q . The incomes can be calculated from this price, the redemption values and the costs.

If the market were organized differently (sealed-bid, barter process, etc.) then predictably different patterns would emerge. If the allocation process were replaced by a committee which had the power to decide who sold to whom and at what price, the outcome would depend upon certain aspects of the procedure and voting rules. In all cases, however, the outcomes depend upon the mode of organization. Theories of why this happens are reasonably reliable and the simple controlled environment processes provide an inexpensive opportunity for those who may be skeptical of the theories to see how they work.

CHAPTER II

EVALUATIVE CRITERIA

II. EVALUATIVE CRITERIA

The criteria to be applied for the evaluation of various processes are those which are generally applied to processes used for the allocation of scarce economic goods. These are adopted in recognition of the fact that the airport capacity is a critical resource in the operation of an airline. Its equitable and efficient allocation is necessary for the health and competitive viability of the industry as a whole. Not only should the resource be allocated efficiently, the allocation must be flexible in response to changing economic conditions of carriers, the development of new competition and it must be reflective of economic conditions in general.

In addition, any acceptable process must have built-in safeguards for the maintenance and possible development of services to small communities. Such communities should have continued and regular service to the major metropolitan airports.

The chapter is developed in two sections. The criteria are listed and explained in Section A. Section B is devoted to a brief exposition of the application of these criteria to the performance of controlled environment processes.

A. Concepts and Measurement

Six criteria are used to evaluate alternative process performance. These are listed and explained in order.

1. Service to small communities. Within some types of allocative processes it is possible to design institutions and procedures which would assure the service to small and remote communities required by

the Airline Deregulation Act of 1978. Within other processes it is not. All of the processes seriously considered within the body of this report have the necessary flexibility if properly implemented.

2. Efficiency. Ultimately efficiency is measured in terms of the value delivered to the consuming public from a resource base. Since an airport slot is critical to the operation of air service, the efficiency of a slot allocation process is dictated almost directly by the efficiency of the air transportation system the process engenders. Such a measurement at both the airport or independent market level and the air transport systems level is natural and is also a major goal of the Airline Deregulation Act of 1978.

a. Carrier expansion. Within a given market carriers with efficient marginal operations (relative to the marginal operations of other carriers) should expand. Under competitive market conditions the relative efficiency of marginal operations can be approximated by profitability. Thus because a slot is a critical resource for flight, those carriers which have relatively high profit opportunities for additional slots should be allocated additional slots. If capacity is limited, then these slots must either be newly created capacity or must come from other carriers.

b. Carrier contraction. The corollary to the above is that in the absence of either excess capacity or newly created capacity the slots for expanding carriers should come from the carriers whose marginal operations are the least efficient.

c. Entry. An entering firm is similar to an expanding firm (only starting from a zero base). If the potential entrant can provide equal quality service at rates lower than existing carriers, then the slot and the business should go to the entrant. Again relative profitability at the margin is the key.

d. Exit. If a firm can be replaced by another firm that can create greater net value from the use of the slots, then under conditions of limited capacity, the former should leave the market. The slots should go to the most efficient firms. Likewise some firms should be prohibited from entering a market. If slots are taken from a carrier and given to a less efficient carrier, consumer prices will go up as a result. If the slot transfer to an entrant results in an efficiency loss, then the slot should not go to the entrant. Entry with corresponding efficiency losses is wasteful of resources and simply forces the prices of air transport services to be above the competitive level. A possible exception exists in the case of substantial monopoly but even here the output-restricting tendencies would necessitate capacity slot use patterns with marginal efficiency levels below those of potential entrants. Thus the goals of efficiency and competitive industry prices dictate that inefficient entering carriers should not be encouraged by the transfer of slots.

e. Coordination. Carriers have some time frame latitudes within which operations can be shifted. Sometimes shifts of operations within these latitudes are inconsequential to the carrier while at other times they are costly. The fact that these latitudes exist indicates that "gains from exchange" can be achieved through proper coordination of carrier

services. Thus carrier A may see a big cost savings or a big profit opportunity in a shift of an operation from time x to time y. Another carrier, B, operates at y and is essentially indifferent between operating at y and operating at z. A third carrier, C, operates at z but would be willing to shift to x. By coordinating the operations of A from x to y, B from y to z, and C from z to x, the efficiency of the pattern of capacity use is increased. Any system of slot allocation should foster efficiently coordinated patterns of capacity use.

f. Overall market efficiency. Each of the dimensions above contribute independently to the market efficiency fostered by the slot allocation method at a given airport. An allocation system might perform well on some dimensions and poorly on others. However, some care must be exercised in looking at the dimensions independently. The contributions to total efficiency are not necessarily additive. That is, the poor performance on one dimension can be offset in terms of overall efficiency by poor performance on another dimension. Thus, overall efficiency must be evaluated independently.

g. System level efficiency. Not only do interdependencies exist among carrier operations at a single airport, they also exist between airports. This is because overall routes and city pairs figure heavily in forming a market. The value of a slot at airport A might vary considerably if a slot at the appropriate time is available at airport B as opposed, say, to some other airport. A system of slot allocations operative at many different airports must be capable of capturing the efficiency gains and reductions in the overall costs which can result from proper coordination among airports.

3. Responsiveness to changing circumstances. The fact that the economic circumstances of individual carriers can change needs little documentation. Alterations in the patterns of carriers relative to each other should accurately reflect any underlying changes as quickly as is possible.

4. Susceptibility to monopoly and/or collusion. Since slots are a critical resource (there are no substitutes) their allocation dictates the pattern of competition. In any market the control of slots could provide a key for the development and enforcement of anticompetitive practices. Therefore the process of allocating slots should have adequate safeguards to prevent these possibilities.

5. Long-run industry growth. Without additional capacity the industry cannot expand. Yet, capacity expansion necessarily absorbs valuable resources. One measure of the need for capacity expansion is the value created by additional slots. If such values, when integrated over time exceed the cost of expansion, then capacity expansions are in order. The calculation is complicated, however, because the operations of an airport involve the public values in ways other than as users of air transport services. Activities of a "public goods" nature (convenience, availability, etc.) or "public bads" (noise, pollution) may be present. Nevertheless the slot allocation process if properly designed can be used to facilitate the growth of the industry.

6. Process cost. Processes use resources.

B. Performance Measures in Controlled Environments

In controlled environments relevant for this study some aspects of performance can be easily measured. Benefits to participants accrue from only one source--the resale of any acquisitions to the experimenter. From any given and constant state of underlying resource availability, some processes naturally and systematically generate more income for participants than do other processes. Such processes do a relatively good job of coordinating activities and individual decisions, while others do not. As was discussed above many of the principles which govern these events are well understood and can be used to predict the outcomes with remarkable accuracy.

Within any controlled economic environment there exists a maximum which participants can collectively earn. In technical terminology it is the maximum of consumers' plus producers' surpluses and is the controlled environment analog of the income generated by an economic system. Whenever this maximum is attained, then the process is said to be operating at 100 percent efficiency. And in general the efficiency of a process is defined as,

$$\text{efficiency} = \frac{\text{actual earnings}}{\text{maximum possible earnings}} .$$

This measure obviously abstracts from interpersonal comparisons of utility and related concepts found in the technical literature. It is however, simply a direct application of measures used in field studies to evaluate the performance of naturally occurring processes.

CHAPTER III

ALTERNATIVE PROCESSES

III. ALTERNATIVE PROCESSES

There are a large number of alternative processes which would allocate the available slots at airports. Some can be summarily dismissed, while others have features which are attractive. This chapter consists of a listing of alternatives which should help organize the discussions of options.

Every process has two important features as dictated by the slot problem itself. First the process must provide a primary allocation of slots at each airport. Secondly, the process must allow for adjustments in the primary allocation to reflect changing economic circumstances, mistakes, unfulfilled expectations, etc. Thus each process must actually be composed of two processes--a primary process for allocating slots and a secondary process which operates afterwards.

Table 1 lists many of the options and indicates the chapter of this report in which some reference or evaluation is made. Frequently the reference simply indicates why the body of the report was not devoted to the study of that particular alternative.

For the most part the process names reveal the essence of the process. This is clearly the case with committees, auctions, and lotteries. A "grandfathered" primary allocation simply means that carriers are given the exclusive right to the slots they have used in the past. An entitlement system would involve a title to a "slot" which could be sold, traded, or simply not used as the preference of the owner dictates. Local authority discretion is essentially the system used now at all but the high density airports.

Among many of the processes summarily dismissed are those which would involve radically different committee procedures from those now used by the committee. Majority rule (or any less than unanimous voting rule) for example is known to have especially poor features in such situations because of a failure to protect the rights of minorities. Given that unanimity is to be used, several different sets of parliamentary rules could be imposed. The fact is, however, that the procedures that have evolved under the ATA chairmanship are as efficient, fair, and effective as could be expected from a committee process operating under unanimity. Some room does exist for using modern technology for expediting the details of the committee process but that is another matter.

A variety of secondary processes exist. There are, for example, many different ways to organize a secondary market. Brokers, specialists, computers, etc. all provide market-oriented alternatives. Those listed on Table 1 are only suggestive of the possibilities.

TABLE 1

Primary Allocation	Secondary Allocation				
	None	Bilateral Trade	Committee	Organized Market	Administered
Committees: Unanimity		Chapters IV, V, VII			
Committees: Majority Rule		Chapter III			
Auction: Sealed-Bid, One-Price		Chapters VI, VII			
Auction: Sealed-Bid, Discriminatory		Chapter VIII			
Auction: Oral, English or Dutch		Chapter VIII			
Grandfathered Rights		Chapter VIII			
Entitlements		Chapter VIII			
Lottery		Chapter VIII			
Adjustable Landing Fees		Chapter VIII			
Local Authority Discretion	N	N	N	N	N
FAA Administered Methods	N	N	N	N	N

N = not studied

CHAPTER IV

SLOT COMMITTEES: PROCEDURES AND PERFORMANCE

IV. SLOT COMMITTEES: PROCEDURES AND PERFORMANCE

A. Introduction

In 1968 the Federal Aviation Administration established quotas for scheduled airlines, commuters, and general aviation at five high-density airports in the United States, and the CAB authorized airline scheduling committees for each of the five airports. The five airports were John F. Kennedy International Airport, La Guardia Airport, and Newark Airport in the metropolitan New York area; O'Hare International Airport in Chicago; and Washington National Airport. Currently Newark is not scheduled by a scheduling committee; thus we shall focus our attention on the scheduling of the four designated high-density airports.

As will be described in more detail below the committee problems are basically to divide up among the members a fixed number of units of a valuable commodity, viz. slots. The number of units varies across the airports with the FAA quotas. The committee actions appear to be dominated by two factors: (a) the fact that any distribution of the slots must be unanimously agreed upon, and (b) expectations concerning possible outcomes should a committee fail to reach agreement. As each committee meets periodically this means that the carriers are involved in a multilateral sequential bargaining situation. Given the institutional framework to be described later in this chapter, one would expect the following: (a) entrants will be able to obtain slots from the committee but only a small number for each one; (b) growth will be difficult, especially for large carriers unless, of course, slots are in excess supply; and (c) considerable strategic behavior on the part of the committee members will occur.

B. Institutions

The nature of slot committees has been determined substantially by various aspects of the problem they were originally formed to solve and by the CAB order. When first organized the major problem was not primarily one of allocating fixed airport capacity among competing and potential carriers. Instead the major problem was one of coordinating the operations of a fixed number of carriers. Individuals who represented carriers were fully informed about the technical details of carrier scheduling operations (as opposed to having a management or marketing orientation) and had considerable authority within the firm organization to formulate and implement schedules.

Originally the typical firm's representative on a slot committee was an expert on the technical aspects of scheduling and had the authority within limits to schedule a firm's movements. It is our impression that the importance of the firm's representative has increased with time, however, and has grown closer to top management. It seems that individuals have tended to retain part of their function as a representative on a committee even while moving to a higher level of management within their own organization. As a result the committee representatives tend to be important within their own organizations. Though there is some turnover, most have years of experience with the committee and are generally friendly towards one another.

The Civil Aeronautics Board approved the establishment of airline scheduling committees for each of the airports. These committees generally meet on a semi-annual basis. Each committee

has as members the certificated scheduled airlines serving that city. Each of these airlines may send a representative to the committee meetings. Notice that this means that the membership of the four committees is not identical, though of course there are substantial overlaps. Also the CAB and FAA may, and occasionally do, send observers.

The procedures followed by the committees are to a considerable extent controlled by the rules laid down by the CAB. Each meeting is limited in scope to ensuring that the number of scheduled flights into and out of a given high-density airport is consistent with FAA quotas. Discussions of city-pair schedules, fares, profitability, and other general aspects of airline competition are specifically prohibited. These rules make it difficult if not impossible for the airlines to trade slots either across the high-density airports or over time. Of course, this may not preclude carriers from trying to make such arrangements, but the committee procedures and current conditions (to be discussed later) make enforcement of any bargains difficult.

While the procedures used by the committee were not detailed in the order which created the committees, the basic rule is unanimity. Any agreement must be endorsed by all certificated carriers at a given airport. Should a committee fail to reach an agreement, the responsibility for a decision would then rest with the FAA. The possible consequences of such a "default" are of overriding importance and will be discussed in detail.

Prior to each meeting the carriers send their requests for slots (called submissions) to the scheduling committee staff. These submissions are tabulated and distributed to all member representatives at the start of each meeting. Also, the requests and amendments to

the submissions are shown to all in attendance using an overhead projector. In addition to the submissions the committee staff provides the representatives with the results of the previous meeting and the planned movements of the carriers as reported to the FAA. Notice that this emphasizes three different points of departure for bargaining: (a) the previous meeting outcome; (b) actual schedules; and (c) submissions. Only the first two are necessarily within the FAA quotas. On occasion other historical data may be provided. For example, there appear to be some seasonal factors in the traffic at O'Hare International Airport and, at the most recent meeting of the O'Hare scheduling committee, the staff passed out data relating to the meeting of a year prior to enable those present to make year-to-year comparisons. In essence, it allows them to perform a simple sort of seasonal adjustment to the data.

The representatives generally address each other by airline name and the chairman of the committee also addresses the members by carrier name. Most remarks of the carrier representatives are directed to the chair, but this is not a part of the formal procedure. Representatives do address each other, "side conversations" take place, and no procedures govern the interaction of members during breaks or recess.

As one might expect, the submissions generally exceed the slots available. The chair begins the meeting by calling on carriers in a roll-call fashion to reduce the requests. This, together with spontaneous discussions, serves to reduce the requests as carriers strategically lower their demands. "Sliding," a procedure whereby a carrier moves an operation from one hour to another, frequently occurs. At some point an "exercise" is proposed whereby carriers attempt to allocate their operations constrained to the individual totals of some previous (typically the last) meeting.

As stated earlier the CAB requires that all agreements that the carriers enter into at the scheduling committee meetings be voluntary. Thus, no carrier can be "coerced" by the other carriers into an agreement that it finds unacceptable. In other words, all agreements require the unanimous consent of all participants. This rule directly affects the way the committee operates.

Since it is not possible to bind any carrier to a particular schedule, the meetings often entail discussions of hypothetical schedules or proposals. These hypothetical schedules may, for example, be of the form that each carrier have the same number of slots as it received at the previous meeting with certain specified exceptions. If all carriers agree to discuss such a hypothetical schedule (the "exercise") then bargaining proceeds from there. Note that the committee representatives are not bound to go along with the results of an exercise and may explicitly reserve the right not to do so. At its beginning an exercise may not represent a feasible schedule. This is because the assumptions of the exercise may exceed the FAA quotas, and even if the total number of slots required is in balance, there may be excesses in the peak hours of the day.

The main portion of an exercise is taken up with the carriers' moving-slot requests from one hour to another ("sliding") and also some reductions in the total number of slots requested. This process can be rather complicated and appears to require extensive study of planned operations of the individual carriers. Thus the representatives of an airline may after studying a computer printout announce that it would be possible for them to reduce, say, a slot at 1500 and increase

at 1600. During an exercise and during other times in a meeting, carrier representatives may offer to make certain moves if any of a variety of conditions are met. These include: that the group is "close" to a feasible schedule to vote on, that the offered move aids the search, that certain named carriers reduce their demands, or that some other move be made. Depending upon their complexity these offers are posted in the front of the room using the overhead projector. Except for tying one's moves to actions of other carriers, there appears to be little direct trading or bilateral negotiations.

The purpose of an exercise seems to be to obtain a schedule of operations that works, that is that meets the FAA quotas. If such a schedule is reached, the carriers may then vote on it. If all agree, the schedule is set (subject to checking for errors in bookkeeping, etc.). If, however, one or more carriers object, the proposed schedule must be modified or a different basis for negotiations must be established.

An example of a somewhat different type of exercise as well as the role of unanimity is given by the "3.5 rule" suggested by the representatives of Aeromech and Air Florida at the Washington National meeting in July 1979 (Appendix C, pp. 38-40). The suggestion was for all carriers to reduce their requests by 3.5 percent (of their requests as amended during the preceding bargaining process) rounded to the nearest even number. The rationale was that the requests for slots, at the time, exceeded the FAA quotas by 3.5 percent. After some discussion the carriers' representatives agreed to see what this calculation would lead to. When it was apparent that it affected only the largest carriers, complete agreement was not obtained. There was

some discussion of voting in the procedure by majority rule, but counsel explained that this could not be done without explicit CAB approval.

C. Elements of Strategy

In the absence of strict parliamentary rules governing proposals and discussions, committee decisions generally lie in the "core" of the appropriate game.¹ Since there are no side payments and no enforceable agreements involving city pairs, or past or future meetings, this means the allocation will be one which for every carrier is at least as good as the consequences of default and for which there does not exist an allocation of slots preferred by all carriers to the accepted one. This behavioral principle of decisions has the important property that the decisions are governed substantially by the perceived consequences of a committee default (a failure to obtain unanimous agreement).

Traces of this tendency can be detected in the actual pattern of slot committee decisions. These decisions and patterns will be explored below. The full implications of this basic principle will not be discussed until the next chapter. There the behavior of a variety of different committees operating in a controlled environment will be explored and the implications of this type of slot allocation process can be clearly spelled out and demonstrated.

There are currently many speculations about what will happen

1. For an introduction the interested reader should consult R. J. Aumann, "A Survey of Cooperative Games Without Side Payments," in Essays in Mathematical Economics in Honor of Oskar Morgenstern, ed. M. Shubik, (Princeton: Princeton University Press, 1967); or R. Mark Isaac and Charles R. Plott, "Cooperative Game Models of the Influence of the Closed Rule in Three Person Majority Rule Committees: Theory and Experiment," Game Theory and Political Science, ed. P. C. Ordeshook (New York: New York University Press, 1978).

if a committee defaults. In general there is much uncertainty but the alternatives seem to have been narrowed as follows.

1. First come, first serve. The view that this alternative will result from a default has been supported by alleged quotations from high-level administrators from the FAA.² This policy means that the local towers will have a great deal of discretion. Evidently at airports near full capacity experience shows that these systems have not been satisfactory since they frequently involve delays, lack of coordination, etc. If capacity is limited under conditions of growing demand, the delay cost will increase similar to a price increase, to a level which discourages additional attempts by carriers to use the airport. But unlike price processes the delay costs involved with first come, first serve are wasteful of resources. Carriers in general do not seem to favor this policy except possibly as a device to expand capacity utilization beyond the FAA quotas which are sometimes regarded as being arbitrary and too low. No doubt the first come, first serve system at the high-density airports would involve considerable uncertainties. At the July 1979 meeting in Denver the committee counsel told the representatives that this was likely as an interim solution only.

2. FAA administered and determined allocation. It is known that the FAA is working on an administrative model. The form of the model is largely unknown but carriers seem to think that any such process will involve politics if not congressional involvement. Carriers who view

2. In discussing the consequences of a default in his opening remarks the chairman of a slot committee attributed this possible policy statement to Langhorne Bond, Administrator of the FAA.

themselves as having a special advantage due to either influential congressional representation or detailed knowledge of administrative processes do not seem to view this option unfavorably.

At the July 1979 meeting on Washington National the representative of New Haven pointed out the senators and congressmen with influence in transportation matters (Appendix C, p. 7). At the same meeting the representative of Eastern which is the largest carrier at Washington National and one of three largest on the Boston-Washington route stated they would take their chances on politics. He stated that Senator Edward M. Kennedy generally gets what he wants (Appendix C, p. 11).

3. Grandfathered slots. This option would simply maintain the existing allocation of slots. It seems to be a viable option in case of a political stalemate over the other options. Administrative sources do not seem to be advancing it but industry sources are.³ It also seems to be a likely option in case of a single default and the absence of a "standing" replacement for the committee.

4. Lotteries. Many industry representatives believe this is the option most favored by the CAB. For large carriers it provides virtually no chance for them to retain the slots they now control unless the lottery were weighted in their favor.

5. Markets. Carriers view markets as increasing their costs and reducing profits. Few if any seem to favor this option over committees. Some feel that the politics would be such that carriers would pay for slots and then be told how to use them. Many carriers are aware that this study

3. Melvin A. Brenner, "De-Regulation Creates Airport Crunch," Airline Executive (June 1979): 22-23.

has been undertaken.⁴ They also participated in a forum where market alternatives were actively discussed.⁵ Thus carriers must consider the establishment of a market to be one of the possible consequences of a committee default.

With the exception of the "grandfather" alternative all alternatives will impose some cost (in terms of payments for slots or loss of slots) to carriers with a large number of slots. Thus, other things equal, one would expect such carriers at this time to be relatively "soft" with respect to concessions.

Currently there are new entrants certificated by the CAB to provide service at O'Hare International Airport and Washington National Airport. At O'Hare the "crunch" caused by the entrants has not really been felt yet as they are operating using slots allocated to commuter operations. This temporary authority granted by the FAA is due to expire shortly and at that time there may arise difficult problems as demand for slots at O'Hare appears to be at or above the supply available.

It should be noted that there seems to be nearly complete agreement that the entrants will receive some slots at O'Hare and Washington National. There is substantial disagreement as to the number of slots they should have but at least at the Denver meetings only one carrier representative made any remark that could reasonably be interpreted as favoring exclusion. Thus the scheduling committees do not appear to preclude entry. In fact it is probably easier for an

entrant to obtain a few slots than for a large carrier, e.g. Eastern at Washington National to increase operations by the same number of slots.

The reason entrants can obtain slots is that there appears to be a general belief that in the event of default each entrant will obtain some slots from the FAA. The unanimity rule means that entrants can veto any proposal which does not provide them with slots. Since they clearly expect that any administrative process will provide them with some slots, they can and do threaten to force the committee into default if their demands are not satisfied. For instance, at the July 23, 1979 meeting of the Washington National committee the representative of New Haven Airways stated that if the committee defaulted, those asking for a small number of slots had nothing to lose, but that it was the major lines that were vulnerable. He stated that Eastern would lose slots in such a process and (probably facetiously) offered to take bets on that proposition (Appendix C, p. 11).

A carrier that is large at a given airport and thus possibly at risk in the event of default may wish to make deals or concessions concerning operations at other airports. The CAB order restricting discussion to scheduling a given airport at a single time period to conform to the FAA quotas clearly hinders this sort of activity, but does not completely eliminate it.

For example, at the recent O'Hare meeting in Denver (July 24, 1979) the representative of Eastern Airlines was quite explicit in stating that he hoped that the concessions he made at that meeting would be remembered later when the Washington National committee reconvened on August 7, 1979 (see pp. 68 of Appendix C). Similarly

4. The study was referenced in statements by the counsel at the 1979 Denver meetings (Appendix C, p. 42).

5. "New Engineering and Development Initiatives -- Policy and Technological Choices," vol. 1, U. S. Department of Transportation, March 1, 1979.

TWA's representative asked for help at Washington National when making concessions at O'Hare (Appendix C, p. 70, 74) and later when the DCA committee did not respond positively to TWA requests, TWA explicitly opened the possibility that TWA would reduce its activities at ORD if it resulted in more slots at DCA (Appendix D, p. 42, 43, 45, 48, 54-55).

In addition to attempted bargains involving more than one airport there are attempts to bargain over time. At the start of the July 1979 meeting there were several references to a seasonal factor in Eastern's traffic at O'Hare. In fact the committee staff had handed out data concerning the previous meeting and the meeting one year prior to facilitate such comparisons. Near the end of the same O'Hare meeting the representative of Trans World Airlines, when reducing his requests, clearly stated that in the future most of the scheduled airlines would have to make reductions in their operations at O'Hare to accommodate entrants (see pp. 77, Appendix C). He stated that TWA would "take its lumps" then but for the other carriers to remember at subsequent meetings that TWA had already taken its reductions. Thus though the scope of each meeting is limited to scheduling a given airport for a specific period of time, there are some apparent attempts to tie meetings together.

Prior to a meeting each carrier submits a request detailing for each scheduled hour of each day the number of operations the carrier wishes to perform. There are considerable strategic considerations involved with submitting such a request. For example, a carrier can request more slots than it might reasonably expect to get and then "concede" slots to others during the course of the meeting. Note that the submissions generally exceed the number of available slots at least

for the peak periods of the day. As the capacity constraints become tight relative to demand, the strategic behavior apparently increases. Note that at O'Hare International Airport, not only do the total requests exceed the FAA quotas, but over the years the majority of the slot requests by individual airlines have been reduced in the scheduling committee. From Tables 2 through 9 one can see that there are generally more requests than available slots but the effect is greater at O'Hare and Washington National. The requests for the recent meetings at Washington National when the entrants first appeared on the scene is especially interesting in this regard. From Tables 4 and 5 it is apparent that the increase in the requests at that meeting to a considerable extent is due to the existing carriers who were apparently anticipating a difficult bargaining session. This increase in requests and by implication, the possibility of strategic behavior, was the subject of extensive discussion at the meeting. This strategy of asking for more than one expects from the meeting is typical of committees' operating under unanimity and it can clearly be seen operating in the controlled-environment committees which are discussed in the following chapter.

A good example of explicit strategic behavior was given at the July 23, 1979 morning session of the Washington National Scheduling Committee. At that meeting, as noted, several entrants were asking for slots and several established carriers were asking for increased allocations as well. In particular, TWA was asking for an additional ten slots. When asked by the representative of National if he expected to get the ten extra slots, TWA's representative said no, but TWA would

TABLE 2
LA GUARDIA AIRPORT: SUBMISSIONS (S) AND POSTMEETING RESOLUTIONS (R)
SUMMER, 0600-2359

Airlines	1972		1973		1974		1975		1976		1977 ^a		1978		1979	
	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R
American	216	216	222	222	165	165	196	192	186	188	190	182	190	190	188	190
Allegheny ^a	86	84	70	66	42	42	54	50	62	62	62	62	74	72	73	64
Braniff	10	10	14	10	12	12	12	12	14	14	14	14	14	14	28	24
Delta ^b	50	44	54	54	56	56	45	46	52	52	58	54	57	55	58	56
Eastern	162	152	156	158	148	148	148	148	154	157	159	159	158	158	158	160
National	20	19	21	21	21	21	21	21	29	19	20	20	23	22	25	23
North Central	8	8	10	10	10	10	8	8	8	8	8	8	8	8	12	8
Air New England																
Northwest	16	12	14	14	14	14	14	14	14	14	16	16	16	16	16	16
Ozark	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4
Piedmont	16	16	16	16	16	14	16	16	18	18	20	18	22	22	24	22
Southern	4	4	6	4	6	6	6	6	6	6	4	4	8	8	8	8
Trans World	122	103	100	96	96	96	96	92	96	94	94	90	90	90	92	90
United	75	72	74	74	52	52	54	54	46	46	44	44	52	48	48	48
Total	791	746	763	751	642	640	674	663	727	718	717	701	754	735	774	753

a. Includes Mohawk.

b. Includes Northeast.

Source: This table is based on data supplied by the Airline Scheduling Committees.

TABLE 3
LA GUARDIA AIRPORT: SUBMISSIONS (S) AND POST MEETING RESOLUTIONS (R)
WINTER, 0600-2359

Airlines	1972-1973		1973-1974		1974-1975		1975-1976		1976-1977		1977-1978		1978-1979		1979-1980	
	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R
Air Canada	220	220	220	224	190	190	186	186	188	188	188	188	184	184	172	10
American	100	100	66	66	59	59	50	50	62	62	79	79	68	68	50	
Allegheny	16	10	12	10	12	12	12	12	14	14	14	14	24	24	32	
Braniff	50	50	51	51	49	47	45	45	56	53	53	53	51	48	49	
Delta	156	154	163	158	151	147	152	152	156	156	156	156	158	158	160	
Eastern ^a	21	21	21	21	21	21	21	21	80	20	26	23	26	24	25	
National	8	8	10	10	8	7	8	8	8	8	8	8	8	8		
North Central																
Air New England	14	14	14	14	14	14	16	16	14	14	16	16	16	16	16	
Northwest	6	6	6	6	4	2	4	4	4	4	4	4	4	4	4	
Ozark	16	16	16	16	16	13	16	16	18	18	22	22	22	22	22	
Piedmont ^b																
Republic	4	4	8	8	6	6	6	6	6	6	8	8	8	8	16	
Southern	97	95	96	96	92	77	92	92	94	94	90	90	92	92	90	
Trans World	76	72	70	58	46	46	44	44	48	46	46	46	48	48	48	
United																
Total	784	770	753	738	668	641	676	676	716	695	722	719	731	726	724	

a. Does not include shuttle extra sections.

b. North Central and Southern.

Source: This table is based on data supplied by the Airline Scheduling Committees.

TABLE 4
WASHINGTON NATIONAL AIRPORT: SUBMISSIONS (S) AND POSTMEETING RESOLUTIONS (R)
SUMMER, 0600-2359

Airline	1972		1973		1974		1975		1976		1977		1978		1979	
	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R
American	78	80	80	80	62	62	72	72	72	74	76	74	74	74	62	60
Allegheny ^a	100	100	92	92	96	96	88	88	88	88	86	80	82	82	86	80
Braniff	14	10	16	12	14	14	16	14	24	20	22	20	22	20	24	28
Delta ^b	34	32	34	32	32	34	32	32	32	32	34	34	34	34	34	34
Eastern	144	147	140	140	140	140	134	136	144	142	142	142	142	142	142	142
National	54	54	54	54	54	54	54	54	54	54	54	54	54	48	48	34
Northwest	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
Piedmont	60	60	66	66	70	70	68	68	66	68	68	68	68	68	70	72
Trans World	28	28	31	28	32	36	36	36	40	40	42	40	40	40	42	44
United	86	82	84	84	76	74	74	74	68	64	66	66	68	68	72	70
Air Florida															6	6
Altair															4	4
Empire															4	4
Federal Exp.															4	0
New Haven															4	4
North Central															4	4
Western															4	4
Texas Int'l															18	
TOTAL	640	635	639	630	618	622	616	616	630	624	632	620	626	618	654	634

a. Includes Mohawk.

b. Includes Northeast.

Source: This table is based on data supplied by the Airline Scheduling Committees.

TABLE 5
WASHINGTON NATIONAL AIRPORT: SUBMISSIONS (S) AND POSTMEETING RESOLUTIONS (R)
WINTER, 0600-2359

Airlines	1972-3		1973-4		1974-5		1975-6		1976-7		1977-8		1978-9		1979-80	
	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R
Aeromex															62	
Air Florida	94	94	96	96	88	88	88	88	88	88	82	81	84	82	84	
Allegheny															8	
Altair	78	78	80	80	76	72	74	74	74	74	74	74	68	74	62	
American	16	12	12	12	14	14	16	16	20	20	22	20	22	22	34	
Braniff															6	
Colgan	34	32	34	32	34	32	34	34	38	32	34	34	36	34	34	
Delta ^a	148	144	142	140	140	140	140	140	142	142	142	142	142	142	142	
Eastern															4	
Empire	54	54	54	54	54	54	54	54	54	54	54	54	48	48	44	
National															8	
New Haven																
Northwest	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	
Piedmont	60	60	70	66	70	70	66	68	68	68	68	68	68	68	70	
Republic															4	
Trans World	28	28	28	28	36	36	38	40	40	40	40	40	40	40	54	
United	86	84	86	84	74	74	66	66	66	66	68	68	68	68	70	
Western															4	
Total	640	628	644	634	628	622	618	622	632	626	626	623	618	620	692	

a. Includes Northeast.

Source: This table is based on data supplied by the Airline Scheduling Committees.

TABLE 6
JOHN F. KENNEDY INTERNATIONAL AIRPORT: SUBMISSIONS (S) AND POSTRETTING RESOLUTIONS (R)
SUMMER, 1500-1959

Airlines	1970		1971		1972		1973		1974		1975		1976		1977		1978		1979	
	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R
American	28	26	30	29	33	32	32	28	20		26	26	29	29	31	31	32	32	29	29
Allegheny ^a	18	15	13	13	12	12	16	16	22		16	13	22	22	20	20	26	26	20	21
Braniff	12	11	7	7	10	10	13	13	13		14	14	14	14	14	14	17	17	22	22
Delta ^b	27	26	24	25	29	29	26	26	26		20	20	18	18	18	18	19	19	19	19
Eastern	37	37	41	41	33	33	33	33	31		39	39	41	41	42	42	47	47	50	50
Flying Tiger	0	0	1	1	1	1	2	1	1		3	3	2	2	1	1	3	4	5	5
National	20	21	21	19	22	22	22	22	21		19	19	26	26	15	15	18	18	20	19
Northwest	15	15	16	16	18	15	10	10	8		8	8	7	7	6	6	11	11	10	8
Pan American	28	26	28	30	36	34	44	40	28		35	35	19	19	23	23	22	20	21	18
Seaboard	3	3	3	3	1	1	3	3	4		4	4	4	4	1	1	1	1	3	3
Trans World	56	53	53	57	57	57	54	50		50	50	51	51	55	55	58	57	60	60	60
United	24	23	28	27	24	24	22	22	22		25	25	20	20	20	20	19	19	20	20
Foreign carriers	97	94	89	88	87	86	99	97	79		73	72	72	73	64	66	91	71	68	68
Other U.S. ^c	10	10	0	0	0	0	0	0	1		0	0	0	0	0	0	0	0	0	6
Total	375	360	354	356	363	356	379	365	326		332	328	325	326	310	312	364	342	347	348

a. Includes Mohawk.

b. Includes Northeast.

c. Includes Airlift, Trans Caribbean, Capital, Trans International, World.

Source: This table is based on data supplied by the Airline Scheduling Committee.

TABLE 7
JOHN F. KENNEDY INTERNATIONAL AIRPORT: SUBMISSIONS (S) AND POSTRETTING RESOLUTIONS (R)
WINTER, 1500-1959

Airlines	1970-1971		1971-1972		1972-1973		1973-1974		1974-1975		1975-1976		1976-1977		1977-1978		1978-1979	
	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R
American	27	27	39		29	29	28		24	24	26	26	27	27	28	28	28	28
Allegheny ^a	18	18	12		6	6	22		23	23	18	18	26	26	25	25	22	22
Braniff	7	7	10		11	11	14		14	14	15	15	14	14	15	15	17	17
Delta ^b	24	24	28		28	28	26		20	20	20	20	18	18	19	20	19	19
Eastern	36	36	35		32	32	33		34	34	40	40	40	40	42	44	50	50
Flying Tiger	0	0	0		2	2	1		2	2	3	3	2	2	3	3	4	5
National	23	23	22		22	22	29		19	19	19	19	26	26	17	17	19	19
Northwest	17	17	15		12	12	10		8	8	8	8	6	6	6	6	8	8
Pan American	29	29	30		32	32	36		28	28	19	19	13	14	24	24	19	19
Seaboard	2	2	1		3	3	5		2	2	1	1	2	2	2	2	1	1
Trans World	45	45	47		49	49	46		50	50	50	50	50	50	52	52	52	52
United	29	32	24		18	18	21		22	22	20	20	18	18	19	19	19	19
Foreign carriers	67	65	65		68	69	75		70	69	67	63	63	64	60	62	66	67
Other U.S.	6	7	1		0	0	0		0	0	0	0	0	0	0	0	0	0
Total	330	332	327		312	313	346		316	315	306	302	305	367	312	317	324	326

a. Includes Mohawk.

b. Includes Northeast.

Source: This table is based on data supplied by the Airline Scheduling Committee.

TABLE 8
O'HARE INTERNATIONAL AIRPORT: SUBMISSIONS (S) AND POSTMEETING RESOLUTIONS (R)
SUMMER, 1500-1959

Airlines	1970		1971		1972		1973		1974		1975		1976		1977		1978		1979	
	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R
American	97	94	85	81	95	86	102	88	99	91	94	91	99	93	95	93	95	93	97	93
Allegheny ^a	16	16	15	15	14	13	13	13	13	13	8	12	12	12	15	14	14	14	15	14
Branniff	18	18	14	14	16	15	19	16	19	16	20	17	29	20	25	22	24	22	26	23
Continental	12	12	15	14	13	13	13	12	10	10	14	11	16	13	13	13	13	13	13	13
Delta ^b	47	43	44	43	52	48	52	50	52	51	51	51	53	51	53	51	53	51	53	51
Eastern	31	29	27	27	29	25	26	23	25	21	22	21	22	21	21	19	19	19	19	17
Flying Tiger	2	2	6	6	3	1	3	2	4	3	5	3	4	1	1	1	6	1	3	1
North Central	45	45	46	45	50	48	48	48	46	44	47	46	48	46	49	46	47	46	47	47
Northwest	50	50	48	47	49	47	47	47	47	47	47	47	47	47	45	45	47	45	45	45
Ozark	34	27	32	33	31	33	32	31	30	31	30	31	30	31	30	31	31	31	31	30
Pan American	4	4	5	5	3	2	4	2	2	2	6	4	2	1	1	1	4	1	2	1
Piedmont	0	0	0	0	0	0	0	0	4	3	6	4	6	4	5	4	5	4	5	4
Airlift	1	1	0	0	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0
Seaboard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
Southern	0	0	0	0	0	0	0	0	4	4	1	2	3	1	3	3	3	3	3	3
Other U.S.													2	2	2	2	2	2	2	9
Trans World	82	78	85	83	93	87	94	84	88	87	89	86	89	86	88	86	86	86	88	85
United	139	132	144	128	164	134	140	132	135	130	131	127	128	125	129	126	129	126	128	126
Foreign	23	22	21	21	22	22	25	24	25	24	25	24	24	24	26	22	19	18	24	19
Total	601	573	586	561	638	573	621	575	605	572	610	579	611	576	604	578	597	575	608	576

a. Includes Mohawk.

b. Includes Northeast.

Source: This table is based on data supplied by the Airline Scheduling Committees.

TABLE 9
O'HARE INTERNATIONAL AIRPORT: SUBMISSIONS (S) AND POSTMEETING RESOLUTIONS (R)
WINTER, 1500-1959

Airlines	1970-1971		1971-1972		1972-1973		1973-1974		1974-1975		1975-1976		1976-1977		1977-1978		1978-1979		1979-1980	
	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R
Air Wisconsin	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	
Airlift	16	15	14	12	14	13	8	12	12	12	12	12	14	14	14	16	14	15	15	
Allegheny ^a	84	87	91	89	94	89	99	91	98	91	91	91	99	93	95	93	96	93	97	
American	16	16	15	15	16	15	19	17	21	19	25	21	23	22	23	22	28	22	26	
Branniff	13	13	18	15	13	12	12	12	10	8	16	12	15	13	13	13	15	13	13	
Continental	50	47	51	49	52	50	52	51	51	51	53	51	51	53	53	51	53	51	53	
Delta ^b	29	29	36	31	29	29	25	25	24	24	29	24	26	23	23	22	22	22	22	
Eastern	2	2	1	1	3	3	7	6	6	4	8	4	3	1	4	2	4	2	6	
Flying Tiger																			5	
Mississippi Valley	44	44	44	44	46	46	45	45	45	45	45	45	45	44	45	44	45	45		
North Central	54	54	47	47	47	47	47	47	49	47	47	47	45	45	45	45	45	45	45	
Northwest	26	26	31	29	32	32	32	30	29	31	30	31	30	31	30	31	31	30	30	
Ozark	4	4	6	6	3	2	3	2	4	2	3	2	0	0	1	1	3	1	3	
Pan American	0	0	0	0	0	0	0	0	5	4	4	4	5	4	4	4	5	4	6	
Piedmont																			48	
Republic	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	1	
Seaboard	0	0	0	0	0	0	0	0	4	2	3	1	4	3	3	3	3	3	5	
Southern																			2	
Other U.S.																			2	
Trans World	80	83	90	87	85	85	88	84	88	85	86	84	85	84	86	84	86	85	85	
United	136	132	133	130	144	133	133	133	133	129	130	127	128	125	127	126	129	126	130	
Foreign	16	17	16	16	16	16	20	21	23	22	21	23	21	21	20	19	15	16	20	
Total	572	570	595	572	594	572	595	574	603	574	604	578	599	576	589	575	598	575	636	

a. Includes Mohawk.

b. Includes Northeast.

Source: This table is based on data supplied by the Airline Scheduling Committees.

not reduce its request until the other carriers whose requests were up also reduced (see Appendix C, p. 8). Note also that throughout the three sessions devoted to Washington National, small carriers tended to talk in terms of percentages, e.g. New Haven Airways' drop of "twenty-five percent"--two slots--(Appendix C, p. 4) while the larger carriers' representatives generally spoke in terms of the number of slots that needed to be dropped. Recall that it was Air Florida and Aeromech, small carriers at Washington National that introduced the 3.5 percent exercise discussed earlier.

From Tables 2 through 9 one can see that on average carrier submissions exceed the FAA quotas at least at peak periods of the day. These quotas have been constant since 1968, but submissions still exceed them and are bargained away during committee meetings. The demand seems to be especially tight at O'Hare where nearly two-thirds of the requests for slots are reduced prior to resolution.

During the bargaining certain airlines may be singled out and become the subject of pressure to alter their requests. Particularly visible are carriers' attempting to increase their share of slots (e.g. the TWA example cited earlier or Appendix B, p. 22). Small or entering carriers can also be visible if their requests seem "large" or are not equal to the requests of other small carriers (Appendix B, p. 17; Appendix D, pp. 15-18).

Carriers that have not used the slots they were allocated are also the subject of pointed discussions. At the July 1979 meeting of the Washington National scheduling Committee, considerable emphasis was put upon the number of slots an airline obtained previously as compared with the number actually used. There was a substantial

discussion of carriers' "releasing" slots; that is, carriers that obtained slots at the previous meeting and did not use them. Braniff Airlines in particular was singled out for having increased its allocation by four slots (to 28) and then only having used 24 of them. Other carriers (Eastern, National, and United Airlines) also released several slots but did not appear to be the target of as much criticism as Braniff. Generally the excuse offered was equipment shortages due to the problem with DC-10's. Note, however, that this phenomenon of releasing slots did not occur at O'Hare International Airport. In fact, of the 576 slots allocated for July 1979 only one was released (by Mexicana) compared with 23 of 634 at Washington National. Also at Washington National the number of slots reserved (as reported to the FAA) for June 1978 was below the postmeeting resolution by a total of 30 slots and the figures for the winter of 1978-1979 were comparable (January 1979 was 26 slots below the postmeeting resolution for February 1979). At the meeting in July 1979 the chairman of the meeting exhorted the committee member representatives to ask only for the slots that they needed and would use. Regarding the practice of obtaining slots through the committee for whatever purpose a carrier might have and then later releasing them, the chairman told the committee that those days were over -- or should be over. (See also Appendix B, p. 10, Appendix D, p. 20, 24.)

D. Actual Outcomes of the Committee Process

Tables 2 through 10 and Figures 2 through 19 give a summary of the actions of the scheduling committees. Figures 2 through 5

TABLE 10
REQUESTED SLOTS MINUS FAA QUOTAS BY YEAR AND SEASON
1500-1959

Washington National Airport							La Guardia Airport						
Date	1500	1600	1700	1800	1900	Total	Date	1500	1600	1700	1800	1900	Total
Summer							Summer						
1970	-3	1	2	1	3	4	1970	-8	-4	4	6	-2	-6
1971	-1	-1	2	2	0	2	1971	0	7	2	1	9	19
1972	0	-1	3	2	4	8	1972	0	8	14	3	7	32
1973	0	2	2	-1	5	8	1973	-6	7	-1	4	0	4
1974	-1	1	1	-1	1	1	1974	-9	-2	1	-1	1	-10
1975	1	3	0	2	4	10	1975	-2	6	5	3	4	16
1976	0	5	4	-2	3	10	1976	-9	1	7	6	-1	4
1977	0	0	4	3	3	10	1977	1	3	0	3	5	12
1978	0	3	1	-1	1	4	1978	0	3	5	3	4	15
1979	6	3	6	4	6	25	1979	3	1	3	7	1	15
Winter							Winter						
1970-1971	1	0	3	5	-1	8	1970-1971	-3	2	2	5	6	12
1972-1973	2	2	2	2	4	12	1972-1973	7	6	7	7	10	37
1973-1974	2	1	1	0	1	5	1973-1974	6	2	5	6	5	24
1974-1975	2	2	2	1	4	11	1974-1975	-1	1	3	0	1	4
1975-1976	0	6	2	1	4	13	1975-1976	-9	3	1	-4	6	-3
1976-1977	-1	1	4	1	3	8	1976-1977	-1	-2	2	1	4	4
1977-1978	0	5	2	-1	5	11	1977-1978	-7	1	6	7	3	10
1978-1979	1	1	3	1	2	8	1978-1979	-2	0	4	4	3	9
1979-1980	5	11	12	8	11	47	1979-1980	-4	2	6	6	8	18

Slots from post meeting resolutions minus submissions
O'Hare International airport
January 71-79; July 70-79

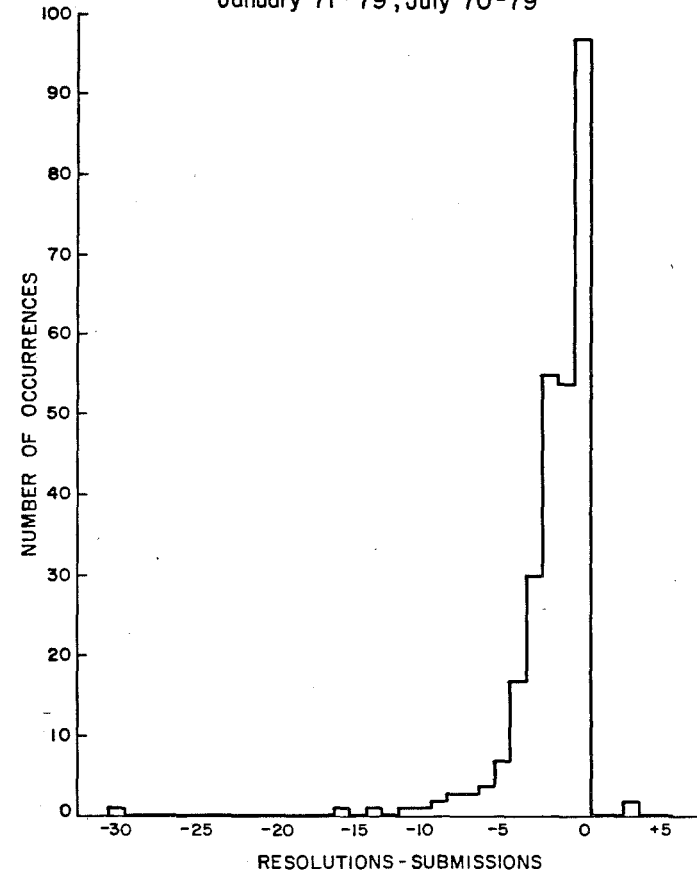


Figure 2

Slots from post meeting resolutions minus submissions
Washington National airport
January 73-79; July 72-79

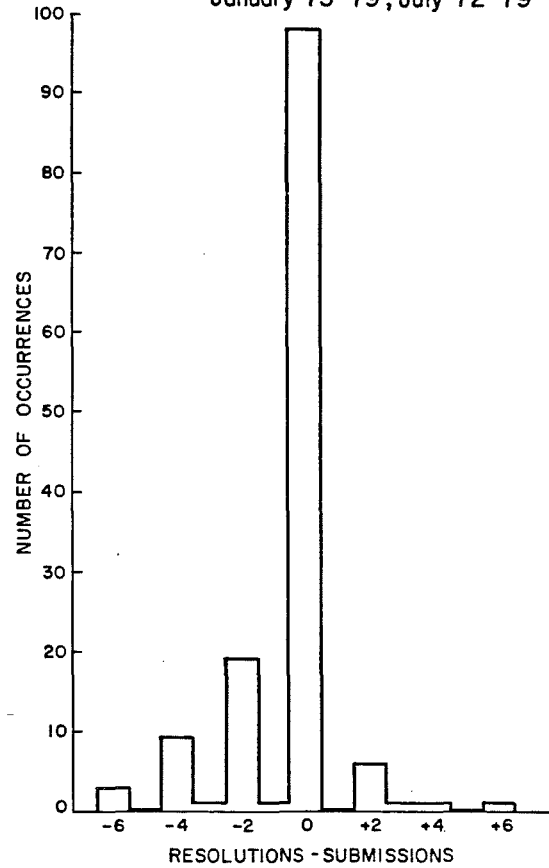


Figure 3

Slots from post meeting resolutions minus submissions
La Guardia airport
January 73-79; July 72-79

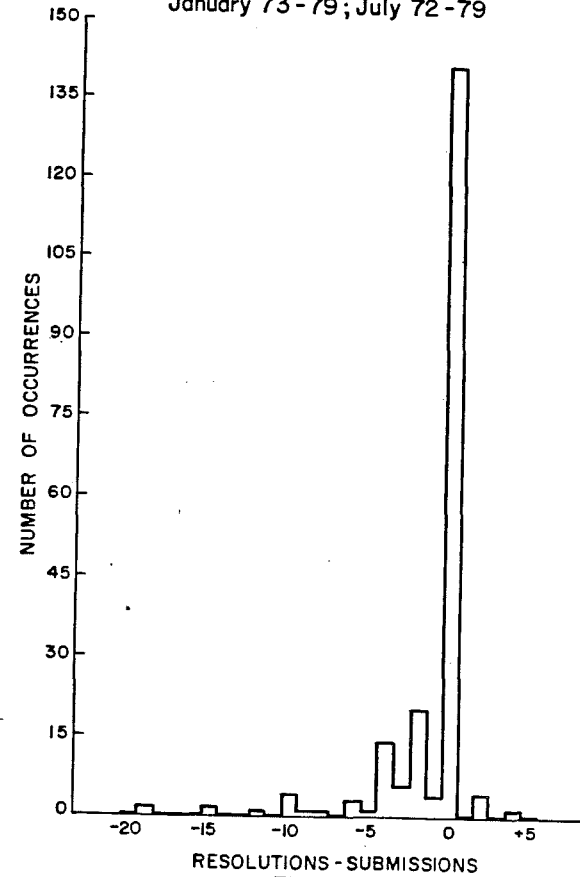
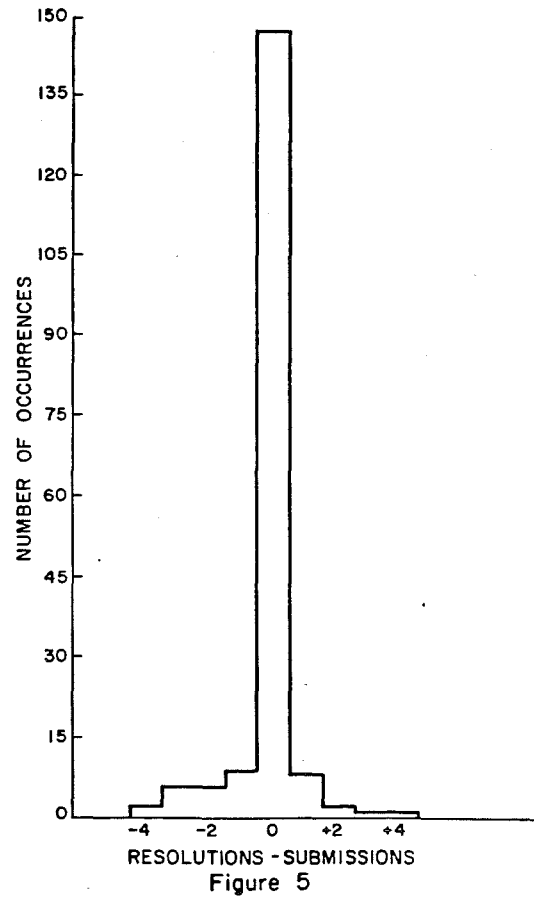


Figure 4

Slots from post meeting resolutions minus submissions
John F. Kennedy International airport
January 71, 73, 75-79; July 70-73, 75-79



Committee decisions at O'Hare airport
January weekdays, 1500-1959 hrs

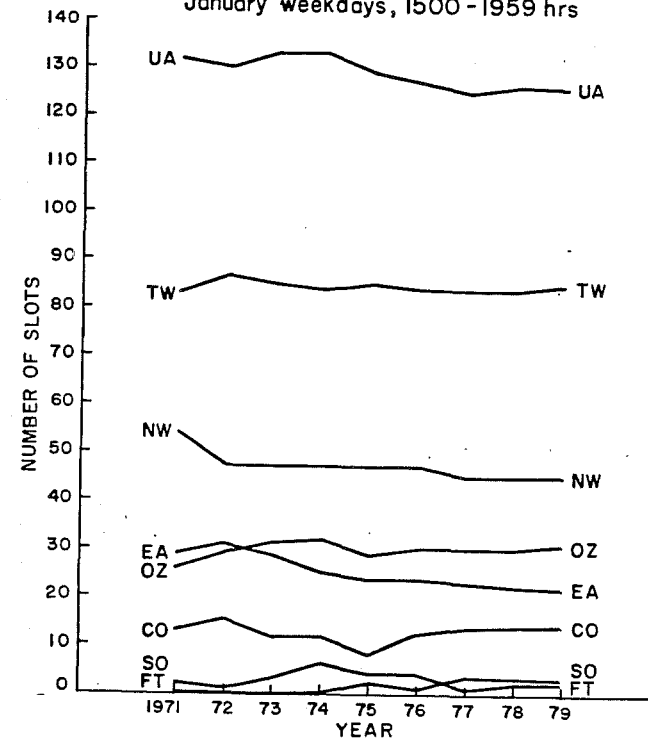


Figure 6

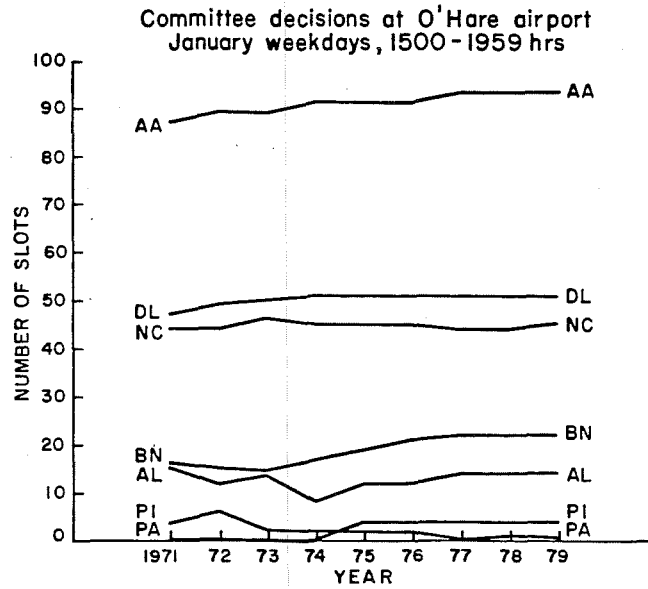


Figure 7

Committee decisions at O'Hare airport
July weekdays, 1500-1959 hrs

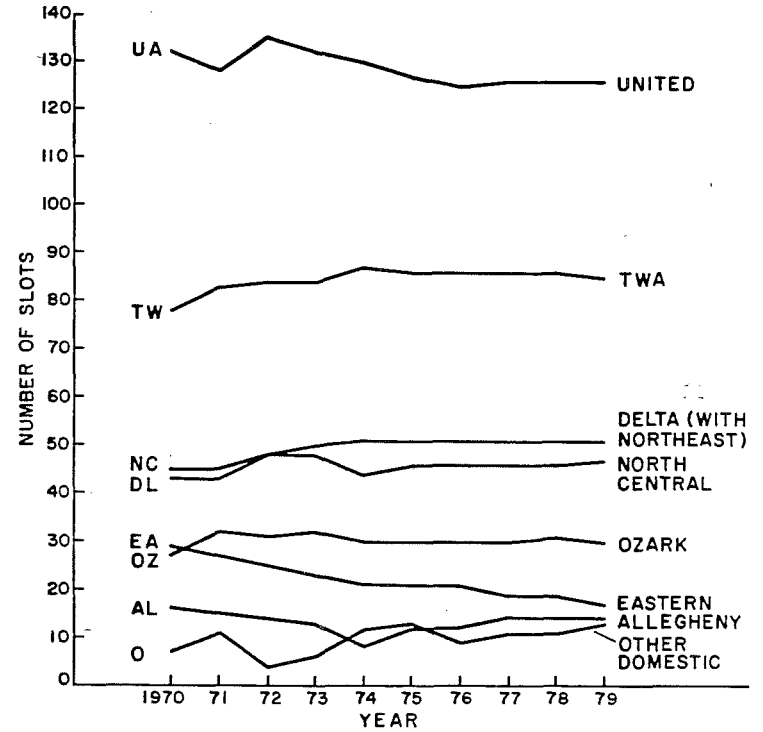


Figure 8

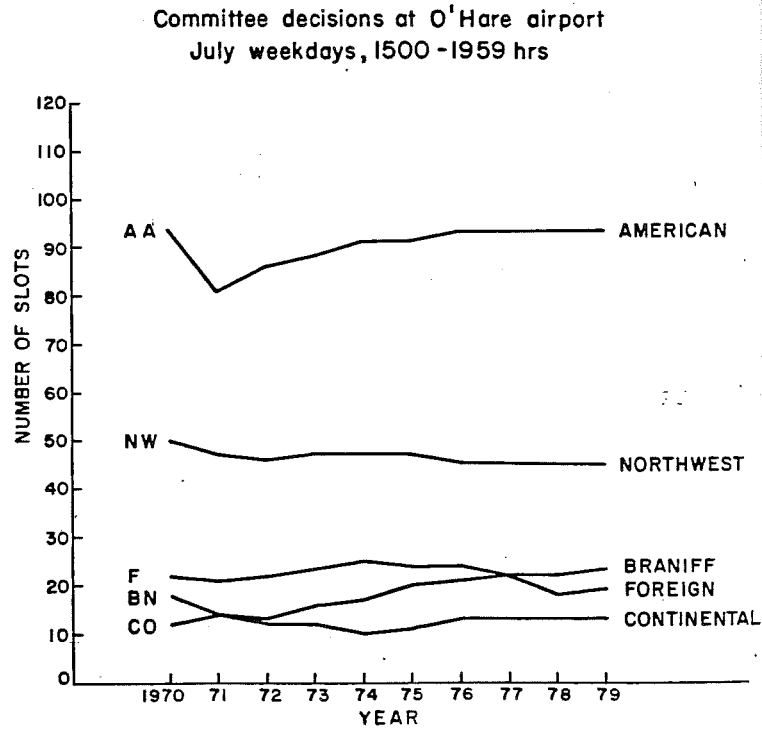


Figure 9

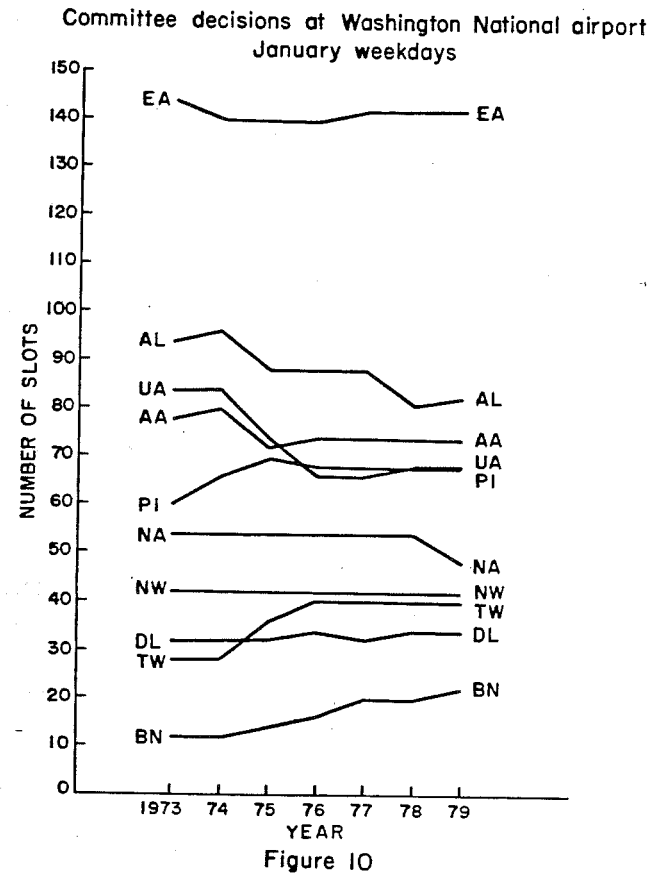


Figure 10

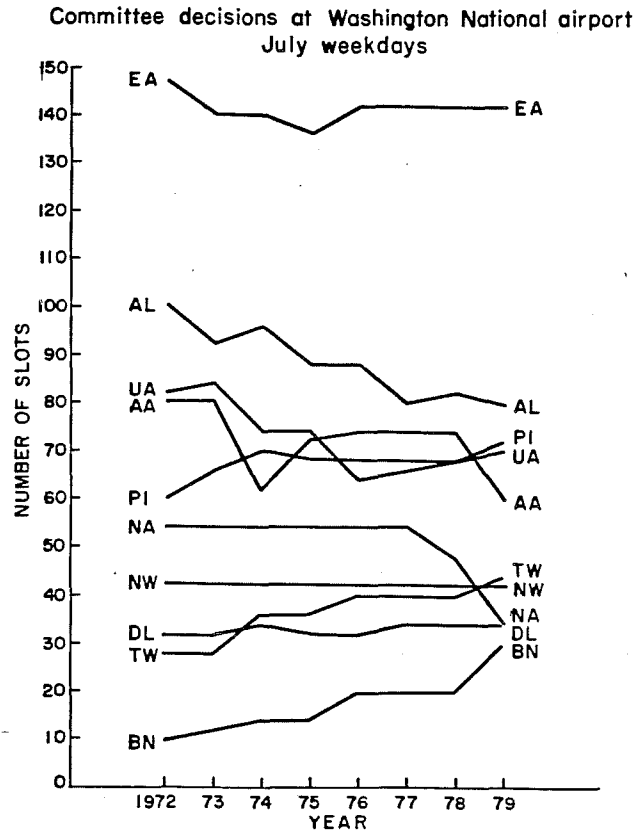


Figure 11

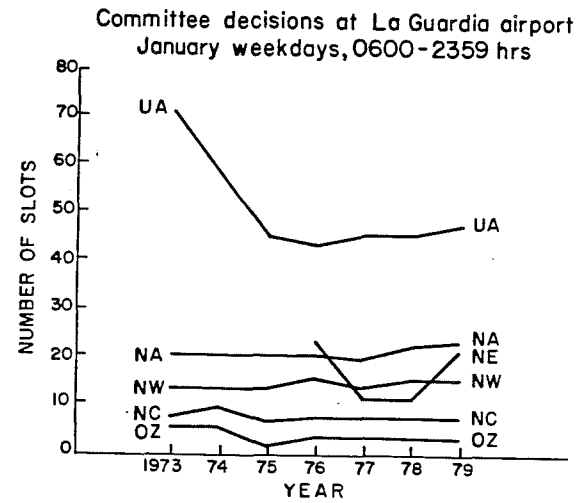


Figure 12

Committee decisions at La Guardia airport
January weekdays, 0600-2359 hrs

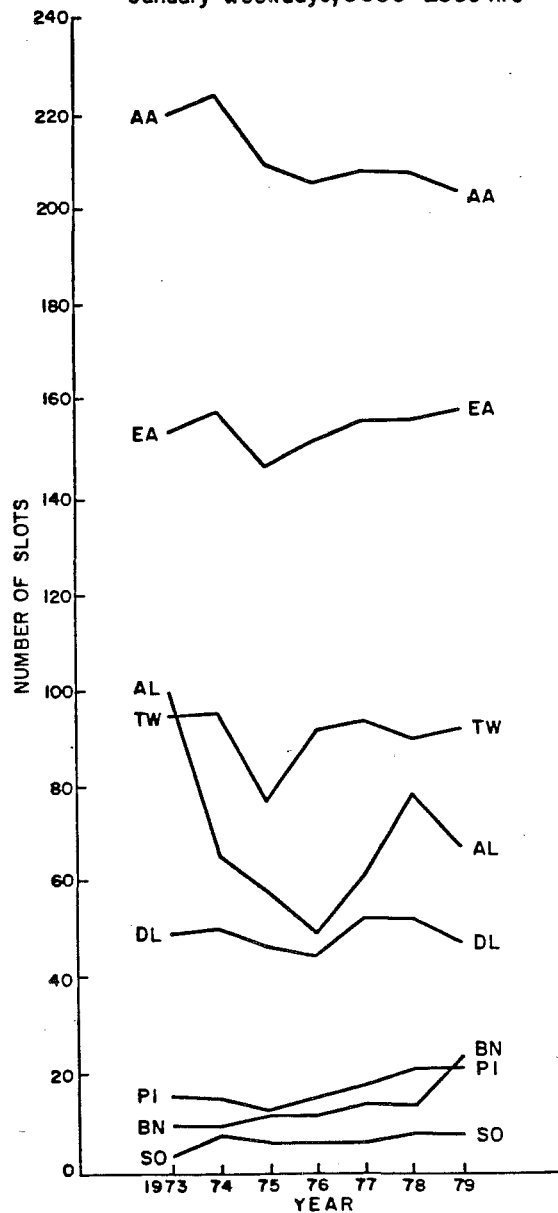


Figure 13

IV-36

IV-37

Committee decisions at La Guardia airport
July weekdays, 0600-2359 hrs

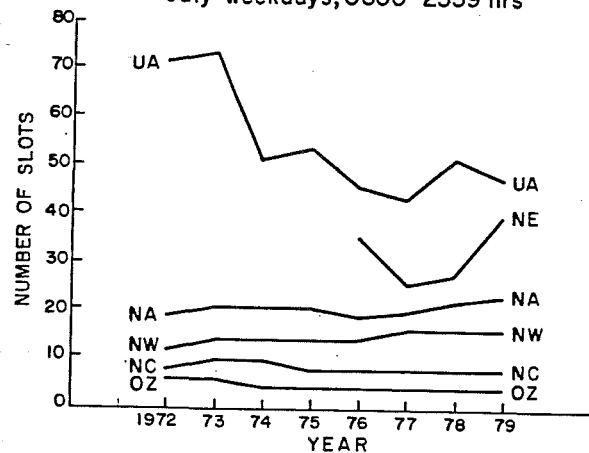


Figure 14

Committee decisions at La Guardia airport
July weekdays, 0600-2359 hrs

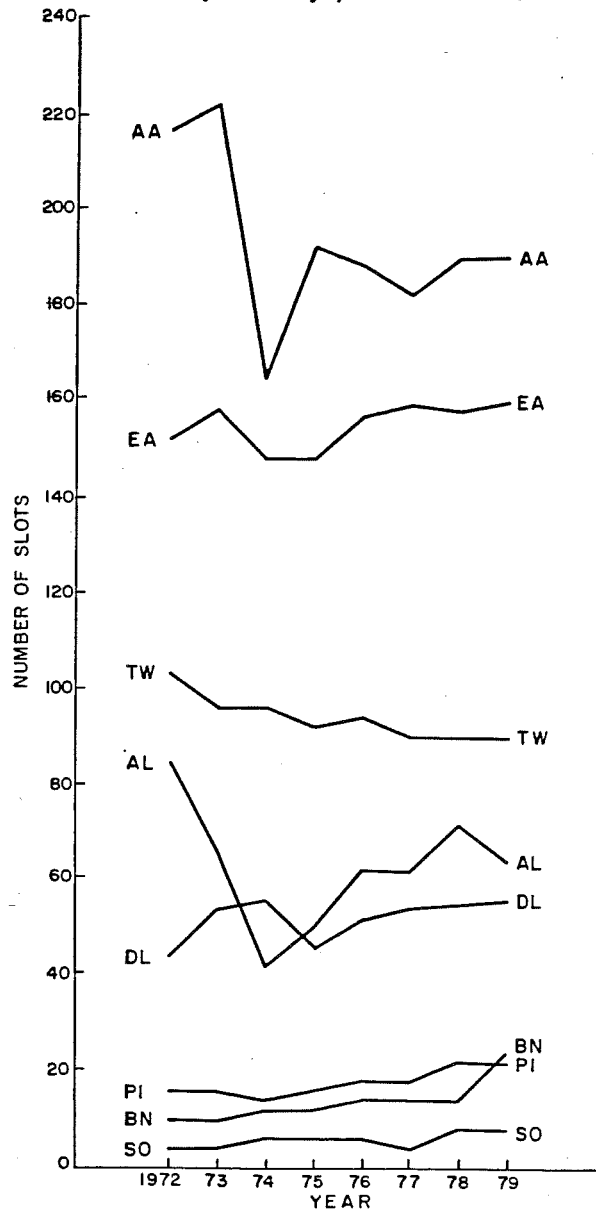


Figure 15

IV-38

IV-39

Committee decisions at
John F. Kennedy International airport
January weekdays, 1500-1959 hrs

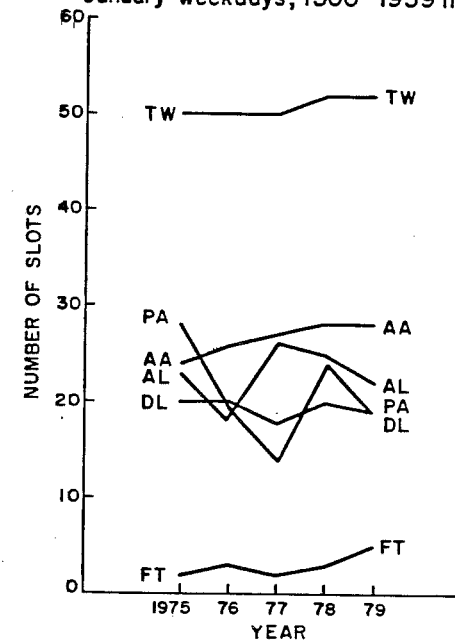
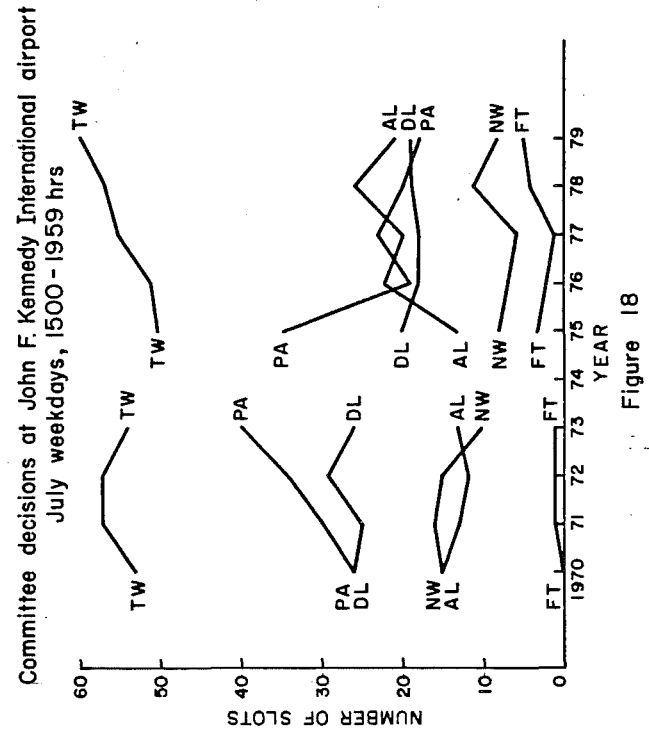
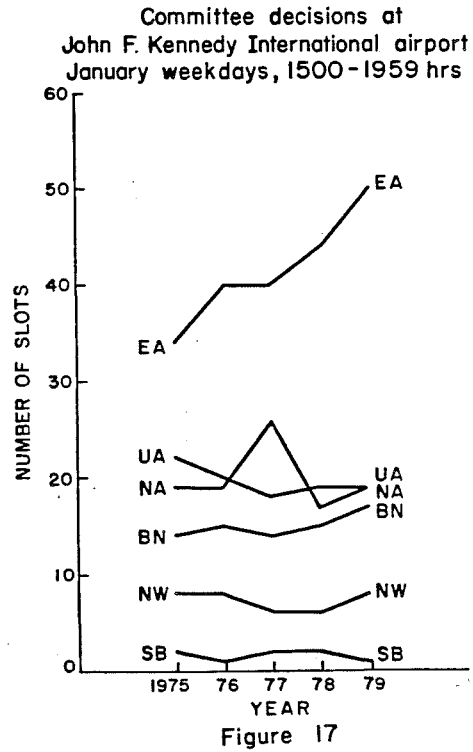


Figure 16



Committee decisions at John F. Kennedy International airport
July weekdays, 1500 - 1959 hrs

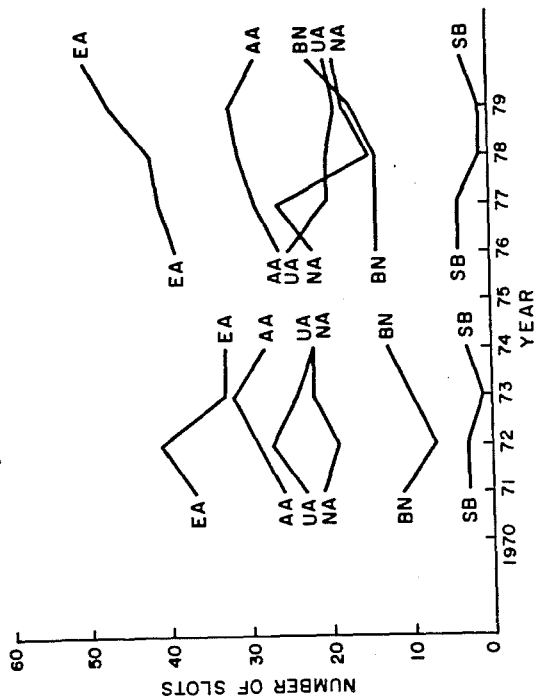


Figure 19

show the results of comparing the submissions with the number of slots received by the domestic air carriers. Note that in all four cases the modal (i.e. most common outcome) is that the submission is equal to the resolution. In other words in most cases an airline receives the number of slots it asks for. At John F. Kennedy International approximately 11 percent of the requests are reduced and around one quarter are reduced at Washington National and at La Guardia (24 percent and 28 percent respectively). The pattern at O'Hare is quite different in that the majority of the requests are reduced. Also, the patterns of resolutions at O'Hare are atypical. Note from Figures 8 and 15 that there appear to have been fewer changes in the number of slots carriers receive over time at O'Hare than at say Kennedy where some carriers, especially Eastern and Braniff, have increased operations. Also, at La Guardia one can see more movement as some carriers give up slots temporarily and then regain them (e.g. TWA and Allegheny). As at JFK, Braniff expanded operations at La Guardia. At Washington National some carriers, Eastern, Northwest, Piedmont, Delta, and until recently, National, all held fairly constant numbers of slots. TWA and Braniff both expanded operations while American and United contracted.

To verify the appearance of greater constancy in the resolutions at O'Hare we calculated for each major carrier the standard deviation of time series of resolutions for each airport. To allow for possible seasonal fluctuations the series were split into winter and summer series. For the summer we found that of the eight carriers that have substantial operations at both JFK and O'Hare, six of them (Allegheny, Braniff, Delta, Eastern, Northwest,

and TWA) showed more variability at JFK than at O'Hare, while only two (American and United) showed less. The figures were more variable at La Guardia than at O'Hare for seven carriers and less for three, essentially the same as JFK. The comparison with Washington National was (as the graphs show) much closer to comparability with five carriers more variable at DCA and three at O'Hare. For the winter months the results were the same. The resolutions for seven carriers showed more variability at JFK than at O'Hare, while for La Guardia and Washington National the corresponding figures were eight and five respectively.

To summarize, Tables 2 through 9 and the corresponding figures show that there has been little variation in slots received at O'Hare International Airport. United, American, and TWA are all large operators at O'Hare and have maintained their positions. Braniff has made a small increase (up five to six slots over the decade) and Eastern has dropped a comparable amount. It appears that there is demand for extra slots there (note requests consistently exceed the FAA quotas). With the new entrants there the situation can only be expected to become worse.

The other airport where the slot problem is especially tight is Washington National. The FAA currently authorized 640 slots between the hours of 0700 and 2259. At the most recent meeting there, the requests exceeded the figure by approximately 50. These figures reflect the existence of a curfew on jet flights at the 0600-0659 and 2300-2359 time periods. The largest operator at Washington National is Eastern Airlines. Its level of operations has been roughly constant. Allegheny,

United, and recently National Airlines have all reduced the number of operations, with TWA and Braniff both increasing. As was the case with United, American, and TWA, the largest carriers at O'Hare, Eastern has not been able to obtain more slots from the committee.

Kennedy International Airport offers a significant contrast to O'Hare and Washington National. Here, Pan American and the foreign carriers reduced operations around the time of the Arab oil embargo. They have not succeeded in regaining these slots while some domestic carriers (Eastern, Braniff, and TWA) have increased operations. Similarly, at La Guardia one can find substantial movements in the number of operations per carrier. Note especially the time series for Eastern and Allegheny. Here also Braniff has expanded operations somewhat. From the historical evidence, we conclude that O'Hare and Washington National present harder problems to the scheduling committees and speculate that meetings involving these airports are frequently longer and more difficult than those concerning the other two.

As expected the largest carriers have been unable to expand operations at the airports where they are large. If anything, the potential threat of default makes them vulnerable. Note that Eastern which is the largest at Washington National has been dropping slots at O'Hare and, conversely, United Airlines which is the largest operator out of O'Hare has been dropping slots at Washington National.

E. Conclusion

The record of the scheduling committees suggest that the carrier representatives are fully aware that they are participating

in a complicated bargaining situation. The meetings described in Appendix B, C, and D provide substantial documentation for this conclusion. From the patterns of submissions and requests it appears that strategic behavior is taking place, including possibly attempted bargains involving more than one airport and attempted bargains at the same airport for different points in time. Thus one would expect this process to follow the same principles of behavior which are known to characterize bargaining committees.

Concerning actual outcomes of the process the threat of default seems to ensure that entrants get some slots, but probably a relatively small number. Generally large or medium-sized carriers find expansion difficult when the demand for slots is tight. Braniff and TWA do, however, appear to be exceptions, though their growth could hardly be termed dramatic.

CHAPTER V

THE COMMITTEE PROCESS: EVALUATIONS AND DEMONSTRATIONS

V. THE COMMITTEE PROCESS: EVALUATIONS AND DEMONSTRATIONS

The interpretation and evaluation of the decisions made by slot committees presents a particularly difficult problem. Not all the data are available. In fact only traces of the relevant data are available. Furthermore, even if the data were available, the study would be limited by existing theory. Committee processes are not fully understood. Finally, even if all historical data were available and if the principles governing committee decisions were satisfactorily isolated, there would still be no knowledge about the parameters and circumstances which might characterize the committee's future environments.

In spite of these fundamental limitations, judgments about the committee process need not be made in a vacuum. It is possible to gain experiences with the tendencies of such committees by studying committees which make decisions in a controlled environment. In this chapter we report on the results of several such studies demonstrating the existence, importance, and implications of several key principles which govern their behavior.

As was discussed in the chapter above the key to understanding and predicting certain types of committee decisions is the core or the underlying cooperative "game" and this, in turn, is determined by the "threat points" or default values in the case of the slot committees. In order to demonstrate the operation of this principle, we report on the decisions of a large number of committees which met within a controlled environment. There were three design blocs of the controlled environment committees (see Appendix F) but in each bloc many of the

essential features of the slot problem were present. Committee members were required to divide a scarce and valuable resource among themselves. The value of the resource was systematically varied with individuals and groups so the nature of the response of the process to individual economic opportunities could be studied.

All committees used the rule of unanimity and the same informal parliamentary processes that have evolved in the slot committees. However, default rules and default consequences were systematically varied in a manner which demonstrates the importance of these variables.

Three different default rules were studied. (a) If the committee defaulted, each committee member received his/her "initial allocation" of slots which was unambiguously specified and known before the meeting began. (b) If the committee defaulted, slots were allocated randomly. (c) If the committee defaulted, slots were taken at random only from those with large initial allocations and given to those with small or no initial allocation.

The analogies with the slot committees are clear. Policy (a) is similar to a grandfather policy. Policy (b) is similar to complete uncertainty as to what will happen, and policy (c) reflects a set of political circumstances in which the large carriers feel that entrants will receive slots and they will result in a reduction from the large carriers' historical shares. The key policies for study are (a) and (b) because they represent polar cases of current expectations, the first involving no uncertainties about the consequences of default and the latter reflecting complete uncertainty. For the large carriers the certainty of a grandfather policy is preferred to complete uncertainty.

For the small carriers or potential entrants complete uncertainty is preferred to getting no slots for sure as would be the case with a pure grandfather policy. All other options are combinations of these with large carriers seeing no likely default consequence which would costlessly improve their position over what it is now and small or entering carriers having some confidence that they will receive "something."

The details of the committee environment are contained in Appendix F. The essence of the problem was that nine people for some committees or fourteen people for others had to divide "cards" or "flags" among themselves using the rule of unanimity. In bloc 1 (six experiments) nine participants divided up 28 cards (10 blue, 9 pink, and 9 green) and 32 flags (10 blue, 11 pink, 11 green). The cards/flags dichotomy provided an opportunity to build in a type of system interdependence, as each person's payoffs for the second meeting (flags) depended upon the number of cards received in the first meeting (cards). A similar system was employed in bloc 3 (six experiments) except that in four of these there were fourteen rather than nine participants. In bloc 2 fourteen participants divided up 32 cards (10 blue, 11 pink, 11 green), but there was no interdependent flag meeting.

Values for cards were created by application of induced value theory. That is, each individual was paid for participation in accordance with the number of each colored card he/she had in the allocation unanimously approved by the committees. These values differed among committee members and card colors. The marginal payment also decreased with card volume. The complete schedules are contained in Appendix F but the range is from \$6.87 for a single card to zero. Earnings, which

were paid in cash, ranged up to \$50 for some individuals for a single meeting. Each committee member had an "initial allocation" of each type of card.

The analogy with the slot committee is obvious. A card is analogous to a slot and the color of the card is analogous to the time of day. The delineation between cards and flags is analogous to different airports. In designing parameters, certain features of O'Hare were used as a guide for the card meeting and National was used for the flag meeting. The declining marginal values to committee members are analogous to diminishing returns to operations for carriers at a given airport. The procedures followed by the controlled committees were almost exactly those that have evolved for the slot committees. The initial allocation of cards to committee members is analogous to the historical allocation of slots among carriers.

A. Default Value Influence

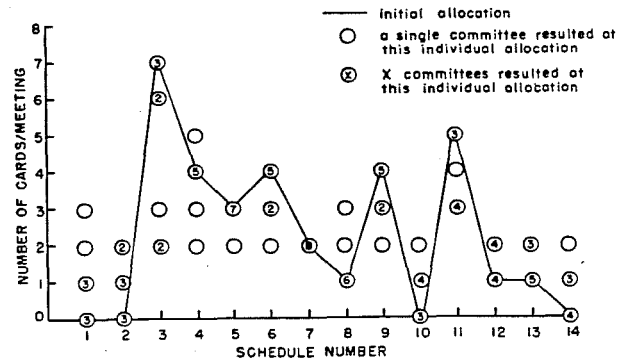
For the controlled committees in bloc 2 two different default consequences were studied. (1) The first was a "grandfathered" policy whereby each committee member received his/her initial allocation in case of a default. The analogy here is of course the "grandfather" option in the case of a slot committee default. (2) The second consequence was an equal-chance lottery. If the committee failed to reach an agreement, available slots would be allocated at random with each committee member having an equal chance for each slot regardless of the initial allocations.

The results of the experiments in bloc 2 are displayed in Figure 20. On the vertical axis is represented the number of units received. On the horizontal axis is the "schedule number" which represents a specified profit opportunity. They are similar to economic positions in a market.

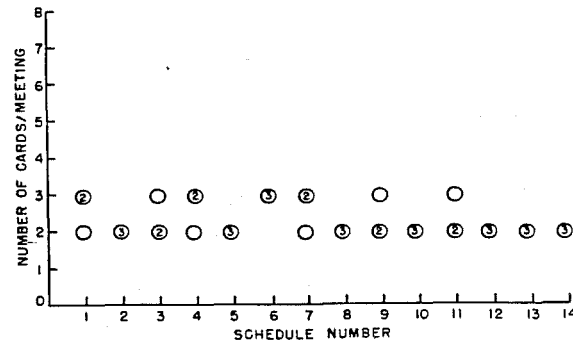
It is clear that the outcomes are substantially different when the "random" default rule is used rather than the "grandfather" rule. It is no coincidence that, since the expected number of slots received by a participant in a random allocation is two and two-sevenths, all outcomes in the "random" process were either two or three. This is exactly the "core" prediction. On the other hand, the outcomes in the "grandfather" series tended to be close to the initial allocation (again, the amount to be obtained in the event of a default) which for this committee is also the case. To the extent that outcomes diverge from the initial allocation (core) in the "grandfather" series, the tendency was for those with large initial allocations to give up some slots to allow limited expansion by persons with smaller initial allocations. Such tendencies are not unusual but the opposite tendencies, for the large to get larger, are never present.

It is clear that the "real" default process in the airline scheduling committees as perceived by carriers is not identical to either of these archetypes; however, all the descriptions articulated so far suggested that the real consequences of default involves elements of either "uncertainty" or "grandfathering" or both. The controlled-environment results give a demonstration of the tendencies which the actual rule will have as it resembles either randomness or uncertainty.

Effects of different default rule



Default means initial allocation (experiments 8,11,12,13,15,16,17,18)



Default means random allocation (experiments 9,10,14)

Figure 20

The results from bloc 1, portrayed in Figure 21, demonstrate in a different light the power of the default positions. In these meetings the default rule was identical (initial allocation grandfathering) but two different initial allocation schedules were used. Again, the difference in outcomes relative to the underlying economic value of units is readily apparent. Outcomes tend to shift directly with the default values alone.

In summary, the committee decisions are substantially influenced if not completely determined by the consequences of default. Under the grandfather arrangement "hardnosed" committee members will simply default rather than take less than the default value. Social pressures do exist for those with "large" initial endowments to give to those with "small" endowments, but even if there is no default because of concessions to social pressure the final outcome is not "far" from the "grandfather" alternative. On the other hand, when the consequence of default is an equal chance lottery, the slots will be divided equally, independent of the initial allocation. The the extent that committee members are risk averse this equal split option is preferred to the lottery¹ and will be unanimously adopted. Default values literally determine the outcomes in processes such as these.

B. Efficiency Properties of Committee Decisions

Allocations which result from committees' using procedures such as those used by the slot committees need bear no relationship

1. The equal split provides each committee member with the expected value of the lottery. Under risk aversion the certainty is preferred to a lotter with the same expected value.

Effects of different initial allocations

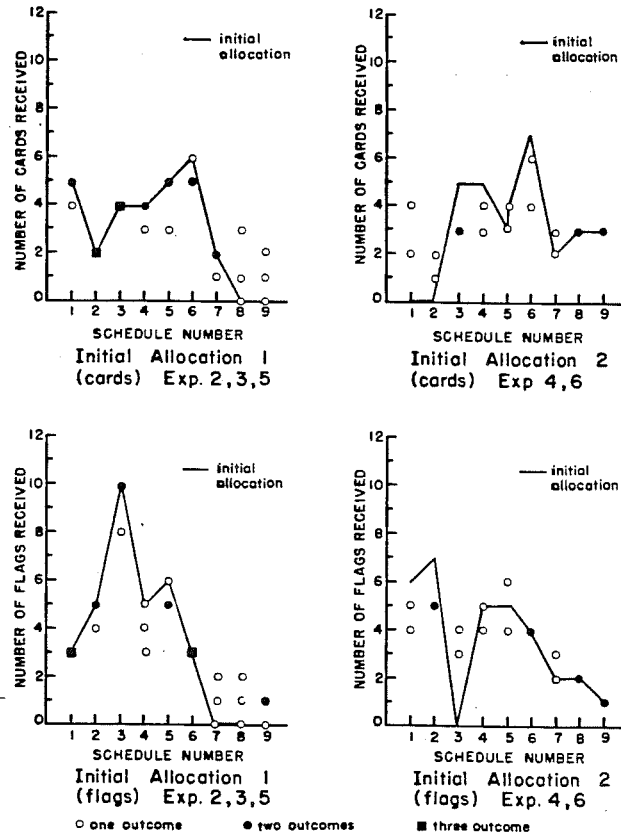


Figure 21

to allocations which are efficient from an economic point of view. The primary variable which guides the committee decision is threat point (the consequences of default) and this latter will be related to economic efficiency only by accident. This general conclusion applies both at the independent committee level and at the "systems" level. For the slot committees this means that the conclusion applies to both the airport level and the air transportation system level.

1. Efficiency at the Single Committee Level

Each of the efficiency criteria will be applied to the committee process at the single committee level. System considerations will follow in the next subsection.

a. Expansion of efficient producers. As is explained in Chapter IV the pattern of allocations has been for the new carriers to receive a small number of slots at the expense of those carriers with a large allocation of slots. Aside from this small allocation at the time of entry, individual carriers have experienced little growth.

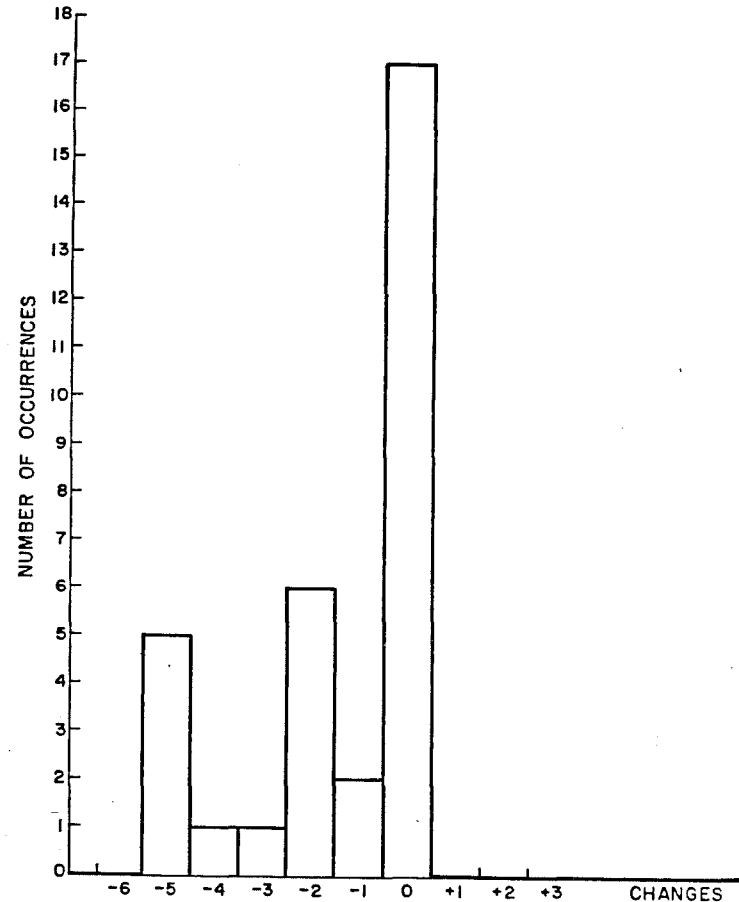
This pattern of allocations is understandable. Large carriers have large potential losses from committee default (depending upon the carriers' assessment of the relative likelihood of the various default consequences) and are thus willing to give up a few slots to entrants who have little or nothing to lose from a default and thus may be prepared to induce a default should the committee give them nothing. Once a carrier has something to lose from a default, it can expect no further concessions from the other carriers.

This same pattern is readily detectable in the data from the controlled environment committees. On Figure 22 it is shown that in the second experimental bloc those participants with large (5 or more) initial allocations never were able to expand even though such expansion would, at times, increase efficiency (eight expansions should have occurred according to the efficiency criterion).

Because the initial allocations need not be related to underlying profitability, those who should expand cannot. In the controlled environment committees there were individuals in each size class that should have grown considerably. Such growth was never achieved for large participants and seldom achieved for smaller, nonentrant participants (see Figure 23) for which entry was small and random across participants.

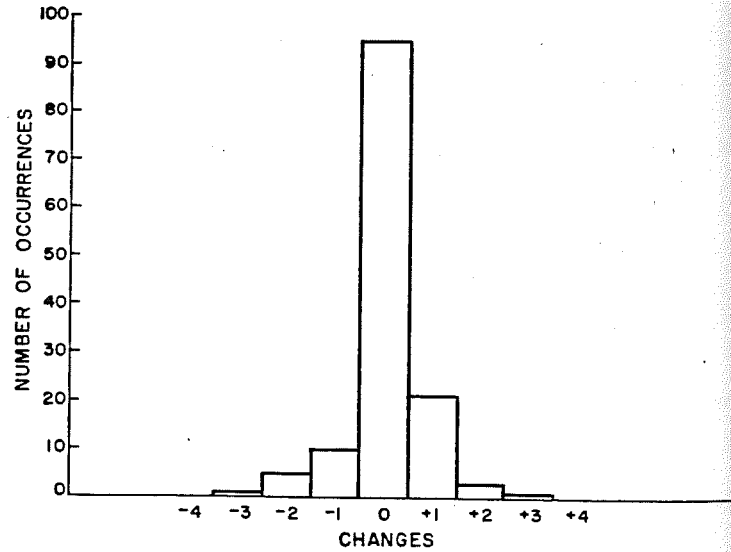
b. Forced Contraction. Inefficient carriers should contract in size. Operations should be transferred from less to more profitable applications. Certainly operations should not be transferred from more profitable applications to less. Yet the latter is exactly what can happen within committee allocation processes. Displayed on Figure 24 are the ranges of outcomes for the second bloc of controlled-environment committees.² Notice that some participants always received more than their efficient outcomes. Because of their initial allocation they could successfully bargain for more.

2. In the second bloc volunteers at the beginning of the session participated in one "card" meeting. After this was over, they were instructed that they would participate in a second card meeting with identical rules but different parameters (payoffs, initial allocations). It is the results of this "second decision" which are reported here.



Change from initial allocations for persons with large initial allocations (5 or more). Experiments 8,11,12,13,15,16,17,18 (default means initial allocation)

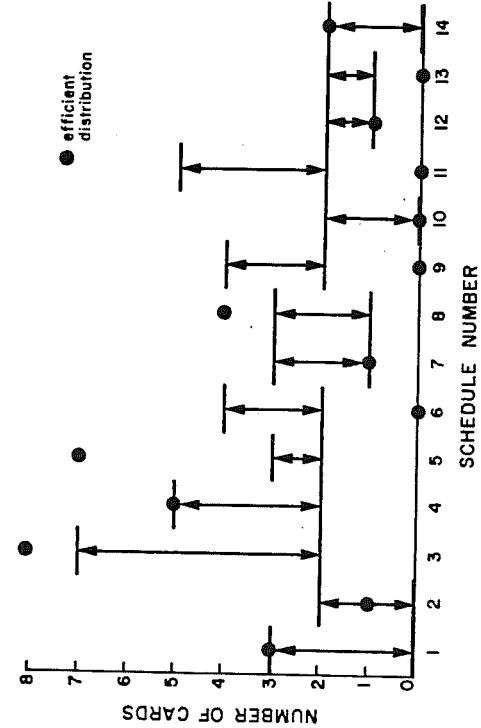
Figure 22



Change from initial allocations for persons with small initial allocations (1 - 4). Experiments 8, 11, 12, 13, 15, 16, 17, 18 (default results in initial allocation)

Figure 23

Range of outcomes in committees. Experiments 8-18



(All meetings had the same parameters and the same efficient outcomes, but two default rules were used)

Figure 24

c. Entry and Exit. High cost carriers should not be granted scarce slot resources and enter the market when carriers with lower costs can enter or expand to do the job. Committee decisions regarding entry and exit bear no relationship to this principle. Under the committee process there will be no exit since carriers whose operations should be replaced by other carriers have no incentive to relinquish their slots. There will also be no discrimination among potential entrants based upon their relative efficiency. All entrants have equal power to "default" the committee and jeopardize the slots of those who have historically had many. Thus under the committee arrangement all potential entrants can "get in."

For the controlled-environment committees this phenomenon is clearly evident. On Table 11 committee members with schedules number 10 should not receive any slots. They are inefficient and they had no initial allocation. Yet they always receive some unless the committee defaults. Furthermore, the allocations received by these members are substantially identical to the allocations received by members 2, 14, and 1 who also had no initial allocation. Member number 2 should receive exactly one card. Members 14 and 1 are very efficient in the sense that not only should they enter, they should receive sufficient cards to become "medium sized" or even "large." The point is that anyone who can "threaten" gets "something" but the resulting allocation has nothing to do with efficiency.

To date the "deal" has not gone through.

The implication is that carriers have learned to mask their desire for trades. The meeting is probably not so open as it would otherwise be. Efficiency suffers to the extent that "big trades" are precluded because they cannot be hidden from the other carriers. This incentive to deal "under the table" also has implications about the possible existence of anticompetitive activity which will be discussed below.

2. System Level Efficiency

In the course of this study we saw nothing about the committee process which would suggest the existence of offsetting inefficiencies thereby rendering a higher overall system efficiency level than might otherwise have been postulated. We did, however, see aspects of a possible inability of the committee system to cope with certain types of systems interdependencies. These problems may be relatively minor now with only four slot committees operative, but if many were operative their problem could become major.

The value to a carrier of a slot at one airport will generally depend upon the other airports for which the carrier has access. For example, carriers entering a market need slots at all the involved airports. At a minimum this means two airports but because of joint costs and scale economies, entry into a "market" will frequently involve several airports. Thus if the market involves cities A, B, and C, slots at B may be more valuable to a carrier with access to A and C than to a carrier which does not. The allocation of slots within the system should be responsive

to these interdependencies. Perhaps the carrier with slots at A and C should be given greater priority in the allocation of slots at B. In fact, the optimum response might be for the carrier in question to give up slots at airport D in "exchange" for slots at B.

The interdependencies among airports are clearly recognized by committee members. The opportunity for some coordination across high-density airports does exist. Even though discussions of city pairs is explicitly precluded by the initial order, references are made to other meetings. Furthermore the meetings for different airports are sometimes convened "back to back." But coordination in an open committee meeting is difficult at best. The TWA proposal is an example of the difficulties. It may be possible that bargains and coordinations can be achieved by private, bilateral negotiations but this involves an alteration of the process that needs to be reviewed itself (see section D in this chapter).

The nature of the problem is easily identified in the behavior of controlled-environment committees. The profits of individual committee members were interdependent across two meetings. The profitability of "flags" in a second "flag" meeting was dependent upon the number of "cards" obtained in the first "card" meeting. If the individual received a critical number of cards, then the value of flags was increased. Thus bargaining for cards necessarily involved some considerations at the individual level about the value of cards for the flag meeting.

In general we found no evidence that the controlled-environment committees were capable of dealing systematically with the interdependence problem. Each decision was as if in isolation and was governed primarily by the default consequences for that meeting. If only committee processes

TABLE 11
TREATMENT OF PARTICIPANTS WITH ZERO INITIAL ALLOCATION
BUT DIFFERENT EFFICIENT ALLOCATIONS

Participant	No. Cards Received	Frequency
Schedule No. 10 ^a (Efficient allocation is <u>0</u> cards)	<u>0</u>	<u>3</u>
	1	4
	2	1
	3	0
Schedule No. 2 ^b (Efficient allocation is <u>1</u> card)	0	3
	<u>1</u>	<u>3</u>
	2	2
	3	0
Schedule No. 14 ^c (Efficient allocation is <u>2</u> cards)	0	4
	1	3
	<u>2</u>	<u>1</u>
	3	0
Schedule No. 1 ^d (Efficient allocation is <u>3</u> cards)	0	4
	1	3
	2	1
	<u>3</u>	<u>1</u>

- a. Mean number of cards = .75. Standard deviation = .707.
 b. Mean number of cards = .875. Standard deviation = .834.
 c. Mean number of cards = .625. Standard deviation = .74.
 d. Mean number of cards = 1.00. Standard deviation = 1.06.

d. Coordination. Generally speaking the committee procedures that have evolved through ATA chairmanship are capable of dealing with certain limited aspects of the broad coordination problem. The sliding operations systematically exploit the "gains from trade" which carriers can achieve by trading operations at various times of day. The procedures are so natural that many controlled-environment committees would initiate the sliding operations even in the absence of their formal introduction. For the case of a "grandfather" default rule efficiencies of the committees that did not default invariably increased over the initial allocations in spite of the inefficient entrant problems. Where "capacity shares" are not a variable (no entry and no growth), the committee process can solve the coordination problem. But, there is a cost even with this feature.

The gains from trade between two parties can be prohibited by a third member not a party to the transaction (by virtue of the unanimity rule). Thus, a member who recognizes that two other members wish to effect a "transaction" can use his power to prevent it (the unanimity rule) as leverage to gain concessions for himself. Committee members clearly recognize this possibility in controlled-environment committees. In the slot committees this phenomenon may have happened when TWA expressed a willingness to reduce its slots at O'Hare if it could gain slots at Washington National. It has been alleged that United Airlines was interested in such a "trade" (see also Appendix D, p. 45, 48) as was perhaps Piedmont (Appendix D, p. 54), but when other O'Hare carriers heard about the potential maneuver, they increased their own O'Hare requests presumably to get a "share" of the TWA O'Hare reductions.

alone are operative (no discussions of "markets" and open negotiations), efficient systemwide organization will not be attained. Committee processes such as these are simply not the appropriate instrument.

C. Responsiveness

Since the committee decisions reflect primarily the consequences of default, they cannot respond directly or readily to changed economic conditions of individual carriers. In fact, the committee decisions can be perverse. If the profit position of a carrier increases, the optimum response in the committee can be to make concessions on marginal slots in order to "protect" its operations from a committee default. Thus the firm would contract as it becomes relatively profitable rather than expand as it should. The problem can also exist when a carrier experiences a temporary disruption due to a strike and so forth. In such circumstances the carrier should have an incentive to release slots for the use of other carriers. However, having released slots there is no guarantee that the carrier can successfully obtain them at the next meeting. Other carriers having undertaken the expenses to schedule operations themselves in those slots may be hesitant to "return" them⁶ and carriers who reduce slots are frequently the subject of heated discussions and accusations (see Appendices B, p. 10, 23; D, p. 20). Since such a possibility exists, carriers may be hesitant to release the slots at all if they can avoid it. In general, because "grandfathering" may play a role in the case of a committee default, carriers always have an incentive to control slots even when the operations so scheduled are not particularly profitable.

3. Some carriers attribute this strategy to Braniff.

D. Susceptibility to Collusion

Discussion of markets are strictly forbidden during committee meetings. City pairs, prices, profits, etc. cannot be discussed. Yet, because of the committee structure each committee member has a type of control over competitors which is uncharacteristic of markets and inconsistent with the operation of a freely competitive system. Firms can influence the market shares among its rivals while leaving its own market share unchanged. The firm can exercise this power selectively over rivals by simply threatening to veto any pattern of resource allocation which it does not like. Thus a firm can prevent the growth of an aggressive firm even though the aggressor may have grown at the expense of a third firm.

Exhibitions of the existence of this power over competitors frequently occur in the meetings. Consider the following concern of Delta, a carrier whose position at Washington National has been very stable and thus has "given up" nothing to those who are expanding.

DL: I've got some numbers I'd like to read off. Postmeeting January, 1978, BN had 20. Postmeeting June 1978, BN had 20. Then 22, and after the meeting last summer, BN had 24. Now with four new carriers, BN asks for 4 more, all in overage hours. I don't know whether to say congratulations or shame. I don't intend to let BN get away with this. I've got people who ask me about slots not being used. I explain that it's a voluntary thing, in good will. But it's harder to explain why we don't get any. I can't explain how a carrier can go from 20 to 28. [emphasis added] [Appendix B, p. 12 of this report]

This quotation from Delta is not atypical of concerns carriers articulate about the general slot distribution. Frequently during meetings carriers will say they will reduce requests only after "others" (often named) have done so. Sometimes they are very explicit about who they feel should get what. See the discussion Appendix D, p. 55) in which

Allegheny, after phoning management (presumably), lists exactly the pattern of slot allocation which would induce Allegheny to reduce its requests.

The fact that unanimity gives each carrier a veto over the entire pattern of slot allocations has another implication. As was noted in Section B of this chapter, carriers have an incentive to mask their desire for trades and negotiate bilaterally in circumstances which protect them from the surveillance of other members of the committee. The rule of unanimity can serve as a vehicle for enforcing such "private trades." The problem is that when such "side conversations" take place, there is no mechanism which protects the consuming public from deals which involve markets and limited competition.

E. Long Run Growth

With the committee process the value of a slot does not serve as the means and the reward for creating additional airport capacity. Instead the slot values are capitalized in the value of the recipient carrier companies. If financing for airport capacity increases can continue to be supplied through the fiscal system, this feature of the committee allocation system may not be relevant. If the fiscal system fails to provide adequate funds, the committee allocation process will provide no stimulus at all for increasing airport capacity. Or, if airport capacity is to be supplied in response to the economic demand for that capacity similar to the supply of other resources to the industry, then the committee allocation system cannot be an adequate mechanism. It will foster no capacity increases beyond those which currently exist.

F. Process Cost

In addition to any budget for the Airline Scheduling Committees the major cost of the process is in terms of time, transportation, and lodging of the airline representatives. The meetings last about a week and are held twice a year although the time required has been increasing. All airlines wanting slots must be present and the carrier representative must have a certain level of authority. A full four weeks have been required in 1979 and most of this time was used in dealing with O'Hare and Washington National. When a large number of airports become involved, the process will be costly.

G. Summary

Existing theory and experience suggest that the decisions of the scheduling committees are determined substantially by the consequences of a committee default. This means that the decisions will be economically efficient only by accident. It also means that the nature of the committee decisions can change dramatically with a change in the political climate of the industry's regulatory environment.

If this assessment is correct, then the current political climate is leading to a committee process which has the following tendencies. (a) The process places a downward pressure on large carriers. (b) The process prevents the growth of large and medium-sized firms even when the economics strongly suggest growth. (c) Entry is allowed independent of the efficiency of the entering firm and possibly at the expense of more efficient firms. (d) If there are no firms seeking to expand operations at the airport or if there are no serious capacity

shortages, then the committees can achieve an efficient coordination of the time of day allocation of slots. (e) The ability of committees to coordinate operations at the system level (the multiairport level) is not good. Separate airport committees cannot coordinate operations in an interdependent system in a manner which captures any existing efficiencies. (f) In addition, the committee decisions are generally unresponsive to changing economic circumstances. (g) They also provide a forum in which seemingly anticompetitive agreements can be forged and enforced. (h) Finally, the committees provide no vehicle at all for expanding scarce airport capacity.

CHAPTER VI

THE RECOMMENDED PROCESS

VI. THE RECOMMENDED PROCESS

The study of the allocative features of the slot committees led naturally to an isolation of various problems which any allocative process should solve. The process outlined in this chapter is a first approximation of a process which should provide a generally satisfactory solution to all the problems. Each feature of the process is designed to fill a particular need. As a whole the process seems to have the best features of the several component processes. The predominant features of the process are as follows:

- a primary market for slots organized as a sealed-bid, one-price auction,
- a computerized aftermarket with "block transaction" capabilities,
- special provisions for small communities,
- special provisions for changes in the definition of a "slot,"
- provisions requiring that the funds be used for expanding airport capacity,
- the possibility of "negative bids" for off-peak periods at airports for which a "zero-sum" feature is appropriate,
- sanctions to prevent the "non use" and/or monopolization of slots,
- a gradual introduction.

A. Sealed-Bid, One-Price Auction

This auction works as follows. Each potential buyer submits for each unit desired a bid indicating the maximum price the buyer is committed to pay. The bids are then arrayed from highest to lowest.

If x units are to be auctioned, then the highest x bids are accepted. The price paid by each of the winning bidders is the value of the lowest accepted bid. For a slot auction this means that the value of a slot will be determined by the least profitable flight.

A hypothetical example using Washington National should make the mechanics clear. All slots for, say, a six-month period at Washington National would be auctioned several months prior to the use of any slots. Such auctions would be held at regular, announced intervals. Each carrier wanting a slot at a given time on a given day (say July 17, 1980 at 1400 hours) would submit a bid. For convenience in the example each day is considered separately.¹ The bid could be submitted at a bank, a local airport or some computerized facility depending upon convenience, cost, etc.

A bid is a commitment by the carrier to pay a maximum of the bid price should it be necessary in order to obtain the slot. Carriers desiring more than one slot would submit a separate bid for each slot as desired. For example, carrier A might submit a single bid for \$450; carrier B submits three bids of \$3,000, \$700, \$400; carrier C submits two bids of \$550 and \$425; carrier D submits three bids of \$1,500, \$500, and \$350.

Suppose that the quota for this day and this time were only six slots. The bids would be arrayed from highest to lowest (i.e. \$3,000, \$1,500, \$700, \$550, \$500, \$450, \$425, \$400, \$350) and the highest six

1. Alternatively the commodity sold could be a slot at 1400 every Thursday for a six-month period. Which method is better (an auction for each day separately or an auction for blocks of days) is left open in this report.

bids would be granted slots at a price of the lowest accepted bid (\$450). That is, carrier A would get one slot; carrier B would get two; carrier C would get one; and carrier D would get two. The price of a slot to each of these buyers would be \$450. That is, even though carrier B bid \$3,000 it would only pay \$450.

This particular market organization has the feature that the optimum bidding strategy is for each buyer to bid the maximum that he/she is willing to pay (except possibly for the marginal bids where the strategy is sensitive to the information state of the bidder). Naturally this maximum is closely related to the profits the flight will generate. As a result the economic circumstances are reflected immediately and accurately in the market. For carriers it means that the profits from their most profitable flights are protected--they will not be dissipated for slot acquisitions. The highest bids do not determine price. Price is determined by the lowest accepted bid and therefore by the least profitable flight in the market.

A controlled-environment market is used to demonstrate how this type of market works. The demand functions for each individual are induced by application of induced preference theory. Each individual is given a schedule which dictates the terms on which he can redeem for dollars any units purchased. The individual is free to keep as earnings the monetary difference between the redemption value and the purchase price. Naturally the maximum the individual is willing to pay is the redemption value. So the redemption schedule becomes the individual demand curve. By controlling the redemption values and conducting the auction we can observe the market under a variety of market circumstances.

The market was conducted for several periods. The demand curve, DD, is drawn in Figure 25 for periods 4, 5, and 6. The bids for these periods are the curves bb. As can be seen on the figure, the bids are very close to the theoretical prediction. The market itself is almost always 100 percent efficient even after parameter changes. The price is always exactly the competitive equilibrium price. These data are on Table 12.

The volume going to each participant is almost always the socially optimum volume. During this market, the circumstances of each individual changed each period even though the market aggregates remained constant for some periods. The social optimum volume and the actual volume for a typical individual is shown on Table 13. As can be seen the actual volume for this individual remains almost identical with the social optimum. Individual expansion and contraction simply mirrors the underlying economics.

Unless technical problems are encountered, slot auctions should be held on regular (six month) intervals. Each hour of each day over the six month period should be treated as a different commodity. A separate bid should be submitted for each slot desired. Other aspects of the auction organization should be similar to the Treasury bill auctions. Appendix A contains many details.

B. The After Market

The sealed-bid auctions can be applied to only one airport at a time. In order to facilitate coordination between airports, an aftermarket is proposed. In this market, carriers will be able to

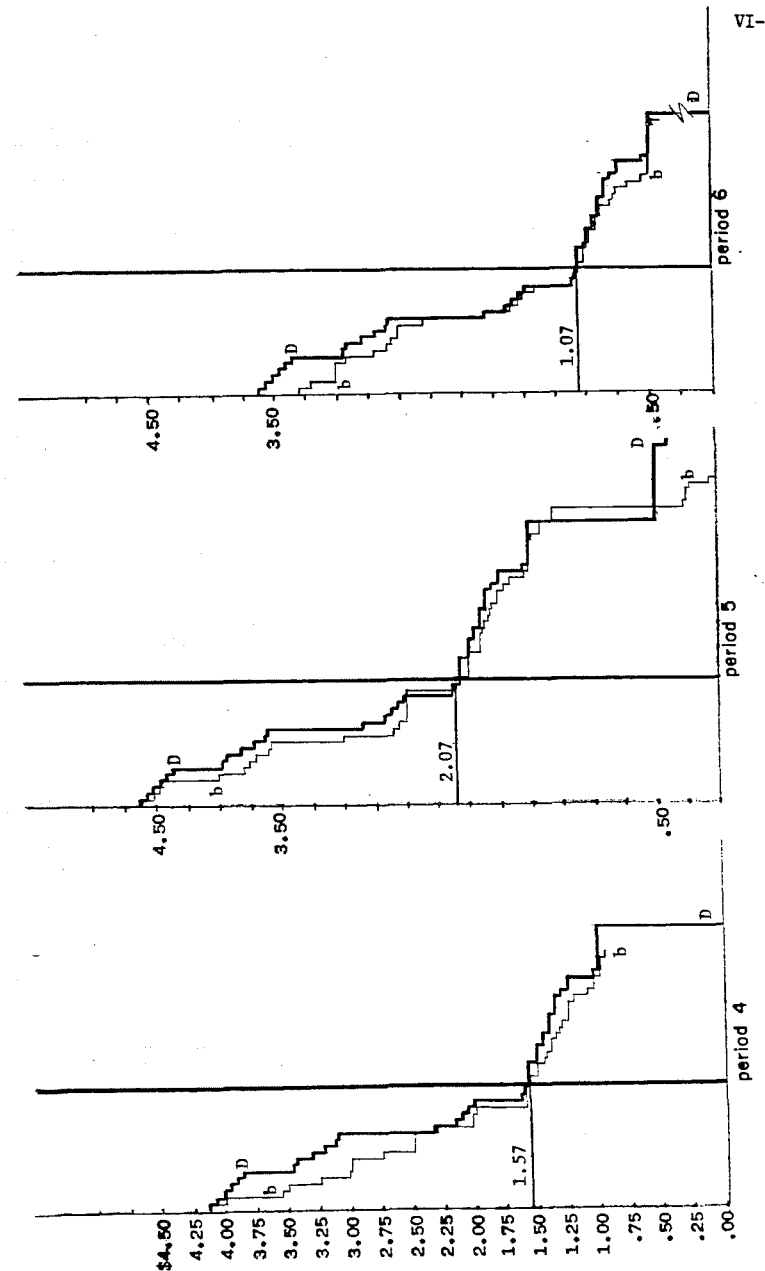


Figure 25

TABLE 12
RESULTS FROM A COMPETITIVE AUCTION

Period	1	2	3	4	5	6	7	8	9	10
Auction Price	1.50	1.50	1.57	1.57	2.10	1.07	1.57	1.07	2.07	1.57
Theoretical Competitive Price	1.57	1.57	1.57	1.57	2.07	1.07	1.57	1.07	2.07	1.57
Efficiency	96.31%	93.97%	97.20%	100%	100%	100%	100%	100%	100%	100%

TABLE 13
CARDS RECEIVED FOR TYPICAL PARTICIPANT
PARTICIPANT NO. 2

Period	Schedule Number	Efficient Allocation	No. Cards Received
1	1	1	1
2	2	0	0
3	4	2	2
4	3	0	0
5	5	2	2
6	6	1	1
7	7	1	1
8	8	5	5
9	9	0 or 1	1
10	10	2	2

acquire or sell slots in order to optimize their operations among airports.

Each carrier would register in a central computer the maximum (minimum) price it would pay for (sell) a particular slot. Contingencies such as block provisions² should also be listed. Such contingencies allow carriers to take advantage of interdependencies of operations which occur because of time and size (nonconvexities). By simply asking for a "print out" each carrier can see the full pattern of offerings at any given time and can activate a transaction through the computer (an "open book" feature).³ Many techniques exist for summarizing information and allowing participants to be fully aware of the state of the market.⁴

Markets organized with an open-book feature behave both smoothly and efficiently. In order to demonstrate how such a market works, participants in an environmentally controlled market were given initial endowments of units which they could resell to us according to a given schedule or resell to other participants (who could then resell to us according to their own schedules). The organization and information was almost exactly the same as the proposed computerized market except that bids, offers, and acceptances were submitted orally.

The resulting market demand parameters are shown on Figure 26. For the nontechnical reader, viewing this as a demand and supply model will cause no problems. Technical readers will note,

2. A carrier may want to buy (sell) only if it can acquire (sell) a certain set of slots.

3. The identity of the carrier making an offer (bid) to sell (buy) would not be available to the potential buyers (sellers).

4. Those desiring further details about such a computerized market should contact the authors.

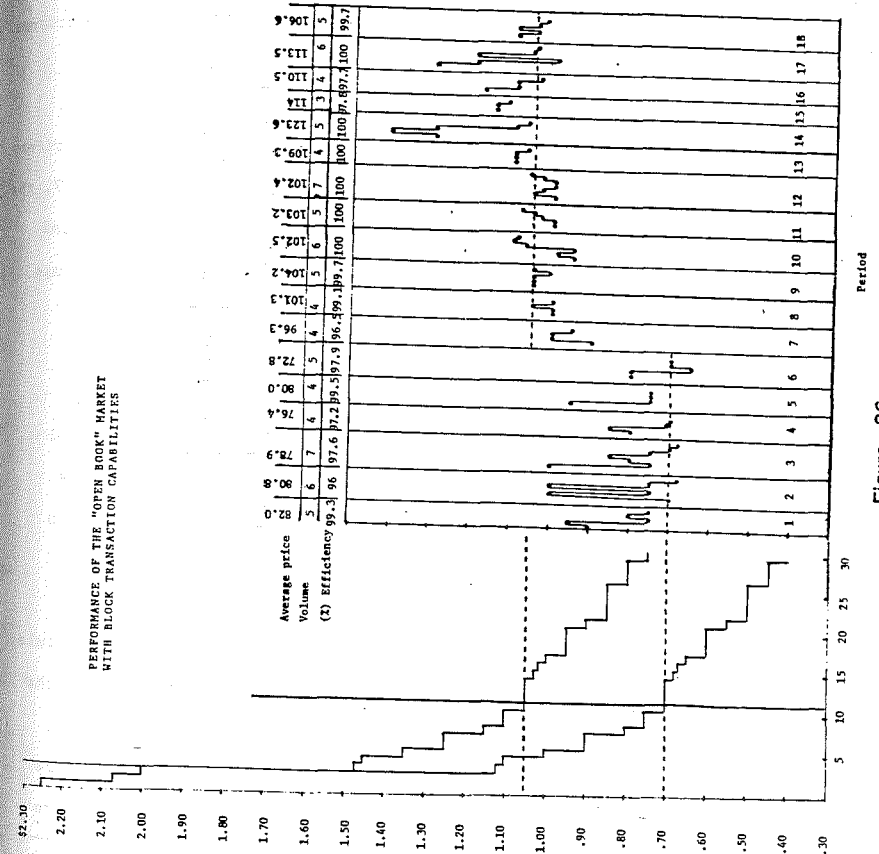


Figure 26

however, that market demand functions were drawn rather than excess demand functions⁵ (positive and negative) as a space-saving measure. The shape of the latter changes dramatically with changing initial endowments and so do the volume predictions but not the price predictions. The results of several periods' trading are also in Figure 26.

As can be seen (in Figure 26) the markets converge to the competitive equilibrium price shown by the dotted lines and the efficiency is always near 100 percent. When demand shifts upward as in period 7, the market recovers immediately. When the initial endowments were shifted among individuals from period to period beginning in period 15 a change in the time series is obvious even though the underlying demand and supply was constant. This perturbation creates a situation with dramatically changing economic conditions from an individual's (but not the system's) point of view. A situation analogous to this would prevail if, due to unforeseen events, many carriers found themselves with an inappropriate number of slots in the primary markets. As can be seen (in Figure 26) the price variance goes up but efficiency remains constantly near 100 percent. The overall efficiency can be seen again on Table 14. Notice that for each individual demand schedule the optimum quantity is constant across all periods. The fact that the quantity purchased for each schedule was almost always the optimum (and in particular for the first eight periods) is an especially clear demonstration of the system's efficiency. In each period for the first

5. An excess demand function is the total quantity an individual desires at a price minus the quantity he/she has on hand. It is the addition or subtraction that one wishes to make on his/her stock of holdings.

TABLE 14
QUANTITY OF CARDS OBTAINED BY EACH PAYOFF SCHEDULE
IN AN OPEN BOOK MARKET

Schedule	Efficient	Period																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	2 or 3	2	2	2	1	2	3	2	2	2	2	2	2	2	2	3	3	2	2
2	2 or 3	2	2	2	3	2	1	3	3	2	2	3	2	2	2	1	2	2	3
3	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	1	2	2
4	2	2	1	2	2	1	2	2	1	1	2	2	2	2	2	2	2	2	1
5	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	1 or 2	1	1	0	2	2	1	1	1	1	1	1	1	1	1	1	1	2	1
8	0 or 1	2	1	1	0	0	1	0	1	1	1	1	0	1	0	1	1	0	1
9	0	0	1	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0

eight periods a given schedule was held by a different individual. That is, the quantity purchased remained optimum for each schedule even though in each period a different individual was using it (see Table 14).

C. System Efficiency

The primary sealed-bid market alone cannot be used to exploit all the potential efficiencies that can be achieved from coordinating operations over time and among airports. The proposed primary markets will operate independently from one another so when a carrier bids at one airport, it may not know about the number of slots at other airports. In this respect the situation is similar to the current policy of separate slot committees for each airport. Mistakes by carriers are inevitable but by participating in an aftermarket they can be corrected. If a carrier finds that it has more slots than expected it can recover its expenditures by selling the slots in the aftermarket. If it needs more slots, it can bid for them.

All such calculations would be governed by the profitability of the least profitable operations. With each trade the system efficiency will improve. The demonstration of how this works is reserved for the next chapter where the performance of this process is compared with committees.

D. Small Communities

Many feel that service to small communities will be terminated if slots are allocated by a market process. Markets can be organized in ways which will prevent this from happening.

For each airport we recommend the establishment of a restricted market for small communities. A restricted market is one in which only buyers with special status can participate. In this case the special status would be based upon the origin or destination of the flight (geographic region and/or city size). The passenger classification of the aircraft (commuter, general aviation, etc.) or the size of the aircraft are also possibilities. Regardless of the ultimate definitions (which are beyond the scope of this study) the technology exists (through the reservation system for runway access) for keeping all markets separate and maintaining price differences.

The market organization should be exactly like that for scheduled airlines. The primary market should be a sealed-bid, one-price auction. The secondary market should be computerized with the "open book" provision. This policy has substantial advantages in that the market institutions, facilities, etc. can be shared with the larger market.

The advantage to small communities can be controlled in the same way it is now--by adjustments in the share of slots which are allocated to the "small community" market. The price differences between the markets and the pattern of bids can be used to assess accurately future policies regarding small communities (e.g. the consequences of increasing or decreasing the small community share of slots, changing the definitions of special status, etc.).

A final comment is in order about markets, small communities, and the types of comparisons which must be made. A general belief exists that in a market the price of slots will be bid up by the higher density routes and service to small communities will be squeezed out.

This can clearly happen but in assessing its likelihood two aspects must be kept in mind. First, for a small city to lose its service into, say, ORD the most profitable service that could be scheduled from the small city to ORD must be less profitable than the least profitable services along the higher density routes which may have acquired the additional services. The relevant statistics are the profits from the marginal flights and not the average profits over city pairs. Secondly, in the deregulated environments, rates can be adjusted to reflect higher costs per passenger. Since demand elasticity from small cities is likely to be low, it is not at all clear that they will lose in a market competition for slots.

E. Slot Definitions

Certain types of aircraft use more "capacity" than do other aircraft. An increase in the percentage of "heavies" for example can result in a loss of airport capacity.⁶ In some instances modification of the aircraft itself might reduce its pressure on capacity. Vortex alleviation at the source and noise abatement at the source are both within the range of engineering reality.

A proper system of capacity allocation should provide incentives for those aircraft modifications which would in turn result in a more intensive and economical use of existing capacity. The definition of a "slot" and/or the number of slots necessary to perform certain "operations" are instruments through which such incentives can be

6. "New Engineering and Development Initiatives -- Policy and Technological Choices," vol. 1, U. S. Department of Transportation, March 1, 1979, p. 133.

created. Operations having characteristics which place disproportional demands on capacity should require more "slots" than other operations. Aircrafts, for example, which contribute significantly to binding noise constraints (that is, noise is the reason for limitations on movements) should require more slots than those that do not. Carriers facing the higher (slot) cost for operating aircraft with properties that are "capacity using" have an incentive to modify the aircraft and conserve "capacity." In doing so the capacity constraints will be partially relieved.

Any attempt to actually provide the appropriate definitions or statement of policy regarding slot definitions would go far beyond the scope of this study. The appropriate definitions could vary among airports, thereby reflecting their individual capacity problems. The definitions may also change over time as measuring and monitoring devices are developed. The key idea is simple enough however. If carriers can modify their aircraft and/or operations so that less capacity is used, they should be rewarded for doing so.

F. Disposition of Funds

Funds generated by the sale of slots should be used to defray the cost of removing the binding airport capacity constraints. Many possibilities exist⁷ including the establishment of satellite airports but almost all of them require funding. The sale of slots provides a natural and economically efficient way of recovering the costs.

The importance of this "use of funds" provision needs to be

7. Ibid.

emphasized. The agents who receive the funds might be able to act as monopolists, restricting capacity in order to drive up the price of slots. The agent could then enjoy the benefits of the revenues by diverting them to other uses. Such behavior would substantially hamper the efficiency gains from the policy proposed here.

In the event that that the funds cannot be used to expand capacity, they should be used to encourage offpeak traffic. This can be done through a "negative" lottery of the sealed-bid, one-price type. Carriers can be allowed to bid negatively, thereby indicating the subsidy it would take to entice them to provide offpeak services. Even though the wording is a little awkward this process is no different from a sealed offer process whereby the carriers are simply indicating the price at which they would be willing to provide the offpeak service. All carriers operating at a subsidized hour would receive a subsidy equal to the lowest accepted (negative) bid. The number of bids accepted would be governed by the available funds.

A controlled environment market was conducted to demonstrate how such markets work. The demand function for units is shown on Figures 27-30 as DD. Wherever the function is negative the unit can only be acquired at a loss. The analog for an airport is that the slot could only be used at a loss to the carrier. As shown on the figure, the bids represented as the curve bb (for the tenth period) approach the demand function (the optimum strategy is still to bid the maximum). A time series for this auction is on Table 15. Prices are as predicted and the efficiency is near 100 percent every period. Such markets work very smoothly indeed.

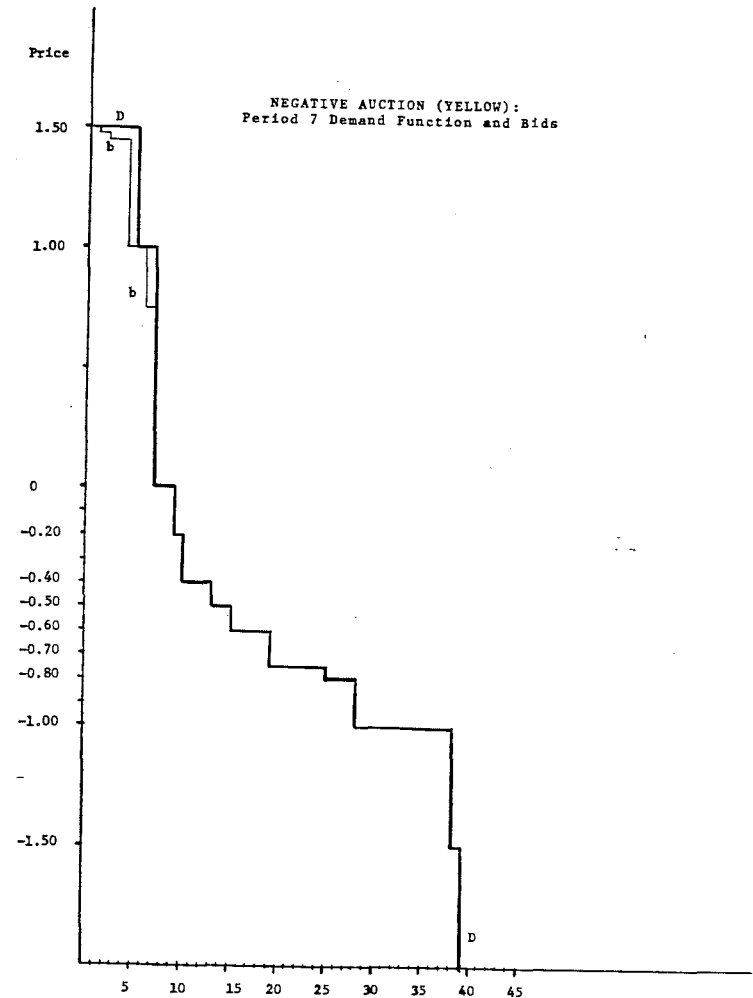
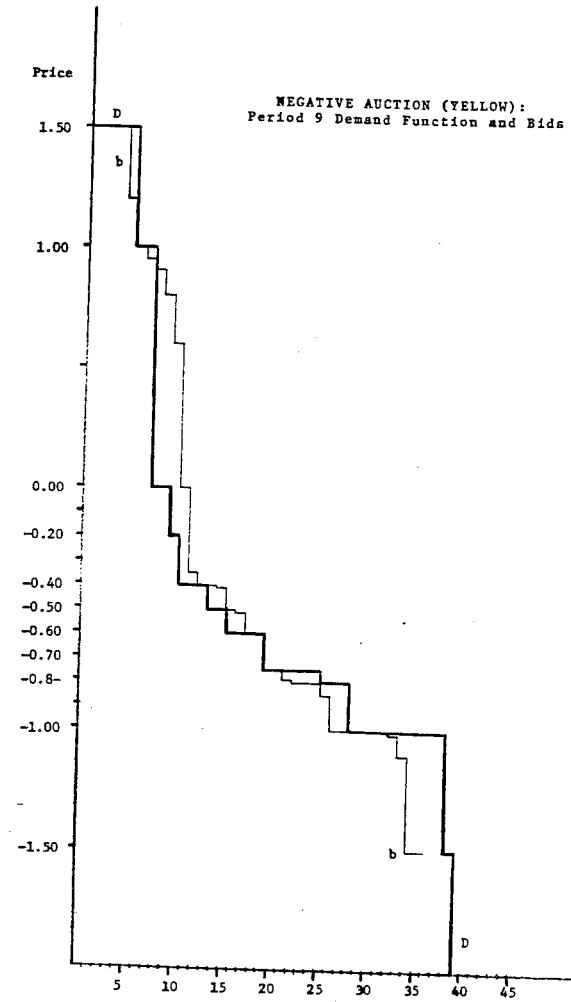
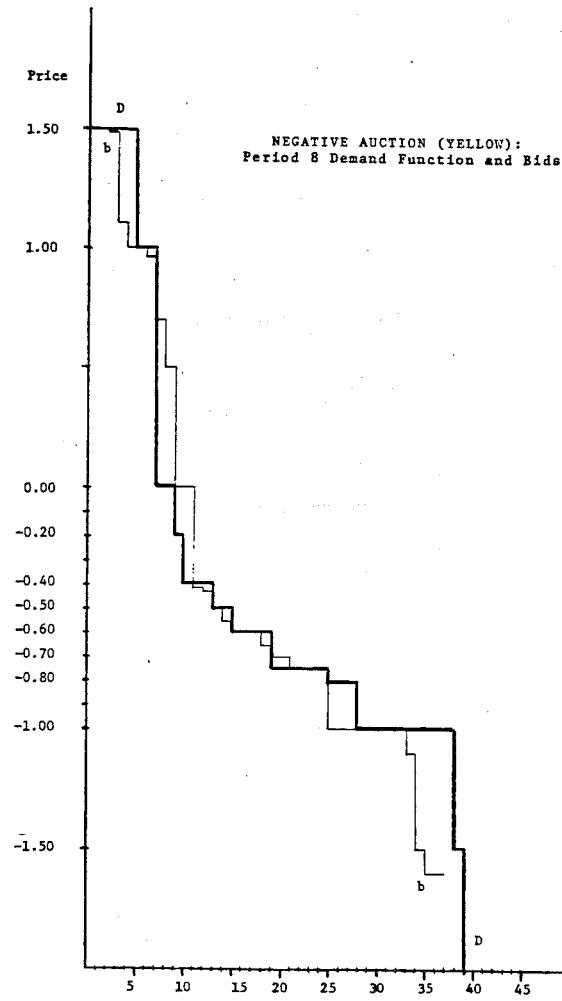


Figure 27



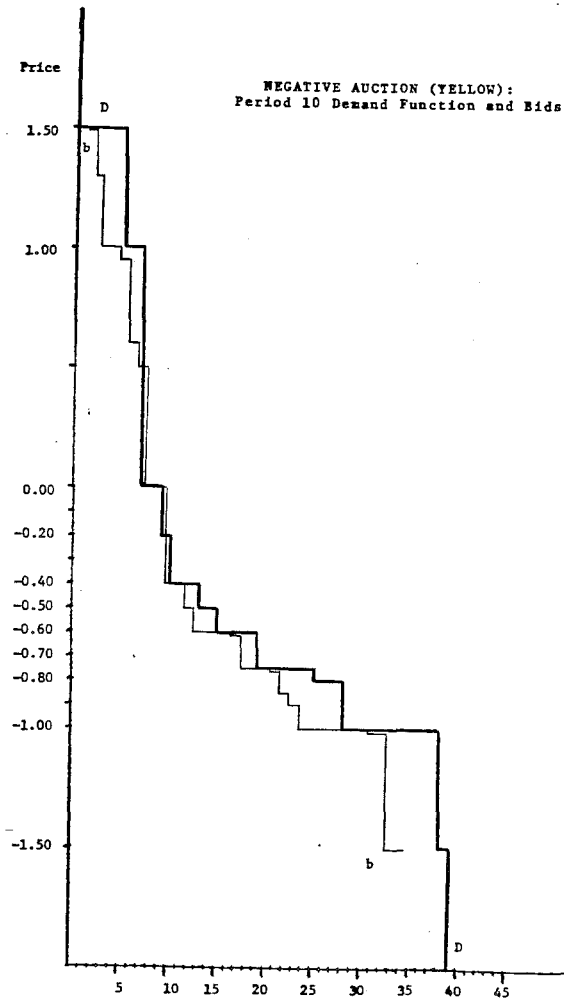


Figure 30

TABLE 15
NEGATIVE BID AUCTION

Period	7 ^a	8	9	10
Theoretical Price	0	-\$\$.40	-\$\$.40	-\$\$.40
Actual Price	0	-\$\$.50	-\$\$.41	-\$\$.40
Efficiency	n.a.	87.6% ^b	94.5% ^b	98.6%

- a. In period 7, no negative bids were permitted. Since excess supply existed, the theoretical price was zero.
- b. These efficiencies are corrected for one individual who treated his negative redemption values as though they were positive.

Subsidized offpeak operations will operate through competition to lower the price to airline customers. As prices for peak periods are edged upward because of the slot price, and offpeak prices are lowered because of the subsidy, customers are encouraged to switch to the offpeak flights. This process will help "smooth" the demand throughout the day.

The advantages of the negative auction are the same as with any efficient market process. The only major difference is that with the negative auction a very precise definition must be provided for exactly what types of service qualify for subsidy. For example, the funds might be used to subsidize only flights considered desirable during the offpeak periods. With this qualification, competition assures that the operations so purchased are the least costly possible and that, given the expenditures, the maximum possible shifts to offpeak hours are thereby achieved.

G. Antimonopoly Policies

It is difficult to see how a carrier might successfully utilize an auction process to monopolize an airport. Even collusion is difficult in an auction since neither winners nor bids are announced. In the aftermarket neither the buyer nor the seller of a slot needs to know the identity of the other. Monopoly is especially difficult since the act of driving up slot prices to prevent competition necessarily uses up all the presumed monopoly profits. Furthermore, the funds would be destined for capacity expansion which would further undermine any monopolistic tendencies.

Nevertheless monopolistic tendencies should be rather easy to spot. Monopolies are effective because they withhold supply. In the case of airports this could only mean that large proportions of slots go unused or that they are used for operations which do not involve many passengers. Under monopoly, revenues from several of the operations would not cover the price paid for slots. We suggest the addition of a nonuse provision whereby slots acquired in any substantial number must be either "used" or offered on the aftermarket. Surveillance in the future could then be the responsibility of the appropriate authority.

H. Implementation

The transition to a market system should not be too abrupt. A market for slots will probably induce some changes in accounting and management practices. The market system is likely to have some "bugs" at first. However, after the "bugs" are worked out of the system and after firms have had an opportunity to assess any schedule changes, there is no need for delay. Firms for the first market should be allocated some reasonably large fraction (say, two-thirds or three-fourths) of their historical shares of slots. This means that the remainder of the total slots will be auctioned. For the next auction (six months later) firms should be allocated a smaller portion of their historical shares with the remainder of the slots being auctioned. This process should continue in a timely manner until all slots are auctioned.

Summary

The major features of the recommended process are summarized in the introductory remarks of this chapter. The process is well suited to meet all the social and economic criteria for an efficient slot allocation process. Entry, exit, capacity growth, the special problems of small communities, etc. will be handled in a smooth and efficient manner. This judgment is backed by a great deal of experience and with controlled environment markets, and with very complicated markets such as the Treasury bill market. As will be discussed in the next chapter the recommended process is preferable to committees on every criteria.

CHAPTER VII

THE RECOMMENDED PROCESS AND COMMITTEES:
COMPARISON IN A CONTROLLED ENVIRONMENT

VII. THE RECOMMENDED PROCESS AND COMMITTEES: COMPARISON IN A CONTROLLED ENVIRONMENT

In order to explore the behavioral differences and similarities between the recommended process and processes based on the slot committee procedures, a special series of controlled environment committees and markets were designed. Participants were, primarily, employed adults with advanced degrees in physics, engineering, and aeronautics. Many were completing work for the PhD degree from Caltech. All were experienced with the institutional structures of controlled environment processes. They viewed participation as a job and as an opportunity to earn additional money.

The format was essentially as was introduced previously in the section on committees. Demand for a resource was induced by application of induced preference theory. The resources were called cards (blue, pink, and green) and flags (blue, pink, and green). This terminology was chosen because of its neutrality and brevity. The terms used are of minor consequence as long as the accepted conventions for this type of demonstration are satisfied.¹

The analogies to the slot problem are clear enough. Cards of different color are analogous to slots at different times of day at a given airport. Flags are analogous to a different airport. In many respects O'Hare and National peak hours were used as a model. Size distributions of participants, demand elasticities are all similar up to scale factors. An attempt to stay completely consistent, however,

1. Smith, Vernon L. "Experimental Economics: Induced Value Theory. American Economic Review 66 (May 1976):274-79.

was aborted because of both lack of information about profit details and the necessary expense of any attempt to stay completely consistent.

The market demand functions for cards are represented on Figure 31. The market demand functions for flags cannot be drawn without some assumption about the distribution of cards because of an interdependency incorporated in the design. For each participant the value of flags depends upon the number of cards. (This is similar to the dependence of slot values at one airport upon the availability of slots at other airports.) On the assumption that each participant has the system efficient number of cards the demand functions for flags are on Figure 32.

The supplies of cards were 10, 9, 9 for blue, pink, and green respectively. The corresponding supplies of flags were 10, 11, 11 respectively. As shown on the figure these should be allocated to those participants with the highest values.

Allocation of cards and flags was done twice through markets and twice through committees using the same pool of subjects. In the text we fully report the results of only one of the markets because a clerical error resulted in the sale of three extra flags in the other market. As a result the data are not readily comparable. The overall efficiencies are comparable however and are almost identical (as are all other aspects after the proper adjustments are made). The data from the second market are in Appendix E.

Generally the results are consistent with all the discussions above. Market prices are dictated by the least profitable units. The model predicted prices of \$4.79, \$4.37, \$4.36 for different colored cards and the actual average prices were \$4.61, \$4.43, \$4.50 respectively.

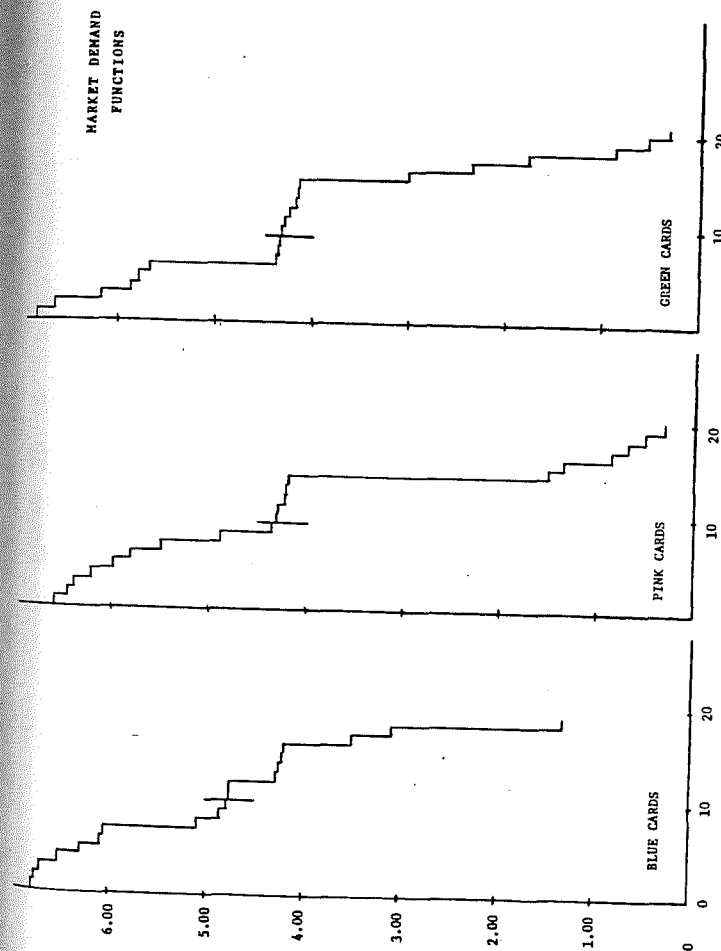


Figure 31

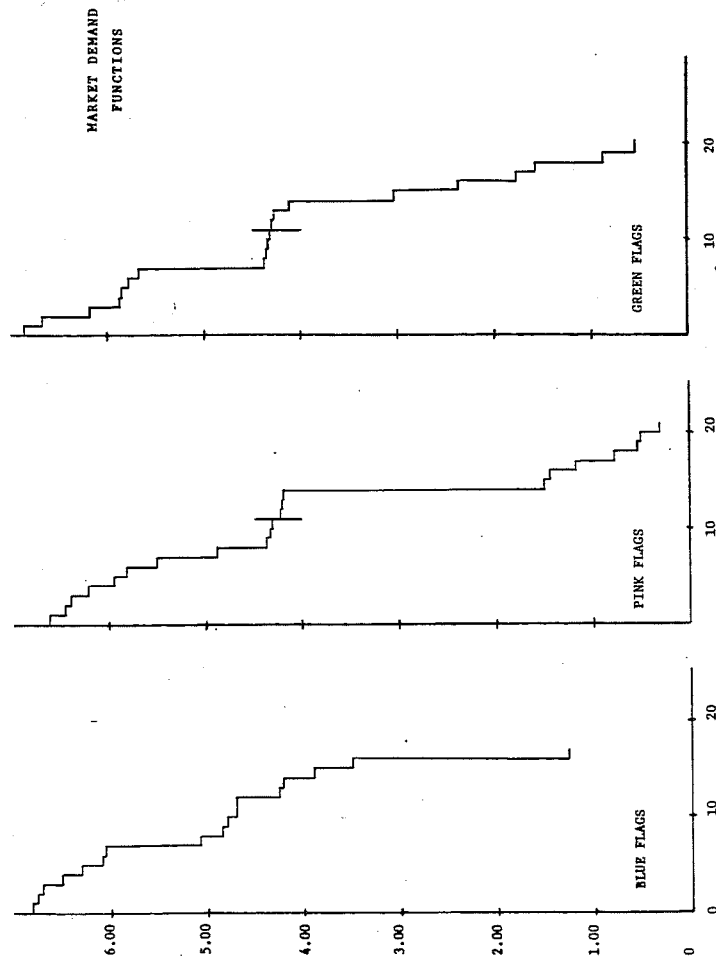


Figure 32

For flags the predictions were \$4.79, \$4.32, \$4.34 and the actual averages were respectively \$4.73, \$4.05, \$4.30. The number of slots obtained by each individual was that dictated by economic efficiency. The historical allocation was irrelevant as those who should expand did so and those who should contract got smaller. In committees on the other hand the default values essentially determine the results with large and medium-sized participants' experiencing no expansion and entrants receiving only a minimal number of slots. The pattern was consistent with all other experience and theories about how such committees operate.

The committee process managed to extract many of the gains from exchanging away from the unprofitable distributions which existed with the initial allocations. Again these results are consistent with those reported above for groups that do not default. The work of "third parties" on bilateral negotiations was evident. In order to see this improvement here, we need only compare the efficiency of default for the two committees which is 71.4 percent and 25.8 percent, respectively with the efficiency of the final resolutions which is 82.4 percent on the first committee and 84.9 percent on the second reported committee.

The comparative results are on Table 16. From a system efficiency point of view the markets were 99.5 percent of maximum efficiency. The differences lie primarily in the inability of the committee process to deal with system interdependencies and the relative efficiency of adjustment of slots among different participants.

The system problem can also be seen with the data on Table 16. The value of flags depends critically upon the number of cards obtained.

TABLE 16
COMPARISON OF TWO ALLOCATION PROCEDURES
WITH IDENTICAL ECONOMIC PARAMETERS

	Unanimity Committees*		Market Process**	
	Exp. 23	Exp. 24	No. 2	No. 1
Efficiency	82.4%	84.9%	99.5%	98.2%
Number of Persons on Wrong Flag Chart	8	8	2	2

Schedule Number	Efficient Allocation		Unanimity Committees *				Market Process**			
	Cards	Flags	Exp. 23 Cards	Exp. 23 Flags	Exp. 24 Cards	Exp. 24 Flags	No. 2 Cards	No. 2 Flags	No. 1	
1	1	3	2	1	2	1	1	3		
2	0	1	3	1	2	1	0	1		
3	0	8	3	6	3	5	0	6		
4	2	5	1	3	2	4	2	4		
5	3	7	1	3	1	3	3	8		
6	1	0	1	3	1	3	1	0		
7	1	1	1	2	1	2	1	1		
8	7	4	5	1	5	2	7	5		
9	0	0	1	3	1	3	1	0		
10	3	0	1	1	2	1	3	0		
11	0	0	1	5	1	4	0	1		
12	4	1	4	1	3	1	3	1		
13	6	0	1	1	2	1	6	0		
14	0	2	3	1	2	1	0	2		
Total	28	32	28	32	28	32	28	32		

* These two committees operated with a rule in which default meant that payments were based on the initial allocation. In experiment 23, the initial allocation was Pareto optimal with respect to "sliding"; that is, no two persons could exchange slots in their initial allocation and both be better off. In experiment 24, Pareto optimality did not hold for the initial allocation.

** This process consisted of six competitive auctions (one for cards and flags of each color) followed by six secondary markets. In process no. 1, an administrative error resulted in 35 rather than 32 flags being sold. The efficiency results are corrected for this error.

In both of the committees eight out of fourteen committee members received a number of cards which placed them on the "wrong" flag payoff chart. (In practice, the participants used one of two "flag" payoff charts depending on the number of "cards" received. Table 16 exhibits the number of persons whose "card" outcome put them on the "wrong" or system inefficient flag chart.) For the markets the total number of "errors" was only two.

As can be seen, markets allocate slots almost perfectly. The committee choices are not governed by the economics; they are controlled almost entirely by the consequences of default. Those with large and medium-sized initial endowments who should expand do not and those who should contract substantially do so only marginally. Entrants who should get many slots get only a few and those who should get none also get a few.

Summary

On all economic criteria the committee process is inferior to the recommended process. From the carrier point of view, however, the committee process might be preferable. A resource which they have been receiving free would become costly under the recommended process. Even though this cost would ultimately be passed along to the users of carrier services, no doubt the adjustment period could involve some lowering of profits. Carriers which perceive themselves as having a strong political base may also prefer the committee process as might carriers who perceive themselves as being marginal (from a cost point of view) within the industry.

On the other hand large and medium-sized companies will have very little opportunity for expansion under committees. Entrants have little chance of growing beyond the low or medium-sized range. Furthermore the committee process affords no natural pressures for the expansion of airport capacity as does the recommended alternative. So, the recommended process may not be totally without carrier support.

CHAPTER VIII

COMMENTS ON ALTERNATIVE CLASSES OF PROCESSES

VIII. COMMENTS ON ALTERNATIVE CLASSES OF PROCESSES

Aside from the problem of small communities which requires special treatment regardless of the process, there are only two key considerations involved with the evaluation. The other aspects of efficiency follow from these. Slots must go to their most economical use and the funds should be used to relax capacity constraints.

Landing fees if properly administered would satisfy both broad criteria. In fact if landing fees were properly administered, the resulting price pattern and allocation would be almost exactly the same as that of the recommended process above. From an economic's point of view the problem is formally identical to the peak-load and capacity-charges problem found in electricity generation.

In practice, however, landing fees have not been administered to reflect demands and uses of capacity. There seems to be two reasons. First, the politics of the fee-setting process results in fees that are too low. If fees were properly set, they would be sufficiently high to discourage some users and bring the demand for capacity in line with existing supplies.¹ The funds generated by the fees would be used to expand capacity to the point of demand and supply balance. We are unaware of a single airport for which such a fee policy has been implemented.

The second problem is related to airport knowledge about demand. Traditionally airports have not been aggressively engaged in selling slots (a slot fee) and are unaware of the structure of demand. The auction process precludes the necessity for developing such a marketing orientation. The proper fee will be automatically set.

1. In the final period of the market represented on Table 12 an optimum fee was imposed. The resulting volume was exactly that predicted to the competitive model and identical to that of the sealed-bid auction.

The first basic tenet of efficiency will be met in part by almost any primary process for allocating slots as long as there is an effective secondary process. If landing fees are set too low, for example, there is a problem similar to the existing allocation problem of allocation among those who wish to purchase at the low price. If those who successfully acquire slots can then resell them in a properly organized secondary market, the slots will ultimately find their way into the proper hands.

The basic problems with a policy of low fees with an aftermarket are similar to the problems with other alternatives. There are three different problems. The first is the obvious problem involving transactions costs and middlemen. If the slots were initially sold to the ultimate recipients, some costs of resale could be saved. If they are not, then every intervening party takes a profit cut which can discourage marginal final users. The second problem is also related to the fact that the initial recipients of slots can obtain a profit upon resale. This profit amounts to a rent which is capitalized in the value of the original company. Such rents can serve to attract firms to the industry and retain firms within the industry that should not be there. The final problem is perhaps the most serious. The value of a slot derives from capacity resource scarcity but the funds generated by slots are not applied to increase the capacity.

The same mode of reasoning applies to several other allocation methods. A "grandfather" policy with resale possibilities is economically similar to a policy of very low fees coupled with an airport allocation method based upon historical shares. Without an aftermarket neither

policy would capture efficiencies due to differing carrier capabilities. With an aftermarket efficiency would be increased but the funds would not be used to promote capacity expansion. There is an additional problem here in that the grandfathering of slots would institutionalize the potential control that certain carriers might have over a market. The basic set of carriers might remain unchanged for long periods. Many widely accepted theories maintain that this type of arrangement can induce a "parallelism of auction" inconsistent with the operations of a competitive market. By refusing to sell their slots the firms could ensure themselves against any entrants whose presence might not be conducive to cooperative behavior.

Some criticisms of the low landing-fees option apply equally to lotteries. The funds will not be available for capacity expansion. Rents from slots may encourage the entry of inefficient firms. Those eligible for a lottery must be well defined and the definition itself should not prevent entry. The aftermarket from a lottery will probably be "uneven." A check of periods 14 through 18 on Figure 26 demonstrate the effect (under constant demand conditions) of rotating the endowment of slots among participants. The markets remain efficient but price variance increases substantially.² Lotteries do have one advantage over low landing fees and grandfathering. Entrants have substantial opportunity with the lottery. There is little possibility that a few firms could use slots to insulate and protect a collusive arrangement.

The final institutions examined were various types of auctions.

2. The problem is probably because of the variance of seller strategies and the inability of buyers and sellers to separate underlying parametric changes (which would affect their own decision rules) from "noise." As a result price equilibrium is much slower if it exists at all.

Oral auctions (such as the commodities market) were viewed as too costly. If slot "packages" (consisting of a right to conduct an operation during specified days for a six-month period) were auctioned, an oral auction for all periods could be conducted simultaneously for a day or so. This would reduce the cost considerably. In general, however, oral auctions can "expose" the buyers to high prices in a way the airlines fear.³ Since no advantages of these auctions over sealed-bid auctions were visible and some disadvantages seemed to emerge, this line of investigation was not pursued.

The recommended auction is a sealed-bid, one-price auction. An alternative institution (used by the United States Treasury) is the discriminative auction. The mechanics are the same except that in the discriminative case each accepted bid is accepted at a price equal to the bid itself as opposed to the lowest accepted bid. Thus, if a carrier bids high in order to assure a slot for a profitable flight, it pays a higher price.

Bidding strategy with this institution is considerably more complicated than with the one-price auction. Carriers would have an incentive to bid at a rate lower than the value of the slot. Whether or not this strategy results in higher payments on average than would have been the case with the one-price auction depends upon the elasticity of demand for slots and the degree of stability of demand.

As inelasticity of demand and uncertainty about the state of market demand increase, the revenues (average price) generated from the discriminative auction increase relative to the one-price auction.

3. See the discussion that follows and the discussion in the summary chapter.

Under very stable conditions the revenue generated from the discriminative auction approaches that generated by the one-price auction. Figures 33 and 34 illustrate the behavior of the discriminative auction relative to a one-price auction. The actual market demands are on Figure 33 and the results of some controlled environment markets in which these demands existed are on Figure 34. As was demonstrated above the price in the one-price auction is almost always equal to the competitive equilibrium price. This price is designated as the "equilibrium" price. It changes from period to period in response to demand shifts (Figure 34). The average price which resulted from the discriminative auction is designated by the curve P_d . As is shown there the average price (and thus total receipts) in the discriminative auction are almost always greater in the discriminative auction. For demand curves with these shapes (compare with the figures in Chapter IX) this will almost always be the case. In addition the discriminative auction tends to be a little less efficient. Since the discriminative auction results in different prices for different routes, it might also have more subtle inefficiencies which stem from this source in addition to those which result from the market operations alone. Because of these efficiency questions and because of the continuity of the one-price auction into the negative auction case, the research was not centered on the discriminative institutions.

Summary

The other options listed in this section all seem to have several disadvantages. Optimally set landing fees with resale rights would have the

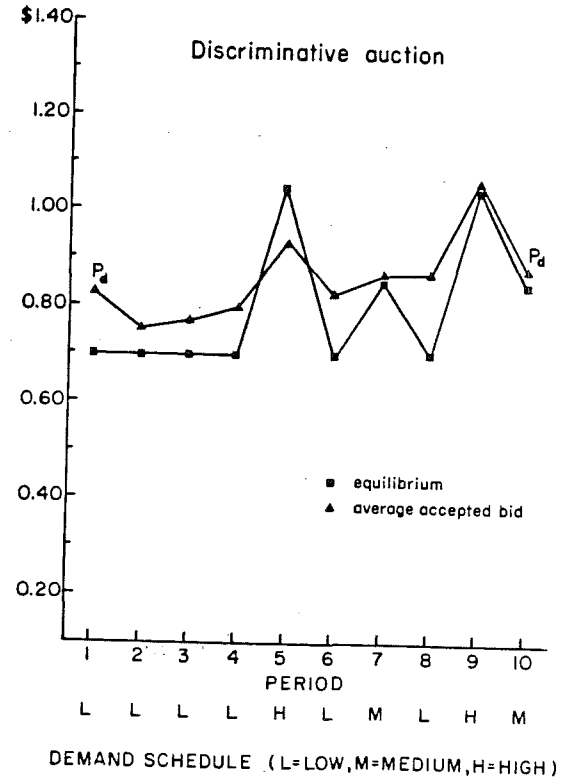
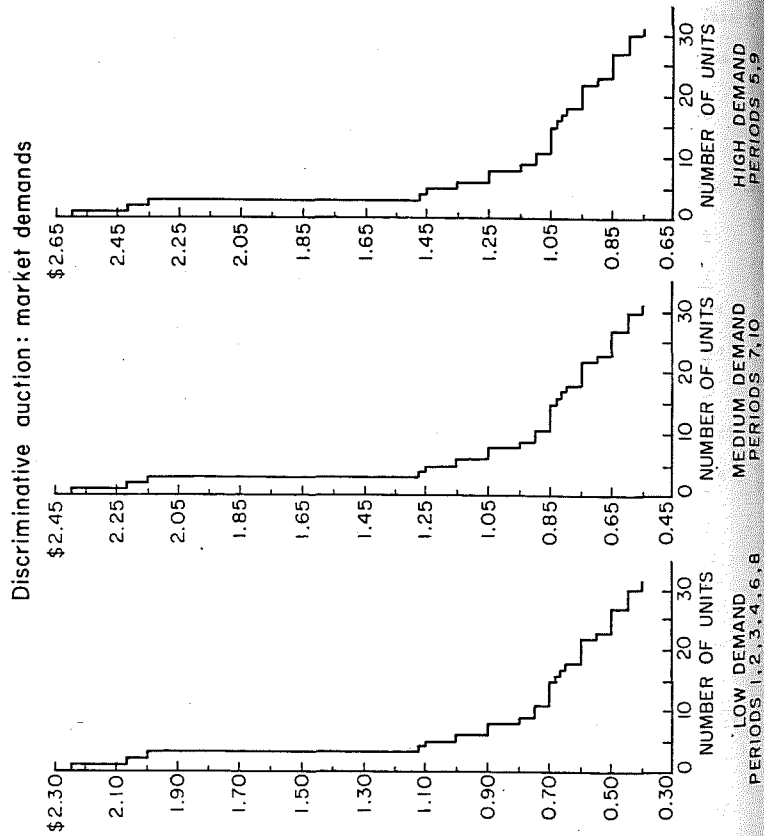


Figure 34

requisite properties but the best way to set the fees would be by auction. Among the other nonauction options, the lottery with, say, a computerized aftermarket would have the fewest problems. But such a policy does have shortcomings as outlined above.

CHAPTER IX

SPECIAL PROBLEMS AND CONSIDERATIONS

IX. SPECIAL PROBLEMS AND CONSIDERATIONS

In the course of the study several questions have surfaced that are not addressed elsewhere. These are listed here and are answered to the extent that answers are currently available.

A. What Will Be the Price of a Slot?

Considerable speculation exists about the potential price of a slot. Frequently the speculation is based upon assumptions about the market organization which differ substantially from that proposed here. Consider the following quote taken from the trade press:

With all due respect to the virtues of the marketplace, it was never designed to deal with something like an airport slot; i.e. a scarce resource, of a critically essential nature and available only from a single source of supply. Considering that \$20-million vehicles can be useless without access to the right airport at the right time, the bidding for airport slots could be driven to ridiculous extremes.¹

The concerns expressed in this quote might be justified if the auction were a discriminative sealed-bid auction (see the discussion in Chapter VIII), or perhaps a unit by unit oral Dutch auction. Or, the concerns might be justified if no controls existed on the use of funds, so those receiving the funds might be free to behave as monopolists and further restrict capacity. However, the process recommended above behaves entirely differently as is easily demonstrable. In fact, the institutions were designed specifically to avoid these problems and several others which could result from an inappropriately organized market.

If the one-price, sealed-bid auction is used the price will be closely approximated by the average profitability of the least

1. Melvin A. Brenner, "De-Regulation Creates Airport Crunch," Airline Executive, (June, 1979): 22-23.

profitable flights that are currently being maintained voluntarily by carriers. While estimating the value of a slot goes well beyond the scope of this study, calculations were made based upon data supplied by the Financial and Cost Analysis Division, Office of Economic Analysis of the Civil Aeronautics Board. These estimates should be treated with extreme caution as they are based upon assumptions about (1) the allocation of joint costs, (2) the alternative opportunities for an airplane day, (3) the shift in demand as a result of airline deregulation, and (4) the nature of the inefficiencies generated by the slot committee allocation process. A more detailed description of the data is in Appendix G.

Since most fears seem to be that the price of slots will be "too high" we chose to make liberal assumptions about profits with a clear upward bias so we could obtain an "upper bound" on the likely price resulting from a one-price auction. A peak hour (1700-1759) was chosen for August (a peak month) and for February (an offpeak month). If the data were taken without adjustment, the price of slots would be zero. Marginal flights are not profitable even with the very charitable calculations. We suspect that this reflects in large part the inefficiency of the committee process. If we assume that a demand shift (as a result of deregulation and open entry) involves a 100 percent (50 percent) increase, then the August slot price would be less than \$1126 (\$650) and the February slot price would be less than \$639 (\$322) according to this model. Calculations were made using conservative profit estimates. These are shown on Figures 35 and 36 along with the more liberal profitability derivations. The lower bound estimates are \$361 and \$238

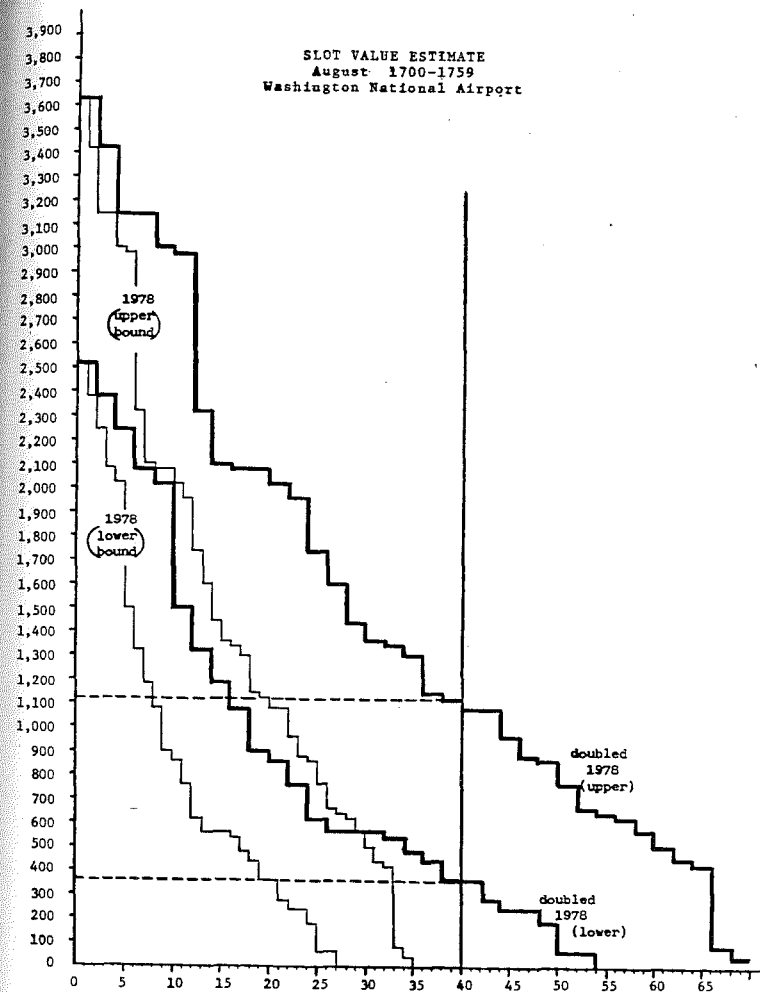


Figure 35

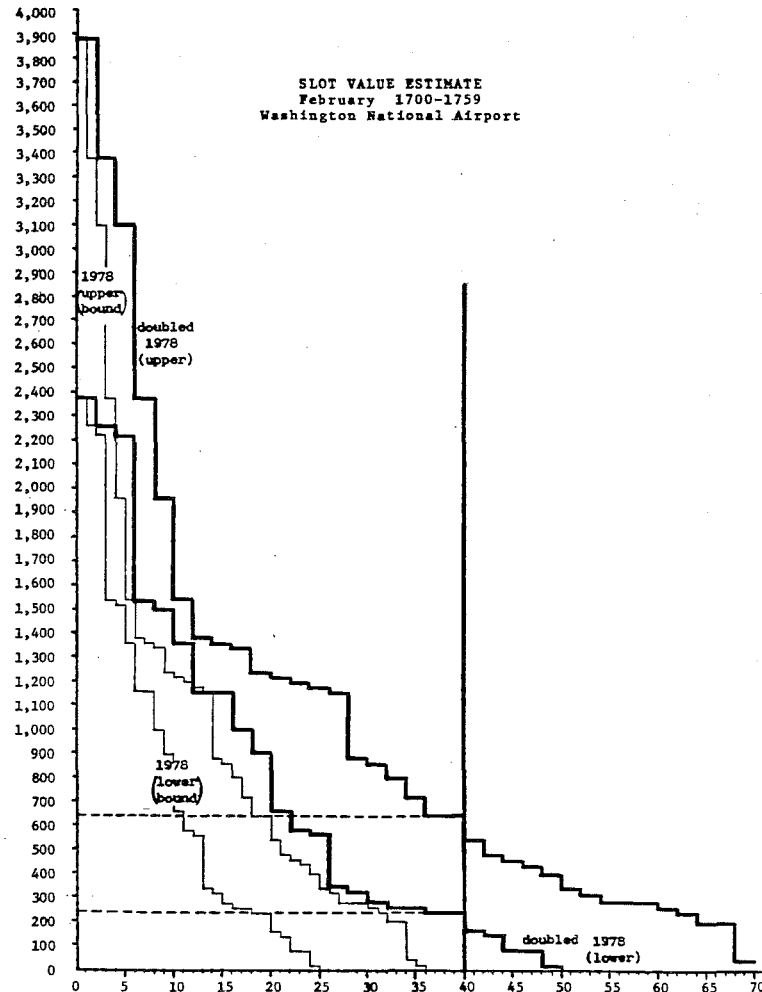


Figure 36

respectively.² Translated into passenger fares these figures imply peak period increases of \$10.50 per passenger for the highest estimates and \$5 to \$7 increases for the lower estimates.

If there are no subsidies and if all slot funds are diverted to capacity increase, then the price of a slot should ultimately grow to the marginal capacity cost for capacity expansion. While we know of no estimates, we suspect the number will vary widely among airports depending upon the nature of constraints which limit capacity.

B. Uncertainty

If slots are to be sold a new dimension of uncertainty is injected into the system which replaces some old uncertainties. Will there be uncertainty about the price of a slot and what will be its effects?

No doubt there will be some variability in the value of slots. In fact the value of slots should mirror the demand and supply conditions for air transportation. When profits are high (demand for air transport is high and/or costs are low), the price of slots will be higher than otherwise. This might have implications for both airlines and airports.

The implications for airlines are minimal. These firms are accustomed to dealing with uncertainties of resource prices. The slot value is no different. Besides, from all indications the cost will be small relative to other costs of operation. In any case they can clearly estimate slot prices if they can estimate competitors' profits.

2. The difference between the upper bound estimates and the lower bound estimates provide some margin for errors about profitability calculations.

The profits of the least profitable flight will determine slot prices.

For airports the uncertainty is a slightly different matter. The sale of slots might well mean that airports will ultimately alter their methods of finance somewhat. To the extent however that current airport financing is tied to carrier profits, the uncertainty aspect should be no greater than that which exists now. If carrier economic positions are stable, the slot price and the revenues generated by each carrier source will be stable for the airport. If carrier profits go up so will revenues thereby signaling the airport that capacity expansion may be necessary. Falling slot revenues may well mean that some of the existing capacity should be retired. The point is that while uncertainty may be a nuisance the swings can be an important indicator for what airport policy should be. In this respect airports seem to be no different from any other industry.

C. Mixed System: Markets and Other Methods

What might be the consequences of markets at some airports and committees or first come, first serve at others? The mix of systems causes no problems. If slot prices are high at one airport, some flights will be diverted from airports controlled by committees when the airport is at capacity. Or, some flights will be diverted from "first come, first serve" because of the cost of delay when the system is at capacity. The cost of delay is analogous to the cost of a slot. Delay costs, like slot values, are zero when there is excess capacity. The major difference is that the slot values can be used to increase capacity while costs due to delay are lost.

The point is that a system which mixes markets at some airports and alternative allocation methods at other airports can function without some type of fundamental fault. The mix of systems causes no independent problems.

CHAPTER X

SUMMARY AND CONCLUSIONS

X. SUMMARY AND CONCLUSIONS

Having studied the slot committees and a variety of other processes for allocating slots we recommend a process with the following features:

- a primary market for slots organized as a sealed-bid, one-price auction,
- a computerized aftermarket with "block transaction" capabilities and an "open book."
- special provisions for small communities,
- special provisions for changes in the definition of a "slot,"
- provisions requiring that the funds be used for expanding airport capacity,
- the possibility of "negative bids" for off-peak periods at airports for which a "zero-sum" feature is appropriate,
- sanctions to prevent the "non use" and/or monopolization of slots,
- a gradual introduction.

The process is fair, efficient in every dimension, and generally meets the goals of the Airline Deregulation Act of 1978.

The existing slot committee process is well suited for airports which have no major capacity constraint. However, experience at existing slotted airports (notably O'Hare and National), and experience with committees operating in a controlled environment suggest that the reliance on slot committees in the future will foster many undesirable tendencies.

The committee decisions will always be heavily influenced by the consequences of a committee default. Within the current regulatory

climate this means that large and medium-sized carriers cannot expand. Entrants will get in but entry and growth will be unrelated to carrier efficiency. What will be the state of future political environments is more difficult to say. If, however, carriers were ever assured that a committee default would result in an allocation strongly based on historical shares, then the committees would become an effective barrier to entry and new competition. In addition to the problem of entry and growth the committees provide a possible forum for the forging and enforcement of anticompetitive agreements.

As the system grows the committees will have two further defects. First, the committees allocating process provides no funds for capacity expansion as do certain market processes. Secondly, the committee processes are incapable of efficiently anticipating the interdependencies which are inherent in a complicated system of inter-related airports. From a "systems" point of view the committees are inefficient and will result in higher prices to the airline customers.

In comparison the proposed market process is an improvement over the committee process in every economic dimension. If the recommended process is not implemented, then we suggest a lottery with an aftermarket. This option seems inferior to the recommended process but it is preferred to the committee process in almost all economic dimensions.

ALTERNATIVE METHODS OF ALLOCATING AIRPORT SLOTS: PERFORMANCE AND EVALUATION

APPENDICES

David M. Grether
R. Mark Isaac
Charles R. Plott

APPENDIX A

NOTES ON TREASURY AUCTIONS

APPENDIX A: NOTES ON TREASURY AUCTIONS

There already exists a functioning, nationwide auction process: the securities auctions of the U.S. Treasury. There are certain aspects of the mechanics of this process which are discussed in this appendix because they can provide some insight as to how slot auctions could be operated.

First, it is possible to develop a regular schedule of periodic auctions which participants find comfortable. The Treasury Department formally announces each auction; however, the weekly cycle of the Treasury bill offerings is an historical pattern to which the financial markets have easily adapted.

Secondly, it is not necessary for the entity offering commodities for sale actually to conduct the auction. The mechanics of U.S. securities auctions are handled by the Federal Reserve System as the agent for the U.S. Treasury (which has final rights in making the awards).

Thirdly, bids may be placed at points widely dispersed from the central point of sale of the commodities. In the Treasury auctions, bids may be placed not only in Washington but also at more than thirty locations (Federal Reserve banks and branches) throughout the country.

In any allocation process, one might expect to have to address the problem of potential noncompetitive behavior by participants. The U.S. Treasury has no special delegated antitrust authority. It would rely on the existing antitrust statutes and enforcement

agencies if necessary to confront potentially collusive behavior. (However, the Treasury has recently modified its regulations so as to limit to 25 percent the amount of any public offering awarded to a single buyer.)

Finally, however, there is one potential problem, breach of purchase by a winning bidder, which is addressed by the Treasury in a manner which may or may not be applicable to slot auctions. The institution used by the Treasury is naturally suited to the role of the Federal Reserve as auction agent: ordinary bidders are required to place a deposit on bids. However, the deposits are waived for banks, recognized securities dealers, or persons whose bids are guaranteed by a bank. This is a rather natural approach, as the guarantors, incorporated banks, are members of and/or have extensive dealings with the auction agent (the Federal Reserve).

APPENDIX B

TRANSCRIPT OF SLOT COMMITTEE, APRIL 1979

MEMORANDUM

To: Ruth Bell and Charlie Plott

From: Ira Leibowitz

Subject: AIR CARRIER DCA SLOT MEETING, APRIL 17-19, 1979

The scheduling committee meeting to distribute slots at Washington's National Airport began at 1:30 PM April 17 at the headquarters of the Air Transport Association, 1709 New York Avenue, Washington, DC. It lasted until 6:00 PM that day. The next day it reconvened at the Sheraton Hotel in Reston, Va. at 8:30 AM, lasting until 5:40 PM. The following day, April 19, it again convened at the Sheraton, and finally broke up at 3:40 PM. Present were Nestor Pylpec, Chairman of the Airline Scheduling Committees; Walter S. Coleman, Director of the Airline Reservation Center; George Lapham, General Counsel of the ATA; Maggie Crittenden, an employee of the Reservation Center; representatives of every carrier serving or allowed to serve DCA except United and Federal Express; and representatives of the Department of Justice, the FAA, and myself representing the Board.

I attempted to transcribe verbatim the discussion that took place over these three days. I believe I was largely successful. However, I did miss portions of the session when the pace of the give-and-take was beyond my capacity to take notes. This tended to happen when debate heated up and charges and countercharges were exchanged. In addition, this transcription cannot account for the tone and tenor of the discussions, the pauses and silences (often lengthy), and the whispered side discussions and working lunches where options were explored and where many of the deals were apparently hammered out. What I give you is the best recording I could make of what I directly observed.

Ira Leibowitz
Attorney
Competition and Maintenance Division

Attachment

Pylpec:

This is a special meeting of the Washington Scheduling Committee. I see some new faces. The Executive Vice President and the President and Chief Executive Officer of ATA are in back of the room.

Lapham:

I would like to discuss some irrelevant things. This is a special meeting, held because of the new authorizations to Washington which came about at the close of the last joint meeting. Several new carriers have come in. Their submissions are formidable. We took it upon ourselves to explore with the FAA the possibility of interim relief. Those who attended the joint meeting recall the discussion regarding the changing of rules. It's those discussions which are irrelevant. We've met with the FAA and told them of the substantial burden we bear. We explored suggestions, especially in light of the O'Hare situation. We asked them, "Would you be susceptible to granting interim relief?" We stressed 'interim', pending final resolution of the issues. Carriers operating small equipment -- would they consent to an Air Wisconsin-type of exemption, we asked. An exemption was granted them for three meetings lasting 18 months -- giving them an air taxi exemption -- they would take their chances in air taxi, and air carrier quotas. Air Wisconsin came into the O'Hare meeting on the third or fourth day, and after creating quite a stir at the outset. We asked the FAA for an exemption for the others. We got a resounding "no." This is because air taxis now stand on line for quotas -- there has been pressure from powerful Senators to do something about it. FAA wouldn't hear of an Air Wisconsin-type of exemption at DCA. We suggested transfer on a short-term basis of slots from the general aviation category -- we also got a resounding no. Reference was then made to the FAA policy statement on DCA.

We then asked for a raise in the air taxi slot allocation from 8 to 12, coupled with an Air Wisconsin-type of exemption, but we got no better answer. FAA said they would have extreme difficulties raising the capacity of DCA, when they're on record as favoring reducing it. Adding into it the environmental impact statement required, the interim relief sought could not be granted.

We discussed the FAA memo to DOT which was the subject of the Daily story. ATA participated in those meetings. We asked if there was anything behind the story. We were told yes, and that the policy stated is true and a "deeply held" view of the Administration, and on a very tight timetable. They would call for a Notice of Proposed Rulemaking in a month, contemplating a final rule by September 1. Every effort will be made to adhere to this timetable.

I fear the FAA would assign slots on an arbitrary basis, which no one would agree with, if the meeting here doesn't solve the question. But it will be difficult. FAA will retain the quota for now, and accept planes on a first-come, first-serve basis. But if the plane doesn't come in within the slot time, we have been warned that it would have to go somewhere else. I couldn't believe my ears. We must use our best efforts voluntarily to adjust operations so that the totals won't exceed FAA rules. It's worked because of good will, it must work in the face of adversities facing us. The CAB forbids us to discuss markets, origins and destinations, anything of that kind.

No one owns any slots at DCA -- anyone may request as many as they wish. No one may be made to cancel or glide a slot.

Coleman: United Airlines couldn't come, Federal Express is not here either, probably because they don't want slots until September, and then at 7. We're meeting in the Sheraton Reston tomorrow, 8:30.

The May sheet doesn't look too bad. These are our final pre-meeting numbers.

Pylypec: New members, are there any questions -- WA?

WA: We have authority and fuel, and we've made arrangements for handling. We've asked for 4 -- 3 present various problems. We look forward to a successful meeting.

UR[Empire]: We've operated at DCA since March 15, with assigned slots. We want 4, which seems to be the minimum. We are willing to take one at 7; the others seem to be popular.

NB[New Haven]:

We have nothing to say.

AK[ALTAIR]:

We hold 6 slots as a commuter. We're expanding -- we require slots at prime hours. We appreciate being here -- we will cooperate in the difficulties we recognize exist.

PI:

Chuck Vesper of NC is a new face in the Washington Scheduling Committee group.

NC:

We have four, and don't expect to need more. We're starting June 25, not June 7.

NA:

As a member of the Executive Committee (and not as National Airlines) I don't see the meeting being resolved today. For the first timers -- you might hear name-calling, argument -- but it's not personal. Call each other by your airline names. You'll be exasperated, bored, you'll threaten to walk out, but we'll meet the quota, because a lot of people hope we don't.

EA:

I hope the new carriers know what problems we face -- that what we leave with isn't what we come in with.

Pylypec:

The way to make it work is by action, not words. The Committee has worked -- situations look hopeless at times, but dedication, the necessity of it work it out. It must be a joint undertaking, not one or a group.

AK:

I'm new, and I'll see how it goes.

TW:

We've been at DCA for quite a few years; we've picked up 4, usually at 7 or 22. So carriers who are new may not be able to get what they want at this meeting. There will have to be a compromise.

PI:

I'm concerned about the summer traffic.

DL,BN,NW:

No comment.

Pylypec:

The federal agencies which are represented here -- speak up. You'll be recognized, Ask questions.

Coleman: [During a wide projector to show 29 April - 31 May chart] These totals are the least unattractive. There is room here for all slots to move into open hours. July is rough -- if we solve it, April and May will fall into line. July is identical to August, September, and October.

Pylypec: Let's start with July -- that's a major problem. Let's solicit some deletions. That's the only way it'll work itself out.

NA: We need 22 deletions between 7-22.

Pylypec: That's a lot, but it's what it's going to take.

AL: For the period 29 April - 31 May, we're using 4 slots at 21, not 5 as shown. From June 15 on, we're requesting an additional slot at 16 and 17 -- former 4 to 5, 17 6 to 7.

Pylypec: Allegheny, this is not good news.

Coleman: It's only fair to say -- Allegheny went from 84 at the end of the last pre-meeting -- then 78 upon our request, then 80, now 82. So actually they're minus 2.

We now need 24 deletions.

NB: We'd be amenable to dropping 9 to 8 for 29 April - 31 May. There's a correction made.

NA: We'll drop one at 17 for the season. At 19 (this will screw up the works), we can drop one 29 April through June 7. 18 I can't help ... Make that 19 for all season, Mr. Chairman.

Pylypec: Thank you very much, Bill. That's what it's going to take. I hope we can keep up the momentum.

NB: We'd also be willing to move an 18 slot to a 16 slot, starting with 29 April -- daily all season. For the first one we should have said daily all season too.

Pylypec: EA?

EA: Nothing right now, but we will.

Pylypec:

I know you will.

NA:

I have another. 7 take out. [Brings it from 40 to 39]

Pylypec:

Thank you very much, NA.

Coleman:

As a result of NA's move, this is what May looks like [Projects month on screen -- only 1800 hour has over 40, and it has 41]

Pylypec:

WA, are your figures correct for May for 18?

WA:

We have no submissions for May. We don't start until June 15.

Pylypec:

So May is cleared.

Coleman:

If we could do a month an hour we'd be all right.

QH [Air Florida] [to WA] -- you're starting June 15.

WA:

Yes.

UR:

I'm willing to trade a 19 for a 21 in May.

Coleman:

May is resolved. Everyone has what they want. NA will take it for 21 and 2 draft choices.

NA:

We can do it. I want to release it through June 7. Talk to you [UR] later.

Coleman:

We'll move 19 to 21 in May, UR.

UR:

O.K.

AK:

We'll move 16 to 15, June 1 --

Coleman: AK'll move 16 to 15, June 1 through the season.

EA:

We'll drop one for season -- 7 -- plus one at 11 -- both for season.

Pylypec:

EA drops 7 and 11, one slot, for season.

AK:

We'll take 7, surrender at 8 -- starting June 1.

Coleman:

That's the start of your season, June 1?

AK: We'll take 7, surrender at 8 -- starting June 1.

Coleman: That's the start of your season, June 1?

AK: That's correct.

AA: We'd like to take one at 7, minus one at 10, June 1 through the season.

NA: When you finish that I'll give you [committee] one more.

Crittenden: Then you'll sit back.

NA: Then I'll wait.

Coleman: [Projecting on screen] This is what July looks like.

AA: We don't need 7 from July 1-August 31, Walt.

Pylypec: NA, did you say you had one more?

NA: Yes, minus one at 11, all season.

Pylypec: Thank you again, NA, AA, we have that slot from you. Do you have any deletions?

AA: No deletions.

Pylypec: TW?

TW: Nothing.

AA: For the record, we traditionally had 74, now we have 62, which represents a very substantial reduction for us. Just for the record.

Pylypec: NC?

NC: The carriers at the bottom stick out like a sore thumb. I've noticed that one carrier goes up four slots from July 1 --

Pylypec: Yes, Braniff. BN, any comments?

BN: These are the slots we feel we need.

UR: We're flexible in 18, 19, 20, 21 if anyone wants to trade.

Coleman: We'll remember that.

NA: 18 months have to come off the board. Somebody's got to give them up.

Pylypec: PI, can you offer some help?

PI: We can make a deletion in August, but I thought that would wait until we're down the pike.

Pylypec: QH?

QH: No moves.

Pylypec: NW?

NW: No moves.

Pylypec: DL?

DL: I don't have anything.

EA: Can I ask Walt if he has the number of deletions by carrier, over, say, the last couple of years?

Coleman: I haven't got it, but I can get it.

EA: We've released 7, 22, a couple of others maybe. The same carriers year after year release slots, and don't use them. You need a deletion, not slides or moves. We did it at Chicago for 4 meetings. It just becomes ridiculous -- no matter what the situation is with new routes. I don't believe a NB or an AK can come in and ask for 6 or 8 slots.

NB: You have the most to lose. You have 26.9% of all the slots.

EA: I don't lose, the industry loses.

NB: You haven't given up anything.

EAL: BN, is trying to go up. This fellow has been here for years. AL has gone down.

NB: AL has gone up by 2.

Coleman: Now I explained that.

Pylypec: Carriers want certain slots at certain hours and knowing they won't get it. You have to have flexibility. That's what EA is saying. Nothing is cast in concrete. WA?

WA: We're all disadvantaged by the fact that a carrier with many slots can't be here to see if they can make changes. We should contact them by phone or get a substitute.

Pylypec: This is normal procedure, thanks for reminding me. Often an absentee has come to the rescue. If we need to we'll get in touch. We all understand their situation.

[Break]

Pylypec: It's been stated many times, but I'll say it again. We need deletions, plenty of them. We've had some good examples of flexibility -- granted, you can't get everything, but if you want something, you've got to move. This is not directed at anyone in particular, but to the committee as a whole.

Pylypec: BN, are you prepared to offer us a reduction?

BN: A reduction? Sorry, don't have any.

Pylypec: We have 2 deletions from NA at 11 -- daily, all seasons, for a total of 3, down to 3 [From 40 to 38].

NA: That's a total of 8 deletions for the day from all carriers. NA has made 6, EA two.

AA: AA has made one from part of the season.

NA: I didn't know that. I don't have it listed. I know damn well that EA and NA aren't the only ones dropping slots at DCA for months.

Pylypec: EA has a deletion, minus one at 12, daily all season [42 to 41]. That's 9 deletions now.

NA: Only 15 more to go.

Pylypec: We're going to need lots more help.

Pylypec: AK, can you offer us anything?

AK: Not right now. We'd like to be flexible. If it would open the floodgates, we'd have to let go of two slots, but that would be 25% of our request. If it would help, I'd recommend it to my client but I doubt even as a first-time observer that it would.

Pylypec: BN?

BN: We have nothing.

Pylypec: NB?

NB: No. We're looking at numbers like 144 and 72, which represent 23% and 11% respectively. All we want is six.

Pylypec: Yes, I sympathize, but every little bit helps. If anyone can do it without totally messing up their operations, we need it.

EA: Does anyone know the cost of slots? We pay great costs to operate at DCA. We believe that every carrier who wants a slot should have one. But to ask a carrier to move existing service -- this isn't like O'Hare. You're asking a carrier here to move out of Washington. We'll do anything within the realm of sensibility to resolve this meeting. Fairlyland was the second section we haggled over. It was resolved ten years ago.

Pylypec: That's not an issue here.

EA: It seems a shame that we sit here like in Chicago and then we resolve things. Someway we'll resolve it.

Pylypec: That's right.

NB: I could have had 6 or 10 last July without legal or administrative hassles. We have the least to lose -- we're not asking for a whole lot. EA has the most to lose. But we can take the slots they give us.

EA: If you're asking EA to give up 15 slots, you're asking them to go down the tubes.

Lapham: No one has any more rights to slots than another. We wear each other down, that's how we do it. The new -- old distinction is meaningless here. Let's not think in negative terms, that's not why we're here.

WA: What are released slots?

Pylypec: A carrier gets them and doesn't use them, for various reasons.

NC: Carriers release them for a month or a whole season. Some release as many as 12 per month. That's a lot of slots -- hate to see them go to waste. Before O'Hare became as tight as now, carriers had pocket slots, but when it became tighter, they disappeared, and as far as I know they don't have them now. We should smoke them out here.

Lapham: Pocket slots can be an outrageously preemptory indulgence, or something a carrier drops after using its best efforts -- depending on your point of view. It is definitely an evil, but has helped us get over some rough spots. It's been a mixed bag. We're operating a little closer to the wall now than before, though.

Pylypec: We need deletions -- we've gotten 9, need 15 more.

UR: We really need only 11 more, because there is room for 4 by sliding.

Coleman: Actually, UR, we have 19 overages, we can lessen 4 by sliding.

Pylypec: AA, are you about to offer something? You have that optimistic look.

AA: No, just trying to close out my June schedule. I see long nights ahead.

Pylypec: Is there anything you'd like to have flashed on the screen to get this moving, or is there enough information?

Pylypec: Maybe it's time to start some kind of exercise. Over the years this committee has used several moves with success. Anyone have potential moves, depending on someone else's move?

NC: I don't know if it's possible to slide -- to 22, can't get departures, but we'll go from 19 to 20.

AA: If we can get a 20, we'll drop.

NA: Oh, a pocket slot.

AA: No. It will give us flexibility in our schedule.

NA: Anyone have a 20 to give to AA? I want to see what they drop.

AA: There's no way to make changes without a 20.

EA: What will you release?

AA: 13

NC: AA will pick up a 20 and delete a 13. He's not dropping anything.

NA: Either you have a slot to release or not.

AA: We have several moves [dependent on that]. It's complicated.

EA: But if you're deleting a 13 and I give you a 20; it's an even swap. What are you deleting?

AA: 11

EA: Oh, 13 and 11 for 20. I'll move from 20 to 21, from June 7 on.

Pylypec: Any time you're ready, AA.

AA: Add 20, minus 13 -- that leaves us at 62 -- minus 11, and minus 10. Deletions good through Sept. 5. Total is down to 60.

Coleman: So AA dropped 10 and 11 effective June 7 - September 5. Add 20 for the same period.

AA: 13 also, June 7 - September 5.

Crittenden: Plus one 20 is June 7 through the season.

AA: Right. We've dropped two.

Pylypec: Beautiful. Very good.

NA: AA, if you've got another hour where you need a lot, and will give up, I'll give it to you.

AA: No thanks. 60 from 72, gentlemen. If we get some movement like that we'll be home free.

Coleman: 20 over, there's room for 10.

Pylypec: We're making progress -- slowly, but we're making progress. PI, can you be of some help?

PI: There's a possibility of going from a 21 to a 6. I'll let you know in a moment.

DL: I've got some numbers I'd like to read off. Post-meeting January, 1978, BN had 20. Post-meeting June 1978, BN had 20. Ten 22, and after the meeting last summer, BN had 24. Now, with four new carriers BN asks for 4 more, all in overage hours. I don't know whether to say congratulations or shame. I don't intend to let BN get away with this. I've got people who ask me about slots not being used. I explain that it's a voluntary thing, in good will. But it's harder to explain why we don't get any. I can't explain how a carrier can go from 20 to 28.

BN: I'd like to explain to DL regarding picking up pocket slots. BN doesn't apologize for picking up slots others can't use. BN has introduced service to two new cities, and plans for two more. Now if we followed the ratio of other carriers, we'd have 16 new slots, not 8. Maybe the problem arises with carriers introducing new service with higher frequency. Let's look at the usage of slots reserved in February 1979, 620 slots were reserved and 594 operated -- making 26 unused. Of that, BN was successful in using two.

NC: BN is the only carrier serving DCA already and asking for an increase.

BN: Our asking for an increase is just as valid as any to cover an operation to a new route or city. This is to cover an operation to a new route or city. This is to cover an operation or service than other carriers have requested. One more point: the BN increases cover hours that are over -- we've requested one in 18, one in 19 -- currently. BN has only one in each, because by hour, it's fairly constant at the level of two. No peaking as might have been suggested.

WA: When do these slots actually become noticed for release?

Coleman: The procedure, formalized, starts approximately in the middle of the previous month -- usually not enough time to use it as a regularly scheduled operation. When giving them up, all carriers and the reservation center should be notified.

WA: Is it correct that in the last month 20 slots have been released too late to be used by others?

NA: It depends on seasonality.

Coleman: It has been extraordinary lately because of the loss of carrier's equipment.

Lapham: For WA's information, it's not a 'formal' procedure, but customary. You couldn't bring someone to court for violating that practice.

Coleman: I agree with counsel.

PI: Take one out of 21, June 14 daily all season -- one, up at 6.

AA[to me]: You've seen much more movement than you've a right to expect. The computers are asking for too much. At O'Hare, Air Wisconsin asked for 30 slots and settled for five. This is purgatory for me.

[Break]

Pylypec: Let's get some deletions here. AA, any moves you can make?

AA: One more move and I can stay here forever.

Pylypec: AK?

AK: We're looking at some possible changes.

Pylypec: AL?

AL: I was talking to my office. We may have something for you tomorrow.

Pylypec: BN?

BN: BN has no moves.

Pylypec: But you'll be explaining?

BN: Yes, sir.

Pylypec: DL?

DL: I don't have anything.

Pylypec: EA?

EA: Nothing.

Pylypec: NA?

NA: I'm going to look harder than EA or BN. I think EA and NA need some help from some other people. In my case I pulled six out and there's a possibility that I can go a little heavier. I echo DL-- it's difficult to explain reductions to your home office with other carriers (not necessarily newcomers) having increases. We'll try to do more, but we can't carry everything.

Pylypec: NB?

NB: We're looking at possibilities.

Pylypec: PI?

PI: Still looking.

Pylypec: TW?

TW: Possibly some changes for July and August. Trying to tie down for June. No flexibility there. Possibly some sliding possibilities for July and August.

[WA, DL, NW, UR -- nothing]

NA: Delete one at 14, daily all season. When someone else does something, we'll give them its brother.

NA: I'll reduce 3 slots in the morning if the other seven slots can come out of the group. If they don't by 9:30, I'll withdraw the offer.

Coleman: I'll advise UA of this offer.

NA: I have an important engagement Thursday afternoon in Miami and I want to make it.

WA: I want you to make it.

NB: We'd like to help NA, by giving up two slots, on condition of no further changes. We will cancel 12 and 13 one each, but move 16 to 18.

Pylypec: That's a very good offer.

NA: I'd like to see five more offers before we settle in for the night. Then tomorrow we could start with sliding.

Pylypec: We need a few more. Get five more deletions here, we certainly could expedite things. We could be finished by noon tomorrow.

Pylypec: Anybody want to offer on NA's package?

[Adjourned]

Pylypec: [Restates NA's offer] Walter (Coleman) was in touch with UA last night and they're studying the matter.

EA: You can put EA down for one.

Pylypec: Good. Four more.

Pylypec: AA, can you offer us anything?

AA: No.

Pylypec: AL?

AL: Not at this time. We're in a situation where we can't make any contribution. Our schedule is being presented to our officers. There is a possibility this afternoon.

Pylypec: Would that include a deletion?

AL: Yes, sir.

Pylypec: Good, BN?

BN: We cannot offer a deletion. We'll do everything we possibly could in the way of slides.

Pylypec: DL?

DL: Maybe sliding.

Pylypec: EA?

EA: May be able to help out with sliding.

Pylypec: NA?

NA: You want blood?

Pylypec: NC?

NC: Nothing.

Pylypec: PI?

PI: No, I don't have anything.

Pylypec: TW?

TW: No deletions, may possibly be able to help in slides.

NA: Wait, what was UA's position yesterday?

Coleman: They are reworking several schedules, won't be in the office for another half-hour. I said I'd be in contact with around 10:30 our local.

Pylypec: Four to go. Can you be of any help to us?

AA: Who me? No.

Pylypec: Twenty-five minutes and counting. Yes, NC?

NC: This may be considered thoughts while shaving. But I wonder if BN called this meeting to gain more slots.

BN: I can respond to that, but I can't answer it. Who knows.

NA: I wish we could get these four over with so I can get out of here.

WA: Speaking as a newcomer, and seeing how it works, it would have been easy to ask for eight slots and then graciously step down to four. To start operations at an airport and ask for eight slots is rather presumptive. Without picking on anybody -- even to a newcomer. You can see it's a damn tight situation. You can see WA can't do anything because of restrictions on our movement and even if we could we'd wait and see some movement by the newcomers.

Pylypec: We're trying to get in touch with AK. At the moment all the newcomers but AK are down to four.

NA: Did QH come down?

Pylypec: I didn't count them as a newcomer.

NA: That's right. You get two out of AK or somebody and I'll give you the other two.

Pylypec: Yes, sir.

NA: Change that number of NA's from 3 to 5. That's predicated on someone giving up two.

Pylypec: We're trying to do just that.

Coleman: AK said he'd drop three.

NA: I'll take one back.

Coleman: I thought you'd say that. He wants to move one to six. I explained the situation to him. He said if there are any problems he'd send a representative.

Pylypec: With five minutes to go.

Coleman: AK takes one out at 8, one at 15 and one at 16. I'll make his changes too. He's going from 12 to 11, he's going from 19 to 21. 7, 11, 12, 21 and I think he has one at 6 too. Let me go call him and check.

Pylypec: QH, you came just in time. We need a move.

Let's take a five minute break while Walt confirms AK's hours.

Coleman: 6, 7, 11, 12 and 21

Pylypec: We have hours for NB. Minus 12 and minus 13.

Coleman: And as part of the package - they want a 16 and an 18.

EA: I think it was minus one at 16.

Coleman: I'll put it up that way.

Pylypec: NA, are you ready to give us your deletions?

NA: I guess so. Minus one at 10, minus one at 11, minus one at 13, minus one at 15. Those are all daily all season. Minus one at 14 effective June 15. According to my count, my numbers at 0700 read -- total 34, 14 is 3, 15 is 4.

Pylypec: EA, are you ready?

EA: 0700.

AL: Mr. Chairman, AL will slide from 8 to 7 [42 - 41 at 8; 38 - 39 at 7] from June 15 on.

NA: I want to know one thing. Does AK or NA get the magnum of champagne? Mr. Chairman, I've got to call the office -- not about slots. But I'll be back in a few minutes.

Pylypec: Now, it's time to think about sliding.

NA: Actually now we should be one under.

Pylypec: Yes, we are.

NA: Be back in a few minutes.

Pylypec: I trust that everyone's exploring the sliding capability. It's got to go to the left - obviously.

WA: There's a popular song about slippin' and slidin'.

Pylypec: That song originated in this committee.

Coleman: I spoke to NW and UA and I gave them our totals and they're studying them. They're delighted. On a scale of 1 to 10, I'd say 6 or 7.

Pylypec: I trust everyone is studying their schedules to see if they can slide.

BN: 21 to 20, 16 to 15, possible 9 to 8. That's at the bottom of our desirability list.

Coleman: There's no doubt that's the kind of thing we're looking for.

BN: We should get a list from everybody of the kind of changes they could make.

Coleman: And what season?

BN: This would be effective June 1

Coleman: That's the kind of drift we need. We have to flow to the left - that 20 will have to go to the left.

NA: I'll go 21 to 16 -- at least July 1. Wait -- you can make that daily all season.

TW: 20 to 19, July 1 onward.

EA: Walt, effective July 1, 21 to 16.

Coleman: Minus one at 21, plus one at 16.

UR: What was that again?

Coleman [Repeats] And from UR?

UR: Nothing. [21 is now down to 40, 20 to 42; 19 to 41; 16 up to 40; 15 up to 38] Could UR -- this isn't really helpful, it just helps us -- could we shift May and June from 20 to 21?

Coleman: I think I'd prefer to wait to see how the slides work themselves out. They're both over. I think it's OK for May, but not for June. Let's see how this thing works itself out.

UR: O.K.

EA: Walt, effective June 1, turn 18 to 17.

Coleman: Great, June 1 through the season.

EA: If you give you a couple up there, 20 to 16, June 15 through the season. We can also give you a morning one that'll help. Minus one at 8, plus one at 10.

AA: Is that June 14, Bob?

PI: Yes.

Coleman: Only 12, down from 15.

Pylypec: We were making such good progress in my absence here. Let me not inhibit that. Keep it up.

Pylypec: AA, do you have any slides at this time?

AA: No.

Pylypec: BN, do you have anything additional?

BN: Nothing more than I've indicated.

Pylypec: DL?

DL: Nothing

Pylypec: EA?

EA: We got some possibilities that I'm looking at.

NA: What are you waiting for, EA?

EA: I'm looking at making some other changes.

Pylypec: Mr. Noon?

NA: No, sir.

Pylypec: NC, I assume you don't have much.

NC: Not right now - I can go from 19 to 20 but I assume that doesn't help much.

Pylypec: No, PI?

PI: We got some possibilities in the early afternoon hours.

WA: When are our friends from NW and UA going to come?

Coleman: We've contacted them.

Pylypec: TW?

TW: Any change will be in the May or June schedules. But TW isn't going to require all carriers in this room to move over two or three slides. It's going to hurt, it's going to require a little hurt, for all. Carriers have more slots than I do and they're going to have to cooperate. I'm looking at some moves.

Pylypec: UR. Are you exploring any possibilities?

UR: No. We're just asking for four slots.

Pylypec: Are you exploring possibilities?

UR: I don't want to. We've already made a commitment on schedules.

AL: Mr. Chairman, although it won't help the numbers, we'll move from 20 to 16, June 15 through the season.

Pylypec: That's very good, that'll help a lot. WA, I take it you have some problems on these slides.

AL: Mr. Chairman, at this time I'd also like to know if UA and NW could be contacted, and given the latest readings. Maybe they could be of some help.

Coleman: Here's a TW possibility.

TW: Mr. Chairman, minus 19, plus 18. As I say it's a change in our existing schedules. We'll make it, firm when we get some other carriers to make changes, slides.

Coleman: UA has two moves. Minus 19, plus 17, and 15 to 14, June 8 through season.

Coleman: [Showing Chart] These numbers represent the difference from post-meeting. But there were a ton of trades after that (We can produce that too). This includes new carriers, who didn't have anything at post-meeting. TW, your offer is -- still a handsome one but not necessary, in view of UA's move.

EA: Could you tell me how I came out at 2000 hour?

Coleman: Post-meeting? 10

EA: And now?

Crittenden: 8.

EA: If anyone wants me to move 17 or 18 to 20, I'd be willing to do it.

PI: We may have to slide.

Coleman: As EA is suggesting, this isn't a complete picture. We're asking for a drift from 20 to the left.

PI: I wasn't aware of all the changes. I wasn't at the last meeting.

TW: I notice on that previous chart that AL is up 5 at the problem hours. They're one of the fat cats, maybe they can help out.

AL: We've lost a total of four since post-meeting.

TW: I'm talking about the problem hours.

AL: I think the whole chart's a problem.

Pylypec: I trust you're thinking of making moves.

AL: I'll be frank, we won't have any moves until this afternoon. This is a new game, new time.

TW: I wonder if AL has any idea when this information would be available to it.

AL: I'd say no earlier than three this afternoon.

TW: I noticed one of BN's new acquisitions is in the 1800 hour. Maybe they would like to move to 12 o'clock.

AA: Let's compare the chart, excluding new entries, from FAA figures of 1978. BN 20-28, DL even (34-34), EA 138-140 (plus 2), NA 39-34 (down 5) NW even at 42, PI 68-72 (net 4), TW 38-44 (plus 6), UA 64-70 plus (6), AA 66-60. Just something else to consider when we talk about slides. We're down to minimum capability -- we've gone down six. We can't make any slides. We should look at those that have gone up, PI, TW, BN up 8. Ponder that over an hour and a half.

AA: (continued) Just another ingredient -- if all of the plusses came out, there'd be a lot more slide capability and a lot more movement.

EA: How many total slots did AA come out of the meeting with, and how many did they fly?

AA: I think that's irrelevant now. The days of pocket slots are over. This is the nitty-gritty now.

WA: One observation -- in the 12 slots we're over -- new entrants only account for four.

PI: You could juggle those figures any way you want.

LUNCH BREAK

Pylypec: Let's hope AL comes back at three with some good news. But we'll need more than that. Much more. We'll lose some of our members at the end of today's session so we've got to go the whole way.

Coleman: I can't do this in my office you know.

Pylypec: I see AA's working very hard on his charts.

AA: No, it's just making it obvious, Nestor, that I can't do anything. Deletions are what we're after.

Pylypec: I thought this would have been the easier part. You guys just like Reston, I know. Gourmet restaurants -- I know.

TW: Another one down on the bottom there. 18 to 17.

Pylypec: (to NA) We voted in your absence that it would be nice to cancel instead of sliding.

Coleman: If we went from 19 to 17, someone could go from 18 to 19.

TW: I'd like to see some movement.

Pylypec: What other possible moves are there -- not definite but possible. PI?

PI: We could move 18 to 19.

Coleman: That helps. Let me put it down as a potential.

Pylypec: DL, do you have something?

DL: No, I don't have a thing.

Pylypec: EA?

EA: I could possibly go from a 17 to a 16.

Pylypec: NA?

NA: I might be able to go 17 to 13.

Pylypec: BN?

BN: I can't even come close to anything like that, Mr. Chairman.

Pylypec: We need a little help in the 900 hour too, let's not overlook that.

BN: I've offered some help in the 900 hour.

Pylypec: How about an 8 to a 7, anyone -- a 9 to a 10? We'll get to you, AL, around 3 o'clock.

AL: Sounds like a deal.

Pylypec: Mr. Berger?

AA: Sorry, don't see anything.

Pylypec: UR? Any slide capability?

UR: No.

WA: Are UA and NW still being polled as to possible changes?

Coleman: Yes (Shows chart if possible adjustments just mentioned were implemented)

Pylypec: NA, you see any potential moves?

NA: Yes, I see a lot of potential moves. I see AA moving, I see BN moving. We'll be sitting here all week, maybe next week, if we don't make some moves.

EA: You can make 17 to 15. (43 to 42; 37 to 38)

NA: You can show NA then 16 to 13 (42 to 41; 38 to 39)

Coleman: Another move?

NA: Yes.

Coleman: Marvelous.

NA: And Mr. Chairman, that is it for me in those hours. That's the last one.

AA: Is this June 15 through the season?

NA: I'm not too sure, I'm trying to figure it out.

EA: EA's for July 1.

NA: It looks to me like both of them would be June 8 through the season.

BN: Mr. Chairman, are those recorded moves?

Coleman: No, they're just part of the package.

EA: You could take mine.

NA: You could take mine too.

Coleman: O.K.

AL: Walt, could you read the total on 1700? Shouldn't it be 42?

Crittenden: That's what I have.

NA: It isn't a question of what we can do, it's a question of what we will do. Some can move out of Washington, if necessary. It's a question of getting someone to bite the bullet, if necessary. Get the people who make the decisions in here, close the door, and leave them in until they make the decision.

I'm going to have my secretary attend as of tomorrow morning, with complete authority.

AA: Is this the one who says yes and no, Bill?

NA: No, I think that's what I'll really do. My secretary or someone from my office -- with complete authority. We go this every damn meeting. It's amazing, in Chicago you can't get down to the numbers. Here, you get down to the numbers and nobody moves.

Pylypec: Jack, are you working hard on possibilities?

TW: Yes, I'm looking.

Pylypec: What's everybody waiting for?

NA: AA to move.

AA: I made a speech while you were out, Bill.

NA: I've heard it.

AA: We can't delete any more.

NA: You don't have to delete, but slide.

AA: We have no flexibility to slide because our deletions removed the possibility of any movement.

NA: This happens at every meeting.

AA: It's the schedule that's tied. It ties the hand. It doesn't matter who's sitting here. We're pretty close to the runway.

NA: Well we gotta do something. I'm not going to sit here all week. And I'm serious, I'm going to have somebody from my office sit here and if you need me you can call me in Miami.

WA: 20 minutes to AL's decision.

Pylypec: I'm sure we'll get some moves.

NA: Well, I can't touch 16, 17, and 18. And if you want to compare year by year, Bob, I will.

AA: Well there are other carriers at the table. Why not compare with them?

NA: I'm not talking about deleting, I'm talking about sliding.

AA: Our deletions prevent us from sliding.

NA: You know, back in '67, whatever, we moved carriers from LAG to EWR, we eliminated flights at DCA. We had the top dogs there -- maybe that's what it takes here to get them out of 16, 17 and 18. And while they're meeting, I'll be on vacation.

Lapham: You might have a long vacation too, Bill. I might add that the last time we had an impasse and had the top people here we lost at least 50 slots.

Pylypec: It was a disaster.

NA: Those that are wheels shall run in circles.

Pylypec: Some of them were ready to storm out of there in the first 20 minutes.

Lapham: Without pointing at anyone, Bill has made some points, especially regarding non-attendance. Obviously, there will be some occasions where one can't be here but that should be rare. His second point is that it's pointless to be here if you have no power to make moves. It is quite critical to our work that we be here and have the needed flexibility to get on with the work. Of course, even the president of a company doesn't have complete power.

It would be a shame to flounder on movements. And I'll remind you of a third point that Bill referred to -- we have a DCA problem but not a Washington problem -- we have plenty of room to accommodate everyone in Washington.

[Break]

Coleman: Al, I think we're ready to listen.

AL: I have one move that'll help. 9 - 10. We've come down from our post-meeting total and have made three slides. We've done our part to help new carriers come into DCA and we wish others to do the same. [This puts 0900 at 42 - 41]

Coleman: Didn't you say there was something under review?

AL: A possible deletion.

Coleman: We exercise the option, we'd have 8 overage - 7 in the late afternoon, one in the morning - that could go 8 - 7 or 8 - 10 or 9 - 10. Any way we exercise BN 9 - 8. 16, 17, 18 those 7 will have to roll to the left, one hour at a time.

NA: Wait, let me throw a few figures at you. July, at hours 15 - 21 (we all know these are critical hours) -- AA is up one, AL is up two (that was a connection, technically that's not an increase, right?), BN, even - DL, even, EA - even, NA, down 5 in those hours, NW hasn't touched it, PI down one, TW even, UA, I didn't get the figures. Now those are carriers that were in DCA before the new carriers. Now NA's dropped 5 and PI one and no one else has done a damn thing in those hours.

Coleman: That represents 11 carriers slots. The bulk of the problem.

AA: Bill, you say AA is one up over what?

NA: The sheet you got yesterday.

AA: There's been two deletions, which represented the momentum you got today.

NA: The only two carriers which have done anything in these critical hours have been NA and PI.

Coleman: UA moved a 15 to a 14. And a 19 to a 17.

NA: What did NW do?

Coleman: Nothing.

NA: As usual. There isn't anything else that I'm even going to look at, until some carriers begin moving.

EA: You want mine?

NA: No, I don't want any of yours.

WA: Mr. Chairman? A comment has been made that the 1500 hour is a critical period, and mention has been made that eleven slots have been asked for by new carriers. Now I can't speak for anyone but WA, but I want to make sure everyone understands our situation. We have restrictions on our authority, they're linked up inseparably to a 7:00 origination and a 2200 determination.

Lapham: Let's not talk about arrivals and departures.

WA: No, it gets impossible to sit here and not say anything. I don't know if it's possible that people with shorter hauls have more flexibility. It's hard to participate in deletions when you have hardly anything to delete. Two are out of the problem area. Two are in the thick of it.

Pylypec: I'm sure the committee understands and is sympathetic.

NA: We could call on our government bodies to help us out as they have for us in the last few months.

Lapham: They've given us a great chance to do it ourselves. We've got to do it ourselves.

NA: Right.

PI: Mr. Chairman, in hopes of spurring on, we'll move from 9 to 10 and 12 to 11, June 14 through the season. (This puts 9 at 40).

Pylypec: Thank you, PI. Both very good moves. Helpful. Seven moves to go. We're making progress.

AL: AL, I wasn't here when you gave your report.

AL: It was a good show.

Pylypec: Is there more to come?

AL: We're working on it. We have some complications, but we want to do it ourselves, rather than have it done for us.

Pylypec: That's the right attitude.

WA: Has anyone spoken to NB?

Coleman: I've spoken to their attorneys. They're working on it. Unfortunately, they're not scheduling people. They're not as smart as our attorneys.

Pylypec: TW?

TW: You can firm up my 17 and 19. Tying up NA and WA, there's approximately 12 slots additional. It's not one carrier, but 4 or 5 or 6. It's obvious that carriers here can do so much. 12 slots can not be filled in those slots. People are going to have to move out. Everybody's got to participate. Everyone's got the restrictions. It's simple, it's black and white.

WA: I would like a further explanation of 'everyone's got restrictions'.

TW: Every carrier has to fit times into their schedule, with scheduling problems.

WA: I'm not considering that. We've got specific routes we have to fly.

TW: Well, 19 to 17.

Coleman: And PI, 18 to 19.

PI: June 14 on. (Net effect is to change 17, 42 to 43, 18 and 44 to 43).

Coleman: We've got a little drift to the left.

EA: If you want you could move EA from 12 to 11 for the whole season.

Coleman: Fine.

NA: I wonder what would happen if I said that if we didn't solve this thing by 5 this afternoon, I'd rescind all my moves.

Pylypec: That wouldn't go over too well. We'll start at the beginning of the list again AA?

AA: Nothing.

Pylypec: If not a slide, how about a deletion?

AA: No.

Pylypec: AL?

AL: Not at this time.

Pylypec: If you do hear anything, do you expect it before 5?

AL: No, sir.

Pylypec: BN?

BN: Nothing, Mr. Chairman.

Pylypec: DL?

DL: Nothing.

Pylypec: EA?

EA: As of July 1, move 18 to 17.

Pylypec: NA, anything from you?

NA: I've got some moves left of 16, but I'm waiting to see other moves of carriers from 16, 17, 18. I'm not making a move until I have to.

Pylypec: NC?

NC: We can move 19 to 20, but it wouldn't help. If it helps we'll do it.

Pylypec: PI?

PI: We can move 17 to 16.

Coleman: As of June 4 PI moves 17 to 16.

Pylypec: Thank you, TW?

TW: Have a combination move -- 18 to 17, 21 to 19. I'll go on record as saying six slides that have been made May, June -- it's going to take a little bit of hurt but you're going to have to do it. I can't make any more moves in these hours. Together with NC.

BN: If it's a 20 to 21, I can undo what I did earlier. It will in effect make an 18 to a 17, won't it?

NA: It'll wash the whole thing.

Coleman: NC 19 to 20, TW 18 to 17, BN 20 to 21. We benefit because it allows TW 18 to 17 (17 goes to 44; 18 to 41; 19 and 20 unchanged).

NC: We can go back to where we were.

NA: And then they could accuse us of not doing anything AA could move back to where it was and then it can slide again.

BN: Mine is effective June 1.

Coleman: I have to tell the conference people by five if we need the room. Tomorrow it'll cost. I don't want to be here.

AA: I won't be here.

NA: Well I won't be here if AA isn't.

Coleman: AA'll show up.

NA: Well then I'll be here, but I won't be here if a major carrier isn't.

Lapham: We can't let these meetings deteriorate, and you know they do when carriers leave. Now UA -- this is the first meeting they've missed, and they have a good reason. But otherwise everyone should be here. If anyone needs a phone we'll make it available. It would be a sin if we have to come back. We've made great -- astounding progress. We can't let this meeting break up. At O'Hare we lost ground every time after we broke up. Now we'll make a phone available to anyone who needs it.

NA: Mr. Counsel, I agree with everything you say, and I'll be here if major carriers are here.

AA: Well Mr. Chairman, I think you should make that call. [Reports figures regarding 'critical' hours since post-meeting]. I feel we've made our contribution. There are the numbers. I don't think it can be argued-- if every carrier made this contribution we wouldn't have this problem. We've made contributions without movement from other carriers.

Lapham: It's not the function of the chair to designate white and black trials.

AA: I agree.

Lapham: But it is a function to make sure everyone shows up. And every carrier has to look for opportunities to do more. We certainly need to hold this meeting together. There isn't a person here who can't articulate that he's right in his position.

AA: We're not going to another planet, I'm going to New York. I can be reached by telephone, if there are any problems. But I will make that all.

NA: Then I'm going home.

Pylypec: I hope all carriers can make constructive contributions. Right now it may be there's nothing we can do.

NA: We've reached a position where everyone's said, I'll move if someone else does. There are movements of just a few minutes before and after an hour, but people are waiting for others to move. We've got to move out of 16, 17, 18.

Pylypec: We plan on taking such steps as are necessary. I've discussed it with George [Lapham] to make sure everyone is here. What incentive is there if half walk out? We're in this together; there is no special dispensation for anyone. It's a joint effort, and once people leave the fold, it's no longer a joint effort. I'd do the same thing--why the hell should I stay? We've all got to stick together and solve this thing. And it does disturb me that some of the new members came in, gave their requests, and didn't show up today and some of the older members too.

NA: You're not going to win with NW.

Pylypec: We're going to try. It's not fair to the rest of the committee. I don't believe we can force them, but we'll appeal to their conscience.

EA: Why don't you pull out Mr. Lapinsky's letter--he said any meeting in Chicago and Washington they would attend.

Pylypec: Let's take a five-minute break.

[Break]

Pylypec: AL, do you have any good news?

AL: No, but perhaps room G will help G for good. How about G for 'Get everyone here'?

Pylypec: Let's get suggestions on how to resolve this thing. Shall we make this a popularity contest? Any proposals? We need help. 7 moves--7 slots open.

AL: Do we have anything to show what slots were used last summer?

Coleman: We have the June 1978 FAA handout.

UR: Five or six carriers are actually asking for more slots in 16, 17, 18 than previously, and two less. Just an observation.

Coleman: Yes, something like that was said, it involved trade-offs. It hasn't escaped the scrutiny of the other members.

Pylypec: Are we going to hear any more news this evening? Good news? Bad news I don't want to hear about. Is there anything you feel you can still do this evening, to help us along?

EA: There's one more move that I'll do, I don't want to do it, but I'll move out of 1600 into something earlier. I don't want to do it yet, I want to see another move.

BN: In connection with that, I'll move an 18 to a 16. I don't know if that's being recorded.

NA: I'm recording it.

Coleman: In stone:

EA: If you want you can move me from 16 to 15.

Coleman: In effect an 18 has gone to a 15. Everybody agree?

Pylypec: Six moves. We've come a long way. We really have. Before we recess I urge you to study your papers, talk to whoever you have to. Let's get this thing wrapped up first thing tomorrow morning. We were hoping we'd be at that position today. We're close. We're making progress, though slowly. We'll solve it, like we always have.

EA: Can we contact UA and NW before we clear up shop.

Coleman: Sure.

Pylypec: Waller has been in touch with them all day.

Coleman: I spoke to AK's attorneys in New Haven and told them it would be good, instructive, if they could get down here tomorrow.

[Recess until tomorrow]

[1600 has 42; 1700 has 44; everything else clean]

Pylypec: I think we have everyone here. A representative of AA will be joining in shortly from New York. We appreciate AK being here. It's been our experience that we get things done when everyone is here, new carriers or carriers here for many years. We hope all of you will participate until the very end. We've come a long way. We have some overages in two hours--we have room in many hours of the day, we just have some overage in the peak hours. We could wrap this up in a few minutes or hours. We hope we could wrap this up today.

AK: We do not impact on the affected hours. We have given up 40% of our asked-for slots. We are a small carrier, we appreciate the irony that we give up \$500/day by giving up a flight and some of the larger carriers may give up \$50,000/day. We appreciate that we've been allowed to come on board at DCA as a new carrier.

Pylypec: [Shows Chart]

AK: We have two slots in 1600 hours as a commuter carrier. We could move one to 1500 if that kind of trade could be made.

Lapham: Say that again.

AK: We could trade a commuter slot for a carrier slot.

Pylypec: No that definitely wouldn't help.

AK: Sorry about that.

Coleman: Nothing happened last night.

AK: We're also here on behalf of NB, if anything develops as to that. If they have any thoughts we'll try to convey them.

Pylypec: Would you know what NB's slide capability is, a slide out of 1700.

NB: We could go from 18 to 17.

Coleman: The only room we have left, we have to move to the left. The 16s and 17s have to move to the 11s and 12s and 13s.

NB: I will contact them and see what they can do.

Coleman: Any move to the left if there's room.

NA: Any move to the left even if there isn't room.

Pylypec: AL, are you still hopeful that you'll come through with something today?

AL: At this time we don't have any slides, deletions.

Lapham: At this time.

Pylypec: BN, how do things look in your camp.

BN: Pretty bleak. In fact, that last move I made I'm trying to figure out a way to fit it in. I created a problem for myself.

Pylypec: DL?

AK: Is it the consensus of the group that movement to the left, say 18 to 17 or 17 to 16, that would be helpful?

Coleman: We could understand the need to have adjacent hours.

Pylypec: Any movement to the left would be helpful.

Coleman: You could just say 18 to 16, it's a movement, we don't care how it's classified. I'm sure we could find a nominee to go 16 to 18 without much sweat.

Pylypec: EA? NA?

NA: Like I said yesterday I have some slides to 16 when counts come down on 17 and 16. But I don't want to move when I don't have to. I can't move any more out of these, I've already given up two out of 17. I could move 15 to 14.

Pylypec: NC?

NC: Nothing.

Pylypec: TW?

TW: I made six moves yesterday. If someone would move 21 to 22, I could move 11 to 12.

Pylypec: Can anyone move 21 to 22? WA, any good news from you this morning?

WA: No, nothing.

NB: I just talked to NB and they can't move out of 1600. In order to do that they would have to leave New Haven at 3:10, and they can't.

Pylypec: We can't talk about that.

NB: Oh. They could go from a 17 to an 18. They could take one at 18 and one at 19. They could do two 18s. I have to get back to them, they are looking at the possibilities.

TW: I could probably go back 19 to 20, if it went that way [There are now the following possibilities, written underneath the main chart: BN, -11 +10; NB, -17 +19; TW, -19 +20]

Pylypec: Uh, do you have anything?

UR: I can't move that 20, in order to have the airplane overnight for crew and maintenance. Our other flight is at 7.

Pylypec: EA, do you have any capability to the right.

EA: Not from 21 to 22, or even from 20 to 21.

Pylypec: What is it going to take, other than obvious moves? What are we all waiting for? It's not going to happen by itself. You've got to do it.

AK: We have to go to another engagement. We'll move one from 20 to 21, one from 21 to 22.

Coleman: Beautiful.

Pylypec: I can't think of a better parting gesture.

Coleman: We should find out then if we could get that NB move. If you can leave a message--we could assume 17 to 19 is OK. Before they go is there anyone who could go from 17 to 18 or 18 to 19.

NB: We'd prefer to stay where we are.

Coleman: I could understand that. And if we can't get these other moves we're back to square one. TW you had a 19 to 20, EA had an 18 to 17.

Pylypec: We'll hold that.

NB: We'll call you about NB.

TW: Walt, let's see what we get from NB first.

Pylypec: Let's take a break.

[Break]

TW: What was the AA total for April 1 allocated to them? What they used.

Crittenden: This is an updated copy. 74.

TW: Winter slot allocation is 74? And April 29?

Crittenden: 62.

Coleman: I believe Bob cited these precise figures yesterday during one of his statements.

NC: I get a message here from AL cancelling 13 slots at DCA in May. Can we hope they would cancel them for June?

AL: We anticipate using all our slots requested for the summer season.

TW: Perhaps AL can help us.

Pylypec: AL, you do have an impressive number of slots, five, at 1700. Any possibilities?

AL: We've gone down 4 from what we requested for the summer; some have raised. We made 3 or 4 slides, I don't know what else we can do.

TW: You did indicate last night that there may be possibilities.

AL: We checked into that. We can't do anything, we're governed by crew time.

TW: Carriers not using slots, April 29 through May-UA has 4-2 in 2200 and 2 in prime hours. These deletions are up through June 6. They hold 70 allocations. We should ask UA their intentions on these. AL, AA, UA--we got to get movement out of these carriers AA's come down in their allocations--but on 2 or 3 slots they could move. We've got to get slides out of them. We should call--an analyst coming down here won't help much. Got to call Mr. Herman directly. This is my personal opinion. You're groping for all areas. We've got to try.

DL: Reference was made yesterday to what was held in the FAA in June 1978--reference was made to the number of open slots at the time the number were reported to the FAA. Between noon and 2159, 15 slots were not used. By coincidence, the July 1979 new entries require 15 slots. Here to the point, BN in June 1978 needed 16, in July 1979 BN holds 22--an increase of six over the number reported to the FAA in June 1978. On these July charts, BN was up 4 between 12 and 2159. Those 4 flights still are not scheduled. We have in prime hours at DCA six open slots--it seems to me, that the carrier who has the overage, audacity, to come in, with new carriers requiring slots, they should move into open slots. Six slots are open at open hours. Nobody has firm schedules--not so presumptive as to make firm schedules without a guarantee of slots.

BN: Numbers can be made to make any point you want to. It's true than BN is looking for four more than it is now operating. The reason is the same as for the others--new routes, new markets to serve. The hours in which increases over current operations occur are not in any hours. Where overages appear. Three operations are in the middle time frame where there are still openings--the latter times present no problem. DL is using figures to make a point which is not completely accurate.

DL: Could we have BN submissions for this period? I think my figures are right.

BN: I'd be glad to supply changes.

DL: I'd rather have submission.

Coleman: [Reads BN submissions] AK had two 19s, moved one to 20 and one to 21.

NA: I agreed to come back to the meeting on the basis that AA would be represented. It's 11 and they're not here. I won't be here this afternoon.

TW: I wish the chair would call Mr. Herman and ask about possible deletions and slides. We need help from AA.

Coleman: I just spoke with AA and UA. I spoke to Herman, who's Berger's [AA rep] boss, and Herman's boss. They said they've reduced to what they came into the meeting with, as a matter of accommodation. They didn't send anyone here. I told them it was critical, and they said they'd send someone. He should be here early afternoon. They didn't volunteer any additional moves.

NA: They said they'd take a 17 to 19 if NB doesn't. He also said he'd go from 14 to 12 as a way of making space. We'll take that move. UA had some other things to say but I'm not going to repeat them. This is from June 8 onward.

NA: Perhaps we can get two going.

TW: We need NB.

Coleman: We are almost due a 17 to a 22 because we know we've got it one way or another. It would be nice to get a 19 to a 22.

EA: We'd be willing to move two from 1600 to 1500. In these 3 hours I came in with 26 movements--put one down to 23. With AK moving from 20 to 22, that would leave a slot open somewhere. To make it work for me, I need another slot 12, 13, 14, except 11 AM. It would give me an old number--151. I have to put stuff back that I took out. Maybe WA could move from 17 to 16.

WA: WA will do it.

TW: It would be July 1 on.

Coleman: Minus 2 at 16, plus 2 at 15, plus 1 at 12--OK?

TW: Wherever you want to put it.

WA: It would have to be June 15.

NA: I'll move a 15 to a 12. June 8 onward.

Coleman: Let's take the NB/AK/TW move and call it NB. OK, TW?

TW: Why don't we take it from UA, and maybe persuade NB to do something else?

Coleman: UA is June 8, AK is whenever they start. A problem of greatly diminished proportions.

Pylypec: We could use cancellations. TW?

TW: I could move 17 to 21.

Pylypec: We need 21 to 22. BN, could you move one?

BN: A 21 to a 22? No, sir.

Pylypec: AL?

AL: I talked with our office, and told them it would loosen up something. They're looking at it. It's a very big restriction on us. I'll go check with them. [The chart looks like this: 1-39; 12-40; 13-39; 14-39; 15-40; 16-41; 17-42; 18-40; 19-40 20-40 21-40; 22-31. Possibilities: BN, -11+10; NB, -17 +19; TW, -17 +21]

TW: Need a 19 to a 21, and then two 21s to a 22.

Coleman: That would take both 17s out.

TW: And a 16 to a 14.

Coleman: That would be a nice solution. TW?

TW: AA released an 11 and a 13; picked up a 20. Move two slots to 20--it's easy to get into 21. Go to 14, and vacated 20 go there, and we need a 16 to 14.

AL: We'll slide from 15 to 13, June 15 through the season. [15 is now 19; 13 is now 40]

NA: If you can get AA to retract I'll release a 13.

Coleman: If we can get a 16 to 15, 17s to 21. Most painful is 21 to 22.

TW: 16 to 15.

Coleman: Two moves'll put us one over.

AL: I was just noticing that all new carriers made more than their effort to accommodate, except QH. Why don't we give them a call?

Coleman: I was on the phone with them rather extensively. Apparently they've given it a hard look. Apparently they're tied.

EA: Walt, has NW come out of that meeting yet?

Coleman: I know, we're all aware they haven't had a schedule change since 1973. Any particular direction I could send QH in?

AL: Sure, 16 to 15.

EA: 21 to 22.

WA: That presumably would be more difficult. But 16 to 15 might be feasible.

Coleman: From what I understand of their sched, it's rather difficult--but I'll pass it on.

Coleman: I can respond to the QH Query. 16 to 15 is a turnaround and they get in at the end of the 1500 hour. They said they've tried. I believe them. There's more to it, but it's not worth getting into. With a most rudimentary knowledge of scheduling, you can see their difficulty.

[Lunch Break]

TW: Call NA when AA arrives.

Coleman: That should be soon. EA is making a call right now.

Pylypec: Any good news from anyone over the long luncheon break that we had?

BN: There's an indication of two moves out of 1700 hour, correct?

Pylypec: One at 19, one at 21.

BN: Someone could slide a 16 to 15. I'll offer another possibility. To pair up with the NB possibility, BN would consider moving 1900 to 14. That clears one of 17. TW moves would shift 17 to 21. So we would need two moves: 21 to 22 and 16 to 15.

Pylypec: AL, how about you?

AL: No moves at this moment.

Pylypec: 16 to 15 and 21 to 22.

BN: We'd need both, Mr. Chairman. It boils down to two moves.

DL: I have a slot at 18, and at 40--these are the two I have at the 1600 hour. I'm 18 minutes from the hour on one, 40 minutes on the other. When you have two in the middle there's nothing you can do.

Pylypec: Jack, would you like to move a 16 to a 15?

TW: No, I wouldn't.

Pylypec: Would it hurt that much?

TW: Have we had a 21 to 22?

Pylypec: No we haven't. We need 2 moves. PI, what about you?

PI: No, I can't do anything there.

Pylypec: Walter is calling NW. TW?

TW: 16 to 15, plus NA's earlier conversation... Maybe NA could give up 13 for AA, and assuming 16 to 15 and 21 to 22, we need a 19 to 20. It's a wild chance, maybe we could do it.

BN: If AA could undo their move into 2000, we wouldn't need 21 to 22.

Coleman: BN, could you--I have had a conversation with attorneys for NB--they'd rather go from 17 to 18, if you could go 18 to 14.

BN: I've already moved an 18 to 14. I could go 17 to 18 if it would help.

Coleman: No, it wouldn't.

EA: Jack [TW] got 17 to 20.

BN: I could go 21 to 20.

Coleman: I just called NW, he just went to lunch. Looks awfully suspicious.

BN: If AA could undo that move into the 2000 hour.

TW: If he can't do it, a 21 to 22 or another 16 to 14.

Coleman: I'll go call Mr. Herman.

TW: It's really down to one move.

AL: Most people know what it'll take. At this moment AL is working hard for a solution. First we'd like to hear in person from representatives of AA and NA before we make our moves.

Coleman: AA said they couldn't do anything. So did NW. NW said they couldn't do any more moves. NB said they didn't like moving 17 to 19, would rather 17 to 18, but they did it. I told AA they could have an 11 and 13 for a 20, but they said oh no, they couldn't do it.

BN: BN isn't particularly in favor of activating these moves--if they can't even get a representative here. Representatives of one-third of the total number of slots aren't here and they expect us to grind out the work for them. I've got to get back to my office, I've got to work nights and weekends.

Pylypec: I agree with you.

BN: Go ahead and mark it up, but it's a bitter pill to swallow. It's going to be done anyway, effective July 1.

Coleman: TW?

TW: July 1.
[17 went from 42 to 40; 21, from 40 to 41]

Pylypec: Let's take care of the easy one first: 16 to 15. Who can do that? AL, you have a possible move.

AL: Yes, we are prepared to end this meeting. We are prepared to move 21 to 22 if someone else will move 16 to 15. We'd like to go on record as saying if a 20 of 21 opens at DCA, we'd like to have it.

Pylypec: Bill, would you like to be a hero and move 16 to 15?

NA: I can't do it. I just can't do it.

Pylypec: 16 to 15, going once.

Coleman: A long way from this morning, from six to one or none. I think it'll work out.

TW: If no one else is going to do it--I hate to move off a flight I've had for 10 years. It's not a hard move, but in all fairness I've had it for so long. I'm going to get shot for this. OK.

Everyone: Yay.

AL: Yes.

EA: If the committee doesn't mind, I'd like to pick up an 11. Otherwise, I'll go to the Res Bureau July 1.

Coleman: I don't think there's a problem.

Crittenden: We only have an opening through September 5--but AA said they may change. Right now we can give it to you through September 5.

Coleman: We still have some isolated problems to work out. We know we have everything solved from July 1 to September 5. The only thing to work out is the AA extension.

Coleman: We have a problem June 15-June 30, we're over now. 4/29-6/7, one over at 18. 6/15-6/30, two over at 16, two at 18. The rest of it is minor, almost inconsequential--one over for a week, a day here and there. We'll do it when everyone gets back.

Coleman: Let's get back [Repeats the numbers]. We can tell you who's up from July 1, if that's helpful. One-week problems--you might hear from us on the phone. BN, you're one up in that period--two in that period. TW, you did it July 1--that's part of the problem.

EA: I know two I'm up. I moved them out of 16, effective July 1.

TW: I can't be in 16 if I'm down 16.

Crittenden: Your problem is the last part of June.

Coleman: You made your date effective July 1. I'm looking at why July, August, and September are solved but June isn't. The same is true in 1800--EA up one, TW up one. That and overage are the only problems that remain.

DL: I'll move one 18 to 19, but it will have to be through June 14.

Coleman: That solves the first part.

BN: How's 1500 during the first half of June?

Crittenden: Open.

Coleman: We'll send a wire out soon asking for your weekend schedules. I find this possibly a little too difficult to handle by phone. Can't we handle these two weeks now? I don't believe it's worth sitting here for two weeks in June. I vote we adjourn. Not a dismissal, but an adjournment.

APPENDIX C

TRANSCRIPT OF SLOT COMMITTEE, JULY 1979

NOTES FROM AIRLINE SCHEDULING COMMITTEE *

DENVER, COLORADO

DCA MORNING SESSION, JULY 23, 1979

Chair: Reported that ZW was at previous ORD meeting. ATA members have met to consider alternatives to the scheduling committee. Suggestions ranged from staying in, quitting, to getting more slots from general aviation.

Discussed future of committee -- two possible threats.

- (1) CAB unhappy with current system,
- (2) Entrants led to fear that the system could fall apart.
"with that goes bag of horrors." FAA hopes that the system will not fail as does not wish to schedule and has no idea of the basis to be used. As an interim measure, FAA might use first come, first serve.
FAA will not increase.

Counsel: FAA suggests lowering slots at DCA from 40 to 36 for noise. Also, an increase in air taxis for small communities. Administrator said the task force group hopes for a recommendation for a new system from the CAB in August. Previous deadline was March. Regarding the "infamous" Frontier memo, CAB thinks the committee mechanism is not competitive enough.

*These notes cover the sense of the meeting but are not necessarily verbatim quotes. Notes were taken by David M. Grether.

Regarding sale of slots -- auctions, either open or sealed-bid type, have been suggested at the high-density airports. Also lotteries -- the CAB seems to be taking lotteries very seriously. This is distressing; hopes it never comes to pass.

Unrealistic not to face up to the possible end of the mechanism. ATA feels that it works, and nothing so far suggested appeals to ATA. Members should be careful to see that the committee doesn't fail.

Coleman: Regarding ATA meeting and DCA problem -- KC operating at DCA without slots. Same could be true for CJ. Pilgrim wants in at DCA also and expects to be certified in September as does one other carrier. Currently in excess at DCA, FAA willing to let slide until this meeting. (Showed total submissions for DCA on screen; pointed out size problem. Told members to study slide for a few minutes)

Chair: First tried to solve August problem.

NA: Felt not good time to solve August problem. New carriers should take slack hours. Old carriers have set schedules now. Slides not of much use when over on slots.

(Meeting turned to winter schedule.)

NA: Delete 1 at 0800, 1100, 1200, 1300, and slide 1900 to 2100.

NB: Can delete 2 -- could drop at 1800 and 1900, or 1 at 1600 and 1700 for net drop of 2.

Coleman: Took 2 and slide later if necessary. Now 60 over.

Chair: All right. Let's get some more deletions -- long day.

NB: Let's take all over 20 percent and talk them down. EA is only target; next largest carrier is 12.7 percent.

Chair: Will go around the room. UA?

UA: Looking hard; will have something later.

RC: Nothing to offer; holding with 4.

DL: No reduction.

BN: None now.

NW: None at this time.

AK: 1 at 1500 -- all days.

Coleman: This gives you an odd number.

AK: Add 1 at 0600.

UR: Only have 4; just want same. Hardly anything.

WA: Have only 4; can't help.

New Haven to DCA, because buying a new plane.

Chair: Don't talk about markets. Not supposed to discuss destinations.

NB: We only go from New Haven. Only an idiot wouldn't know what market we serve.

NA: Lots of those in Washington, D.C.

(long pause)

Chair: You know what it is going to take. Let's get some deletions.

(pause)

What about it TW?

TW: Have been releases by 6 carriers over summer. Those carriers should go down to starting base. Might as well get mad.

Names them. AL, BN (gained 4 and didn't use), NA, UA, EA, NW, AA. Some not using slots allocated.

Chair: BN -- any comment?

BN: No.

NA: We released in summer because of DC-10s. Have reduced already. This difference won't do. Until BN, AL, AA, and DL come down, there won't be progress. Won't move until BN drops. If they sit, might as well quit. No one will move until BN drops down.

NA: Already down. Those trunks going up should drop or will blow meeting; until trunks back to previous base level, will hang. Can't expect entrants to drop. Bad guys are BN, and we all know who others are. If I were small, I wouldn't change. NA won't change.

QH: No.

AA: No.

PI: Agrees with NA.

AL: No.

EA: Thought we had 140; somehow got 142; will drop 2 at 0700, 220 and slide later. Have been around 140 for years; will not drop for entrants.

TW: Thanks to CAB, want to grow; this is part of deregulation. No help.

KC: Delete 1 at 0800 and 1300.

UA: Been in trouble due to strike. But in spirit of helping now will go down 1 at 0700, 2100; will slide later.

NB: We have already cut 25 percent; have flexibility to slide. Notes that EA cut 1.4 percent of their request. Disturbed by differences in market shares. Big folks have to help. Emphasizes percent changes. Says needs 3 round trips,

UA: Because of strike and DC-10s, have released slots. Appalled that BN picked up 4 slots and didn't use. And now wants still more. Maybe wants to blow meeting.

Chair: BN?

BN: We seem to be SOB's but not changing now.

NA: Move to recess DCA. If BN drops, we can start over. Let's go to LGA. Won't waste his time. Will walk out if DCA meeting continues unless BN drops down.

Chair: Ten minute break.

(later)

I understand your frustration but it is always a difficult uphill fight. Let's use best persuasive powers. Don't feel we should close DCA meeting. I hope to get help from all. Will keep pressure on.

NA: I hear you and if up 10 to 12 slots, all right; we could sit here and argue. But we are 60 slots over and I don't think anyone will move unless BN drops down.

(BN out calling his office)

Chair: Let's hope he gets good guidance.

NA: If this is the best effort by BN, I hate to see worst.

UA: Even if took away increases from last time and assumes 0700 and 2200 at 40, would still need 30 reductions

with 0700 and 2200 full (which has never happened). Another reference to BN gaining 4 and not using them. If no real progress by noon, we should go to LGA. Value of time brought up.

Deregulation has done good things for many of us. At JFK and ORD wide bodies helped. If can't fix, give over to government. UA would like to see committee continue.

UA goes along with NA.

Chair: Let's not quit too quickly. Took around eleven days for ORD. Worst problem ever at DCA.

BN: We understand what might happen if FAA took over. We all know how political it is. Maybe we should review who would win. Names areas and congressmen and senators: R. Giaino, Bayh, Dallas-Ft. Worth, Byrd.

Chair: There is uncertainty, but it will be worse. Here we have control over our own destiny. Can't speculate on what would happen. This might not be best -- inefficient possibly, but has worked.

BN: Drop 2 at 1000 daily all season.

Chair: Thank you BN.
AA?

AA: Can't help. Releases in summer due to mechanical problems. Don't know how this will go.

contributed to the problem and all must contribute to the solution.

Chair: Could we use July use as a "working base"?

Poll: AA, yes; AL, no; BN, no; DL, yes; EA, no, but if close would consider (2 over); NA, no; NW, yes; PI, yes; TW, no; UA, no, but if close would consider (2 over); AK, no; NB, no, an unqualified no -- had 4, need 6, and have given 2; QH, no; RC, yes; WA, yes; KC, no; AL, yes, if 80 is number.

DL: Let's poll on post meeting numbers as a starting point.

Post meeting poll: AA, yes; AL, yes; BN, yes; DL, yes; EA, yes; NA, pass; NW, yes; PI, yes; TW, no; UA, yes, already below; UR, yes; WA, yes; KC, not there; NA, yes; TW, can go ahead but won't take number; NB, stop with 6 -- emphasizes already down 2; QH, no.

(Coleman now going to change post meeting by lowering those already down and adding KC and AK; also those that were "no" NB, QH -- put in at higher figure -- on slide shown on screen -- called column G on slide.)

Total: 652 -- down from 692.

Coleman: If fill 0600 and 0700, etc. we will be only 8 over.

AL: Not sure of procedure.

TW: When did DC-10 problem start? Answer: around June 5 to 6.

Slot releases not all mechanical problems.

NA: TW, do you think you are going to end up with gain of 10?

TW: No.

NA: Why not drop now?

TW: If all carriers who are up come down, TW will come down. Currently,

AA + 2, AK + 1, AL + 4, BN + 8, CJ + 2, DL + 2, EA + 2, NA + 12, NB + 2, PI - 1, QH + 4, TW + 10, UA + 6, KC + 6, compared with what was reported to FAA as in operation in July. Is the 2 BN cut 2 of 4 it is not using? Says was token gesture.

BN: No, they were part of increase.

(long pause)

TW: Drop 1 at 1600, 1700 daily all season. If have to chip away like this, it will be a long, long meeting.

Chair: AL, can you help?

AL: No.

Chair: DL?

DL: Thinks all will wind up near what we have in July. DL will be willing to go to 34 (down 2). Won't do it now. All have

UA: Can we poll as to which carriers can use column G as reference for future reduction?

Poll: AA, Yes; AK, yes; AL, won't reduce; BN, yes; DL, yes; EA, yes; KC, yes; NA, yes; NH, yes; NW, yes; PI, yes; QH, yes; UR, yes; TW, not my number; UA, yes; RC, yes; WA, yes.

UA: What would TW want in column G to go forward?

TW: 52 is my number.

NA: (left meeting until TW down.) Call me when it happens.

DL: NA holds key to DCA. Let's adjourn. TW, if I had to release 12 I would leave too.

(Much discussion among chair, Coleman, Crittenden. Coleman left meeting.)

UA: TW has good point about slot releases. What was accomplished at special meeting in May or April was good. Even with TW at 52, would be better than where we were. If NA would return -- some carriers have history of releasing slots.

DL: How did NA vote on first poll?

Chair: No.

(Just sitting. Meeting now about 2.5 hours old.)

TW: AL up 2, BN up 4, comparing column G with July operations.

QH: I have a fair proposal. Let each carrier be given 16 slots for openers. Those who want more can haggle. The rest can leave. It is not fair for small carriers without resources to spend time here, so give all a base and let those who want more stay.

EA: We signed agreement to give best efforts. My 142 just as important as someone else's 6. If we do this, let's do it for ORD. "You submit number and you bargain from there."

QH: OK, but DCA is a public airport. EA has no higher interest than QH.

EA: I need 140; could drop to that.

NB: Do you think you will keep 23 percent? No way.

EA: We will take our chances. Will be political pressure. Ted Kennedy gets what he wants.

NB: Goose and golden egg story again.

UA: Not time to come up with another system. We all start out at zero (EA said same). New carriers want in. If you want in you must sit here. We have procedure that has worked for years.

NB: Little guys have nothing to lose. We will get it from FAA. EA says won't go below 23 percent. That is foolhardy. EA won't keep them. I'll take side bets.

Chair: Does column C represent lowest can live with (52 for TW)?

AL: No. Will start there; not necessarily can live with it though.

Chair: Need some suggestions. Have C. What do we do with it?

Coleman: Let's see what hours they were.

Chair: Too early.
(Asked AA, AL, BN for hours; said no.)

Chair: Let's firm up:

WA, yes; TWA, yes; PI, yes; NA, yes; DL, yes; AK, yes;
UR, yes; RC, yes; NW, yes; KC, yes; BN, yes; AA, yes;
UA, yes; QH, yes; NB, yes; EA, yes; AL, no.

AL: If go with figures can live with, it will be 82. (This would raise to 662.)

Chair: If AL at 82, will this change any votes?
No.

AL goes to 82.

Chair asks for hours again.

DL goes down 1 at 2100, 2200.

NA goes down 1 at 1100, 1200; adds 1 at 1500; down 2 at 1600, 1700; down 1 at 1900.

AA goes down 1 at 1300 and 2200
(Long pause)

UA: Not here for a crap game.

NB: Just pointing out realities.

UA: EA wants 140. This is their best effort.

NB: How do you determine best effort? EA said, if down to 1 or 2 over, will consider a move. We gave up 25 percent of our slots.

UA: (applauds)

NB: (quite heated)

DL: Without efforts of large carriers -- EA, UA, TW have given good efforts over years. Without that little guys wouldn't be here.

Chair: Tries to cool it. Too early to judge what are best efforts.

AL: I take offense at a new carrier "assaulting" a carrier that has solved many problems over the years. Shouting not helpful.

(Recess at 11:45 until 1:15)

DCA AFTERNOON SESSION, JULY 23, 1979

1:20 begin. Not all here waiting. NA back -- reading a book, The Salamander by Morris West.

Coleman: CJ had delay on equipment. CJ out of picture until September.

BN: Goes down 2 at 1000, down 1 at 1500, 1700, 1900, 1800.
(Much confusion now as to status of counts)
(Coleman trying to figure it out)

2:00: Figures now add up to 662. (18 over between 0700-2259)

Coleman: Need deletions before slides.

Chair: UA, can you help?

UA: Working on it. Would like to see others.

RC: Can't offer deletion. Looking at numbers of new carriers compared to last meeting -- new carriers 16 old plus 40.

DL: No deletions.

BN: " "

NW: No reductions.

AK: " "

WA: " "

NA: " "

QH: " "

AA: " "

PI: " "

EA: No

Chair: Save TW for last.

TW: Down 2 at 2200
(AL on phone -- to be called on next)

KC: No.

NB: No.

UR: No. 4 is minimum. Would like to stick with that.

UA: In hopes of getting participation of other carriers,
drop 1 at 1300, 2200.

Chair: Thank you, Pete.
(Now 34 in 0700; 17 in 2200)

AL: No reduction at this time.

NA: Goes to call office before closes.
(2:20)

Chair: EA?

EA: Would look at dropping 1 at 2200; not clear does much good;
but will go to 139.
Schedule is such that it works (reference to odd number of slots).
(2:25)

(3:10)

AL: Have plan that would reduce to 80. Office working on it.
Won't know till tomorrow.

Chair: Will probably be here tomorrow after LGA.

QH: At an impasse. If all start naked and all have certificates,
give everybody some minimum, e.g. 10-12, 16. Not fair for
small carriers. For example, QH wants 10 and EA 142.
QH doesn't want to sit here all day because EA wants 142.
Proposes being given 10 slots; let others argue.

NB: I second that. We are here because law changed. Don't say
we are here because big carriers allowed us. We deserve to
be here.

Chair: Of course you deserve to be here.

Counsel: Information: This committee operates by agreement with FAA.
CAB approval gives antitrust exemptions. Earlier tried to
have sharing (QH's suggestion) agreements. Didn't work
because didn't agree. Wouldn't have mattered because CAB
would never approve such an agreement. No criteria in
agreement allowed. Can argue in best effort, but must do so.
No labor-saving agreement possible. Would need CAB approval.

QH: Have reviewed agreement. Chair could say at an impasse and
propose a new way. Just start with 10 each. Do it like a
football draft. When satisfied, can leave.

Chair: TW?

TW: No. Can slide.

Chair: It will take more than slides as all of you well know.

Chair: BN?

BN: No.

Chair: AL?

AL: I'm looking.

Chair: Good. I hope the rest of you are too.
(2:30)

Chair: Do any east coast carriers want to call office?
No.

Chair: TW, you are smiling. Did you find something?

TW: No. Just laughing at the mistakes I made.

Chair: You discovered you can cancel moves?

TW: No.
(2:35)

UR: I need to be in office tomorrow -- leaving -- just give
us the same 4.
(2:40)

Counsel: Anyone can agree to whatever they want voluntarily. Can't
enforce involuntarily without change in agreement.

QH: Suggestion: Let's look at some number and get majority
or quorum for it.

RC: For same reason, against.

EA: No. I'm here to bargain. No one is going to allot slots
to us. EA looks out for EA as others look out for themselves.

AK: Concerned with and do not support arrogance of new carriers.
Just because new, doesn't mean should get what you want.

QH: Regarding arrogance: Free country. Deregulation act makes
it more so. All entitled to use DCA. QH wants 10. That's
not too many. Just want fair share.

NB: Says same thing. We aren't arrogant in requesting 6. New
ball game--don't know rules. 6 of 640 isn't asking for a
hell of a lot. Trying to serve area without service since
AL pulled out.

AL: Will QH drop some of 10 to help?

QH: No. 10 is not out of line. Have slid already. Picked 1 at
0700 and 1 at 2200. If had 82 slots, would slide 1 -- 10 percent

EA: Only place to slide is out of DCA. Whole day is controlled;
not like JFK, ORD where some hours not controlled. If expect us

to drop around 10 slots, forget it. Won't happen. Might as well close the door.

Chair: Still need deletions.

NB: Why 40 per hour slots or 60 operations?

Counsel: Numbers chosen assuming an IFR day and 1 hour delay.

NB: Controller capacity?

Counsel: Largely. Newark, gates problem -- which has eased.

DCA, also gates.

LGA and JFK mostly airborne problems.

NB: I personally fly in five days per week -- no density problem (he is a pilot). Some carriers had 3 to 5 sections per flight that aren't counted. Can't be density.

Counsel: Tell it to FAA.

NB: If FAA takes over, extra sections will be brought out in open and carriers will lose.

If FAA gets in charge, some carriers will lose extra sections.

FAA: We know about extra sections and keep count.

(NA returns with newspaper)

Chair: NA, good news?

NA: No, down as far as I can go.

(Mostly silence now)

(3:40)

(Chair quietly checks with TW. No dice.)

(3:45)

Chair: Let's get some bright ideas. Not much time left this week. Some time tomorrow after LGA. Rest of week full through Friday. TW, any ideas?

TW: It is a game being played on scheduled carriers. Charters, air taxis, general aviation, plenty of stuff. FAA says even less. We should increase slots to 50 per hour.

If FAA has records, would show scheduled carriers held down needlessly.

NB: Would like to see DCA tower logs.

TW: It is nonsense to give slots to 20 seaters and old carriers reduce 125 or so seats per slot.

EA: BN in DC said CAB deregulating all best airports. Should open up airports. Markets will decide how much people want to be delayed. Also, parking capacity.

AA: Look at numbers. 52 operations over 40 per hour. 15 possible slides. Impossible. AA needs 60 to operate without canceling further schedules. Won't get anywhere at 40 per hour.

AK: New carriers complicating factor. 15 to 19 of the 41 flights over -- 23 by old carriers. So we aren't the whole problem.

AA: Shift 15 to 22.

(NA reading the newspaper)

NB: Things aren't as bad as seem. Have until September 22 for OAG.

UA: Can't go below 66 without canceling other operations. Could slide if helped. Wish could get some "I will if you will." Hate to see default and see people still releasing slots. Our credibility will be zilch.

Chair: Agree. Will be a shame.

UA: We're better off getting what we have planned rather than gamble on a shift here or there later. That goes for everybody.

(Silence)

(4:05)

AK: My schedule requires I leave now. Will be available by phone and in DC if needed. Thanks to all carriers that cooperated and the financial sacrifices. Allows AK to be here. Hope you resolve it. Possible but not probable regarding slides. So few planes; will look and try.

Chair: Any help? BN?

BN: No suggestions.

Chair: Might be time for some kind of exercise. Has worked in past. Maybe some of you can get together and suggest some kind of exercise.

NA: Wants to see columns A-G. Shows NA operates 6 less than slots allocated. Says TW must come down (they are + 8 over current position).

TW: Agrees but only if other carriers come down.

AL + 4, BN + 4, EA + 2, NA + 6, UA + 4, CJ + 2, NB + 2, QH + 4, KC + 6, TW + 6.

All over current position. Not just TW at fault.

NA: I explained why we don't use all. NA down 20 from two years ago. If it weren't for AA and NA, would have had trouble before. Won't drop again. BN not using slots got last time.

Chair: BN, why?

BN: Don't know. Don't work on domestic schedules.

Chair: Ask office and tell us.

NA: Attendance at meetings of people with authority was promised. BN should send someone who can. He (BN) not involved with domestic schedules.

UA: BN can ask office why got 4 slots in April and not used.

Chair: Other carriers in same boat.

UA: No one else got extra slots in same meeting. To get +4 and not use them looks poor.

Chair: Right.

UA: That goes for everyone who has slots not scheduled.

Chair: "Those days are over or should be over in light of the facts that are facing us now."
(4:18)

Chair: TW, can you propose a package?

TW: Anyone can do. We are below requests. Will have to go back and rework numbers. A lot of other carriers in same boat. Can't delete 1 -- except for EA -- use an odd number.

NA: Amazing that TW wants 8 more and would do -- knowing what's going on at DCA.

TW: We know the situation. Other guys can argue. Others have released. We pick up slots and use -- taking advantage of deregulation.

(4:25)

(4:30)

(4:33 -- take 10)

(4:50 -- reconvene)

Chair: Any new ideas?

NA: We lost one (BN, NB, AL absent).

Chair: Schedule for tomorrow. After recess this evening -- LGA 8:30. Hopefully DCA can reconvene around 1:30.

NA: Asks about time if adjournment today. Chair says around 6:00.

PI: To get started. At least 1/2 of meetings go back to status quo. If go back to July and PI drops 2, EA drops 2, and UA drops 2, would give 6 slots. How you divide up doesn't matter. At earlier sessions it took DL years to get up to just a few slots. At least 12 sessions have gone back to status quo. Also mentions AL -- is possible drop of 2.

AL: Not opposed to proposal if it would solve meeting. Will go to 80 if needed. Thinks headquarters would go for it if no growth by others.

EA: OK. Not fair to new carriers. Wouldn't accept if in their shoes.

UA: Committed to 66. Could go along and add 2, making 8 available. Don't think 640 will work as require 40 at 2200.

PI: Last time 34 slots in 2200.

UA: Need compromise. Is CJ here? (Told no -- can contact.)

NB: If CJ doesn't know if will operate, put 6 slots back in pot. Reaffirms needs 6, but will slide.

C-24

C-24

NB: Have problem with CJ not showing. Waste time. If not willing to come, to hell with them.

NA: There usually are one or two no shows.

Chair: Not always newcomers.

(5:15)

(5:20)

Chair: PI, explain proposal again. With 4 carriers, get 8 slots. Then what?

PI: Make another sheet showing increases including 5 new carriers and others.

Chair: As shown in Column A (submission) -- as amended -- now 658. 14 over not counting 4 at 0600.

NB: Contact CJ. They are about 1/2 of the trouble.

UA: Trying another way. Column C, July 1979. Total of 634 includes 3 at 0600; leaves 9 to fill. Plus EA, UA (turns out he forgot KC and CJ; ends up 14 off).

(5:32)

(5:35)

Chair: For the benefit of new members. Plenary session Thursday at 1:30. Deals with administrative and procedural matters. Reports of Finance, etc. committees. Exploration of new approaches.

Chair: Sixty to seventy carriers usually attend. Because of international carriers.

Chair: Let's go around the table.

UA: Think about being between columns B and C (July and last meeting).

RC: Nothing.

DL: Feeling too much reference to old and new carriers. Have identified problem that needs to be solved. Too much reference to past. Are more increases in new carrier group than in old. Need for all to work on it. Someone with 4 may be key to it.

BN: No comment.

NW: " "

WA: " "

NA: " "

QH: " "

AA: " "

PI: Needs to be compromise (new carriers) and we old ones will have to give.

AL: No comment.

EA: Do all we can. Know we can slide. EA will go to 138 if necessary. Used 138 in July because of DC-10s. Wants to work out schedule.

TW: Columns B and C don't turn me on (TWA loses 8 here).

KC: No comment.

NB: Points out that already down 25 percent and going to 4 (B and C) -- not pleased. Will slide when close.

UA: Not saying all must be between B and C. Increases must come from compromise. Each must look at schedules. Carriers with slots not used should release now.

Coleman: Went from 692 to 658 (really 14 over). Great progress. Last time this took three days.

(out 5:50 -- recess)

DCA AFTERNOON SESSION, JULY 24, 1979

(1:38)

Mississippi Valley -- observing.

Coleman: Talked with CJ. Talked in general terms of the meeting. Told 692 requests; got down to 658 by membership -- 14 over 0700-2259. Told that no summer problem due to equipment delay at CJ. Asked to withdraw slot requests. Talked with executive vice president -- withdrew request for 6 slots. CJ knows that can call special meeting. go CJ drops 6 and 1 slot at 0600.

NA: Don't know what the solution to this thing is.
(2:00)
(NW doing crossword puzzle)

Chair: PI? Want to try something. Tried something yesterday.

PI: Well, it seemed like a ray of hope at the time, but not sure it was.

NA: Some of thinking expressed in DC two weeks ago. At some point won't be able to resolve. Why not give to FAA now? Maybe, I'm coming to agree. Don't know how NA would do. Have had controls at DCA for eleven years and the number of slots the same. Staff (controllers) and equipment up. Commuter and taxis have seniority system on slots. If legal for them why not for trunk lines? I believe some carriers in room willing to throw it in hands of FAA.

Chair: Hope not. One year ago trouble at ORD -- trial exercise; what about it now?

PI: ORD different; only slot a few hours.

Chair: Would we lose anything?

KC: Would be exercise without resolution.

Chair: EA?

EA: All mixed up until get 13 out -- could go back and help at 1700 hour and foul up other hours.

Status at Start of Session

Hour:	0600	0700	0800	0900	1000	1100	1200	1300	1400
Requests:	3	34	44	45	40	37	38	36	40
Hours:	1500	1600	1700	1800	1900	2000	2100	2200	2300
Requests:	43	48	48	45	47	47	47	39	18

NA: Goes up 4 at 1200, 1300, 1600, 1700.

Chair: Today it is for DCA. Tomorrow is ORD; also Thursday, and plenary session. Friday is ORD.

KC: If don't get it, what then?

Chair: August 7 in Washington, D.C. Old Town Holiday Inn. (1:55)

Coleman: Need 13 deletions. Assuming 40 in 2200 hour.

Chair: Let's have some ideas. UA?

UA: Regrettable that NA is up 4. Solution near B and C in order to make room for new ones. Every carrier asking for increase will have to come down. Some carriers already have reduced requests. Don't know who holds key. Can't go below 66 or have to cancel. This puts UA at -4 from column C (last meeting) +4 from column B (to FAA as actual moves in July).

Chair: NA?

Chair: No overwhelming support for this. It is different from ORD. Just thought exploring would help. Like to do something constructive. Hope there's no feeling here to want to give up. Will hurt. As long as spread out evenly, the pain should not be unbearable. Can't believe there is nothing we can do at this time. Maybe can't solve totally, but we can surely get closer. Then things happen. Go back to your offices and look again. Some development may make solution possible.

Counsel: Meeting that NA referred to: ATA met to consider future of this mechanism. Some thought mechanism a burden. Most thought should keep control of own destiny. I didn't want to consider alternatives as may become self-fulfilling prophecy. No one knows what FAA will do. If think will like what FAA will do, then should get head examined. Just because the lines blow it, FAA won't stand aside. Board has stated won't abandon quotas. Notes suit at DCA seeking drop and curtailment at DCA of activities. If counting on better deal from FAA, should reconsider, even if it seems a good business decision. FAA said first come, first serve would be interim solution until system on line. I believe him. Don't think you will win and others not. We don't know what FAA will do, but we won't like it.

NA: Agree

NB: Who is party to suit and what is the issue?

Chair: Noise, etc.

NA: As someone at that meeting said, we are doing FAA's work and cutting our throats. Why not cut them now?

Counsel: Can't accept that.

Chair: Thank God sober minds prevailed.

NA: I hate to admit it, but this first meeting in ten years I am under explicit orders. Before I had latitude. I have orders to come back with 38 slots. All I can do is tell them the problem and they know. Maybe need higher level management.

Chair: No. Last time it set us back months. Keep them out.

NA: If you talk around to people at higher levels and say DCA could go to FAA, they say maybe it's best way. I don't know what the answer is. Some numbers have to come out. That's all I know.

(2:23)

KC: Maybe more people than we care to admit are under orders.

NA: I hate to admit it -- first time ever.

Counsel: All under orders to use best efforts. This overrides higher orders.

NA: Will you guarantee my income?

accommodate BN. We have no problem with carriers that must grow. If government gives us 60 we will make it work. Am going to 138 because got a little greedy in the summer.

BN: I asked about going to 24 and told to go up.

Chair: Why 4 released?

BN: Equipment problems.

(2:40)

NA: How many flights to DCA eleven years ago when we started?

Counsel: More than this.

NA: Then they canceled flights. Will happen here.

Counsel: Two airports at DC that can handle the types of planes that go into DCA. Not true at ORD. Some planes just can't go to Midway.

NA: Expresses disgust with Dulles.

NB: Ever consider using Andrews as a reliever? Used to be flight instructor there -- much excess capacity. Run Metro buses out there. I would fly there.

NA: Makes sense -- no wonder government wouldn't consider.

Chair: How about UA's column C suggestion? Any support?

PI: Good idea. Get carriers wanting an increase to do something. Cut it to 1 or 2 or 3.

Chair: We all agree that if such orders issued, couldn't be at a worse time. Hope will retract. Don't put much faith in higher levels.

DL: Most carriers have willingness to go with status quo or less; a small group asking for more. They say can't help it and status quo won't help unless those trying to expand do something. I won't do anything until numbers close. Won't slide. This applies to new carriers and old trying to expand. We are locked in until somebody does something.

NA: All figures can be justified; we look up, but you know of DC-10s. Look at last winter and we are at status quo I think.

Chair: Hope somebody develops some kind of proposal so can get to east coast office before closes. It's 4:20 there. Can someone put together a proposal?

UA: Look at column C. Let every carrier use column C or less for those that reduce. This would drop total to 623. This would leave 17 slots (at 2200) for increases.

AL: Have instructions that can go to 80 if can work schedule. So far haven't succeeded with getting it done.

EA: We will go down to 138 when close. Have problem with carrier (BN) that got 4 extra slots and then released slots. That's the problem. No problem with KC, QH, NB. It's BN. No one should release. All carriers moved schedules to

Chair: Would pick up 10 slots.

UA: (Does arithmetic.) The question is would that be a reference point to work from?

Chair: And then the question of how to allocate. AA? How about it?

AA: OK, but you are counting 40 at 2200. Looks to me we are 36 slots over. Really 620 possible.

EA: There are 28 at 2200.

Chair: What about it?

AL: OK.

DL: OK.

KC: Nothing in column C. OK, will play.

BN: OK

EA: OK

NA: No, can't live with 34.

Chair: This is no commitment; just a place to start. OK?

NA: Nods.

NB: Don't understand this. Start off down 2. Column C hurts me.

Chair: Same boat as KC and NA, etc. -- just a reference.

NB: We will march through the marshes but won't accept it.
(phone for UA)

NW: OK.

QH: As a starting point but can't live with it.

PI: OK.

RC: OK.

WA: OK.

TW: OK.

UA: OK.

Chair: We have a reference point. We have done crazier things.

TW: Will get worse.

NB: As exercise, let's try lottery just to see how it would work.

Coleman: Don't let CAB know we started it.

Counsel: (Negative comments regarding lottery)

Chair: Refers to drawing out of Levine's hat and Cohen's hat.

NA: They don't wear hats; just have bags over their heads.

TW: I think NW releasing 2 slots at 2200.

NA: Don't ask people to answer such a stupid question.
It's embarrassing for me. BN, TW, NA must come down.
Maybe EA and some others. Don't think it will happen here. Should recess and talk to managements. Have ATA talk to our people.

Chair: In due course.

NA: If 6 to 8 slots, someone may break. This will take major surgery. Home office hasn't accepted that yet. Someone may be willing to go to wall and take it to FAA.

QH: Poll? How many feel we should go home and talk to management? I must leave in two and 1/2 hours. How many say go home and reconvene in DC?

Chair: AA?

AA: We have schedules for 60 slots. Can't help now.

AL: Staying.

NA: A suggestion. How many slots down to make it work and see "arbitrarily" what surgery is needed, e.g. AA drop 2, AL drop 2, BN drop 2 or 4, etc. What is on paper doesn't matter. The question is what will companies take?

Chair: Can we agree on number over?

NA: Not realistic to put 40 at 2200.

Coleman: That was in June.

NW: Released through September 9. We are operating 2 at 2200.

TW: So 2 is closer.
(2:58)

Chair: UA, all accept column C as a reference point with reduction as volunteered by EA, PI, UA.

UA: There are 30 slots for 7 carriers -- 621 between 0700 and 2259. How to apportion the 30 slots? Lottery? KC has none. Maybe should get first crack. Can any carriers come down from column C?
(Wait)

Chair: I guess there aren't any.

UA: AL said would try to drop.

AL: Did.

UA: Sorry. We could start off giving all who want to increase 1, but leaves KC out.
(10 minute break at 3:03)
(3:26 called back in)

Chair: OK -- have 30 for 7 carriers. What do we do next?
QH?

QH: This might be a good time to find out about orders from back home. Could be waiting time. I am instructed for 10.

Coleman: Column A now. 23 over. 630 in 0700-2259 (30 at 2200). 3 requests are at 0600 so 653 requests.

Chair: Can we agree?

NA: Just an exercise.

KC: Who doesn't agree?

QH: Don't take 2 from all -- take percentage.

NA: First take those offered. Then take increases away.

KC: Disagree.

NA: Not new carriers.

KC: Agree now.

NA: With increases and volunteers, how many more do we need?

EA: These are tight, realistic numbers. Used to be slack in submissions. Not now.

NA: Everyone goint to have to bite part of the bullet. EA -- big.

EA: Everyone must get hurt a little.

UA: 23

KC: That is 3 1/2 percent. Suggest take 3 1/2 percent of requests of column A and round to nearest even number.

QH: I second that.

TW: All carriers to participate.

Coleman: Column G. Totals based on this exercise.

AA 58, AK 8, AL 80, BN 28, DL 32, EA 136, KC 10, NA 36,
NB 6, NW 40, PI 68, QH 10, RC 4, TW 58, UA 64, UR 4, WA 4.

Coleman: Total 636 -- with 3 in 0600, so 633. Need 33 at 2200.
Will call this the 3.5 system.

Chair: What reaction?

EA: If I were new, I would love it.

NB: We're happy.

TW: I should have asked for 54.

NA: My only problem with this is TW increases.

Chair: UA?

UA: Won't work. We are down 4 already. Should do over again
with new percentage and original submission.

TW: Potentially, all kinds of gimmicks; could base percent
on seats.

DL: Let's resurrect UA share of airport expenses.

Chair: RC?

RC: This concept favors some over others. This doesn't affect me
here; at other airports have lots of slots. Don't agree with it.

QH: Why does EA have greater right than QH? The issue is, we
are equal.

EA: If you ask small, you get it.
138 is needed for schedule.

QH: If willing to live on \$5000 per year, go on welfare. If want
\$80,000 to \$100,000, need to fight. EA wants to be big so
must fight.

EA: Let us get what we need.

NA: It won't fit.

NB: Why was ORD given 115, LGA 48, JFK 70, and DCA 40 per hour?

Counsel: FAA did it, as I said yesterday. Assumed IFR and 1 hour delay.

NB: Over ten year span, hasn't DCA's capability increased?
Ask FAA to increase slots. Don't count nonscheduled and
extra sections.

Counsel: Have always tried to get FAA to go up. Now they want to go
down. We have proposed an increase. Can't count on it.

NB: We should be involved concerning Airport Access Task Force in DOT.

Counsel: Refers to Low Capital Task Force; just said it exists; and
another one (the one NB referred to) made up to advise CAB about
amendment no. 10 to something. Not seeking industry input.

NB: Mad about not having input.

BN: Agree with RC.

NW: Won't support unless all other carriers do.

DL: Can't support.

WA: No.

NA: Don't like result. Why does WA object? No cost to them.

Chair: Based on principle.

NA: We need to do something. Someone has to come down.

Chair: Yes. QH?

QH: I proposed it. I like it. It crystalizes the issue. I'm
talking of a minimum of 2 slots. If QH drops 2 that is 20
percent, and only 1 percent for EA. Somewhere between lies
compromise. If give us 20 percent down, do same for all and
cut operations to 25 per hour, FAA will be happy. Certificate
guarantees minimum number of slots. Let those who want more argue

NA: A lot will say new carriers have no right to operate. Refers
to air taxi and commuter rule at DCA.

QH: As EA said yesterday, we all come in naked. So why should
I drop 20 percent and others 1 percent? Let's all lose
equally (in percentage). It's just that EA is big.

EA: I'd like to start with number of slots in 1968 and reduce
from that.

Counsel: May get input. Not supporting CAB position. He explains
that CAB must approve agreements regarding this committee
for antitrust. CAB now rethinking on this mechanism.
Long speech: CAB said should discuss agreements and other
ways of solving problem on less anticompetitive basis.
ATA submitted arguments. Out of all that the Intra
Government Task Force. Yesterday Aviation Press says
CAB and FAA let a contract for August 15 from consulting
firm to recommend to CAB about mechanism. CAB must
issue order and ATA may fight legally.

NB: Freedom of information act may allow us to get information
on stuff that may affect our economic welfare at DCA
before it gets into CAB order.

KC: Seems that the consensus against exercise. Can anyone try
a new exercise?
His figures show 8 carriers have dropped 2 and 1 has dropped 4.
Let's poll and see how many can live with this.

Chair: So far all but QH opposed. PI?

PI: New carriers get more than deserve and some old carriers are up
over July.

Chair: Could you live with it?

PI: Yes.

AL: No.

EA: No.

AA: No. And the reason is that base altered before 3.5 percent and some increased. Let's go back to July submission.

KC: So you want 692?

AA: OK, except for increases.

Chair: TW?

TW: In spite of going up, TW opposes. Creates a precedent where new carriers get what they want. I will come in with 100 slots and take my percent from that.

This is what FAA is doing. Regarding QH asking for 10 -- comes from zero. We have been here for years and haven't picked up 4 in 5 years. We have resources and facilities.

NB: Comparing QH's and TW's requests is irrelevant. They would have asked for it if traffic there.

TW: In the past we have asked for slots and the meeting went to status quo.

QH: The concept is the number of slots not the increases.

We all have right to serve DCA. All have an equal right. Would be happy to have fair way to cut down. Taking 2 away is not fair. Maybe percent not fair either. I hope we are

NW: Tacky.

AA: Same as 3.5. No.

BN: No.

EA: No.

NA: (out)

NW: No.

AL: No.

DL: No.

KC: Yes.

NB: Yes.

PI: Yes.

QH: No.

RC: Yes, but could be no.

TW: No.

UA: No, we are already down. But KC's suggestion is a bright spot. No one has a right to a slot. You come here and ask for what you need.

WA: Yes.

NB: Let's adjourn -- no progress here now.

all asking for what we need. Won't fit. How to decrease in an equal and just manner.

Chair: KC?

KC: Yes.

NB: Yes. We wouldn't be here if AL hadn't dropped service.

Chair: Poll: 11 to 4 against 3.5 plan.

QH: Why not start over and use first submission as a base.

Question: This makes 8.6 percent reduction then?

(Much figuring going on)

Coleman: 8.5 percent is 12 of 142.

AL: No.

KC: I suggest each of those with 10 or more, except TW, drop 2 and EA drop 4. This includes KC and QH and are part of the problem. It's silly but we must proceed.

QH: Can't take 20 percent down.

KC: Don't call it a percent then.

Some are new. Need to sacrifice somewhere. We are all as equal as others. Must depend on service rendered to public.

QH: All have 401 certificate and need equitable way to get down.

KC: Calls for poll on those greater than or equal to 10 to drop 2 and EA drop 4.

EA: I agree with NB. A lot of carriers told can't reduce, e.g. NA, QH, AA. It's pointless to do exercises.

Chair: Does anyone feel we can do something today?

NA: No sense in slides.

Chair: I agree.

NA: I must talk to Miami.

Chair: We are all here. We could stay to midnight.

QH: We should take secret poll if it is useful to continue; as, if publicly says OK, then shows can reduce. So, secret poll better.

NA: How do you spell "No"?

KC: What will chair do with results?

Chair: Face Mecca and hope.

(Took secret poll on whether can continue usefully.)

Poll: 3 yes; 12 no.

Chair: Would like directions as to what you expect when you reconvene -- shame to reconvene and be in same position. We are talking about 2 to 4 slots, depending on size of carrier. Need mandate from committee to members.

UA: A number of things given to committee head by Friday a week before meeting -- each carrier what number is if

below column A. Will go back to management and ask if will cancel. Need indication of progress.

Meeting with FAA that lays out problem. Can't certify carriers for DCA without more slots. Just asks old carriers to cancel. Should be penalty for those who don't use slots. Last summer slotted 634 and used 619. Can't go on. Can we go to FAA?

Counsel: We can go to FAA, but hard to see much use.

NB: How about seeking restraining order on CAB stopping certification of new committee.

NA: Let's get same rule for scheduled lines as for air taxis.

(Exchange with counsel who says is irrelevant)

NB: Sue FAA and say Deregulation Act can't be enforced because of FAA rules.

Counsel: This is a no-no.

NB: Looking for a forum. I'm a lawyer.

Counsel: No court I know of will help us. Must work it out. No new way will be found. Some new mechanism may come along. We must try. This afternoon has been useful. But new initiative tried. Will see and get insights. Don't think outside forces can be invoked.

Chair: Long range, maybe, but won't help in short run. Go home and ask management.

TW: Don't get counsel heated up again. What about NB's suggestion about Andrews AFB?

Counsel: Long range only. Look at the space at Dulles and Baltimore.

Chair: By Friday August 3 advise Coleman of any changes in column A.

Coleman: Three said could do something. Under what circumstances? (referring to secret poll). (discussion about reduction)

NA: Ask bosses two questions:

1. Will you reduce?
2. Should we give the problem to FAA?

Counsel: Need compromise -- long speech.

(Threat of crash from counsel and chair)

Chair: Backing off of suggestion of crashing -- only meant might delay meeting a couple of days.

Anything else?

(5:17)

Until 1:30, August 7.

Recess until 8:30 AM for ORD.

QH: Sympathize with NB, but don't think courts the right approach. We should go home and check. Should get FAA involved so get appropriate people to sit in room. Invite FAA to next meeting.

FAA: Quotas based on safety; go after CAB.

NB: That's an insult to our intelligence -- not based on safety.

FAA: CAB certifies carriers and gives rights of access.

Counsel: That could kill this mechanism.

QH: Let's get them here.

UA: Offer FAA: 42 per hour between 0700 and 2259 would do it. What if we can't?

FAA: If we raise, then next year you will want more.

NA: Airport limits numbers.

Chair: Maybe some temporary exemption.

Counsel: OK. Good if raise quotas. But no prospect that that maneuver will help. Hoping for more slots will paralyze this committee.

NB: We have lots of political clout. Used to work for majority leader of House. Get lots of people to come down on FAA.

Counsel: Can't help this meeting.

LCA MORNING SESSION: JULY 24, 1979

Coleman: No deletion problem. 720 slots in 0700-2159 with 25 outside, so just sliding problem.

Chair: Any deletions -- might as well go into sliding.

EA: 1, 0900 slide to 0800.

Coleman: Well, EA took care of top row (referring to slide on screen).

Chair: Who wants to do the bottom one?

AA: 2, 1900 slide to 2000.

AL: 1, 1600 slide to 1500.

DL: 1, 1600 slide to 1500.

TW: 1, 1900 slide to 2000

DL: 1, 1200 slide to 1100 (Does not help now but may be good.)

EA: 2, 1700 slide to 1400, 1500.

AL: Will 1 from 0900 to 1000 help?

AC: 2 at 1800, 1900, add 4 at 1400, 1500.

UA: 1 at 1500 slide to 1400.

NE: Drop 2 at 1600 and 1 at 1200.

NA: 1 at 1500, slide to 1400.

DL: Offers 1 at 1900, slide to 1800 (won't help at all).

BN: Drop 2 at 2000.

NA: Drop 1 at 1100 (for bookkeeping).

TW: Down 2 at 2300.

PI: 1 at 1600 slide to 1500.

TW: 1 at 1700 slide to 1600.

UA: On December 13, slide 1 from 1800 to 2000 if helps.

NA: Asks what move was.

NA: Can pick up prior to December 13, 1 from 1800 slide to 2000.

NA/UA: 1 at 1800 slide to 2000 (recorded as NA).

(This is moving right along -- much helpfulness -- first name basis.)

(9:00)

EA: 1 at 1800 slide to 1600.

AL: 1 at 1700 slide to 1600 (note here using slack created to move back.)

(9 to go -- all at 1700, 1800, 1900.)

(No conversation now; all working on schedules.)

EA: 1 at 1600 slide to 1300 (creates help at 1600.)

Chair: BN, can you be of help?

BN: Let me do some juggling.

Chair: RC, what about you?

RC: All moves either compound problem or don't affect it.

TW: If someone out of 0900, will slide 1 at 1600 to 0900.

Chair: Can anyone move out of 0900?

DL: 1 at 0900 slide to 0800. (Both slides, TW and DL, made.)

EA: 1 at 1900 slide to 2000.

AA: Is 1900 correct? I show 50.

AA: 1 at 1800 slide to 1600.

TW: 1 at 1900 slide to 2000.

Chair: 6 more slides.

BN: 1 at 1800 slide to 1600.

TW: 1 at 2000 slide to 2100.

UA: 1 at 2000 slide to 2100 if helps. } (Creates slack at 2000 -- now 46

NA: Wants door closed to outside because of glare.

EA: 1 at 1600 slide to 1200. (also creates slack at 1600 -- now 47)

UA: Split deal -- looking to go down 2 slots.

Drop 1 at 1500 all season.

" 1 at 1900 from December 13,

" 1 at 2100 prior to December 13.

NA: Will call office.

(ten minute break)

NA: Swap with UA.

Drop 1 at 1900 through December 12.

NA: Bad news -- will tell at 1:30.

NW: 1 at 1700 slide to 1600.

BN: offers 1 at 1700 slide to 1800.

Chair: Thank you, BN.

Coleman: Is a weekend problem.

Chair: Hunch that TW will get white-hat award -- looking very hard.

This is cutting into play time.

OK. Slide from 1900 to 2000.

NA: Drop 1 at 1700 prior to December 3.

Chair: OK. UA, your turn.

UA: Sorry. 2 out of 3 isn't bad.

EA: 1 at 1900 slide to 2000.

(4 to go)

NE: Offers 1 at 1700 slide to 1800.

Chair: Any other possibilities? Even if doesn't seem to help, maybe can tie in with something else.

PI: 1 at 1900 slide to 2000.

EA: 1 at 2000 slide to 2100 (creates slack).

EA: 1 at 1800 slide to 1900 if useful (treated as offer).

Coleman: 1 at 1900 slide to 2000?

Chair: AA, slide from 1900 to 2000?

AA: No, have already done 3 of them.

Chair: NW, can you help?

NW: Not at this time.

TW: 1 at 1800 slide to 1900 and go down 1 at 0700 and 1 at 2200 (latter for bookkeeping -- 1800 now works).

Coleman: Need to slide 2 from 1900 to 2000.

NA: If finish now, do we get off until 1:30?

Chair: Yes.

(10:05)
 Chair: 1600 slide to 1500? (Trying to get deals started)
 (Then 1700 to 1600 would do it)
 Chair: AA?
 AA: Nothing to offer right now.
 Chair: Ladies and gentlemen: have made much progress this AM.
 Good work!
 NA: When went went from 1500 to 1400 should have been as of
 December 13.

Coleman
 & Chair: No problem.

Coleman: 23 over at start. This is nice work.

Chair: 90 percent in first half hour.

NA: Wants 2 at 1100 through December 12. Last fixes on schedule.

Chair: John (TW) are you about ready to make your move?

TW: No. (shakes head)

Chair: Be sure to get that white hat for this session.

AA: Offers to slide 1 at 1600 to 1500 only if it helps.

TW: Slide 1 at 1900 to 2000.

EA: Slide 1 at 1800 to 1900.

Chair: Let's start with deletions. Who is going to start? (Long pause)
 Let's do something. AA?

AA: Nothing now.

AL: Poll regarding going to status quo (last meeting).

ZW: Should speak up. Our submission is our schedule. FAA granted
 more time on exemption. So in same position as last meeting.
 At mercy of committee for slots. Will change to reflect FAA
 ruling. Saturday, same; Sunday through Friday:
 Drop 5 at 1500; drop 4 at 1600, 1700; drop 3 at 1800,
 drop 4 at 1900. Saturday, same. Exemption expires March 31.
 Next time will be trouble.

Chair: Thank you ZW. Excellent start.

BN?

BN: Not now.

CO: " "

DL: No

EA: No.

FL: At status quo. If any carriers playing games, come down now.

Chair: Well said, FL.

FT: Drop 2 at 1600 Tuesday-Friday.

Chair: Fine. Just fine.

BN: Slide 1 from 1700 to 1800.

(done)

AC: May want 1100 or 1200.

(Checking numbers. Much confusion. UA erred. Dropped
 1500; meant to say 1400.)

EA: Drop 1 at 1600, 1700, 1800; up 1 at 1500.

EA: Says to forget it -- will work it out with somebody.

(10:25; adjourn until 1:30)

ORD MORNING SESSION, JULY 25, 1979

(8:32)

Roll called.

Coleman: We must do every day of week 1500-1900 for each month.
 Asked everyone to look over submission materials for
 inaccuracies.

Coleman adjustments:

MX drop 1 at 1500

SAS drop 1 at 1700.

Coleman: Overhead projector -- Chart shows days and hours.
 For February 1980 -- notes limit of 115 per hour.

MVA: Here first time are up since at zero. Drop 1 at 1700 all days --
 says same boat as ZW.

NW: No, at this time.

OZ: Agree with FL. Those with inflated numbers should go down.

PI: Not now.

RC: Nothing to offer -- are down 2 from summer.

TW: Pass.

UA: Our numbers are up. Schedule calls for more than 130.
 ORD is UA's life blood as is Atlanta for DL. Agree with AL;
 need something like status quo. There are slots coming
 available. When NC merged into RC, gave up 2 and 4 others
 so are 6 slots for MVA and ZW plus seasonal needs of EA who
 helped a lot in past.

AC: Nothing now.

LA: Nothing.

Chair: AL suggested poll regarding status quo in "some form" as
 a basis.

AL: Poll to see if willing to go back to last meeting -- below
 submissions -- EA has a problem as all know seasonal at ORD.
 Maybe should look at February 1979 meeting as status quo.

Chair: Post meeting poll July 1979:

ZW: We weren't there but will cooperate.

UA: Pass.

TW: Yes.

RC: Yes.

PI: Yes.

OZ: Yes.

NW: Yes.

MVA: Yes.

FT: Yes.

FL: Yes.

EA: Yes.

DL: Yes.

CO: Yes.

BN: No.

AL: Yes.

AA: Yes.

UA: No. Will go along if unanimous. Need more alets.

MVA: Have zero in column C but will go along as exercise. Yes.

NW: Yes.

RC: Yes.

ZW: Yes.

OZ: Yes.

TW: Yes.

AA: Yes.

PI: Yes.

UA: Yes, as an exercise.

CO: Yes, as an exercise.

FT: No. Will take column D, February 1979 (drop 2 for this; column C is drop 3).

TW: Is FT daily?

FT: Tuesday-Friday.

FT: Won't accept C even as an exercise.

Chair: Will FT go along without commitment?

FT: As long as all understand is only an exercise.

Chair: We understand.

EA: Why don't we do again with FT at 2?

Chair: Will assume UA is yes for purpose of poll.

BN: Will go below 26, but not to 22. Will go to post July 1979.

(This would be down 3 not down 4.)

(Coleman's slide)

EA: Will carriers accept July 1979? If all will accept, give me four hours and will try. Need time to work out schedule (EA at 17, down 5 from submission of 22).

AL: Will go to February 1979 and let BN at 23 and EA at 22.

Poll: BN at 23 and all at February 1979.

AC: Had poll one and about to have poll two. Would need time. If unanimous will try to make something work.

AA: Pass.

NA: Using postmeeting July 1979 or FAA July 1979 (Column C) with BN at 23 (for clarification).

AL: Yes.

BN: Yes.

CO: Pass.

DL: Yes.

EA: Yes.

FT: No.

(ALL agree.)

Column C -- Now put up on screen is July 1979 with BN at 23, EA at 17, and FT at 2.

(Note: PA not here -- for exercise cut 2. RC at 48. SB not here; gone from 0 to 1 -- shows 1. WO not here. ZW, 2.)

ZW: MVA should be zero for exercise.

MVA: OK.

Coleman: Calculates -- gives total of 573.

FL: Proposes that subject to international carriers' approval, we increase MVA and ZW to 1 which is solution. Gives each entrant 1.

Chair: ZW?

ZW: Have to make a call, but . . . answer lies with EA and AC. Whether I can go along must be seen. We are just putting off problem.

MVA: Agree. Came with 5 (absolute minimum); already at 4. Would have to make call. It all depends on EA working out their schedule and dropping 5 to 17.

EA: Will try; hate to hold up committee. Can't guarantee can do it. Could slide, etc. to get hours straight.

AC: Without doing the fine tuning my contribution would be minimal. Won't take 4 hours. Will have to do scheduling.

FL: Our proposal could be IWI. s.t. EA, MVA, ZW, AC, why not start sliding now?

TW: PA and WO and SB may not go along.

FL: Would present strong front to them if in resolution and sliding when they show up.

TW: Carriers here go to IWI -- should slide.

Coleman: Can't slide until we know where hours come from.

EA: Take drop of 1 each hour -- won't be right but will still be sliding when EA is finished checking schedule.

Chair: OK?

ZW: Will go to 3 without phone call. If get solution, will check with office. Easier to deal with higher ups if "monkey is on our back."

MVA: Will proceed as exercise before calling office.

Chair: Let's start sliding.

EA: Drop 1 at each hour -- down 17.

FL: Question about what exercise.

EA: Go down list and post changes. (Trouble no submission sheet shows proposal for column D with FL at 3.)

ZW: Drop 2 at 1600, drop 1 at 1700, 1800.

Coleman: PI drop 1 at 1500, 1900.

AC: Couple of minutes. With extreme difficulty and reservations, will go to unworkable situation, but want 1 back.

Drop 1 at 1500, 1900. (This puts them at 7 not 6 as agreed in column G.) Wants 1 at 1500 -- can't release third slot. The seventh slot is Wednesday-Friday.

(Much consulting of schedules or just sitting and reading newspapers.)

Coleman puts up new slide showing daily totals. Change from 575.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
0	-1	+6	-1	+1	+1	?

(The question of WO comes up -- also not here.)

Chair: Coleman will call those absent. No sense in sliding until get more information.

(20 minute break -- be back at 10:50)
(11:00)

Coleman: SB, PA en route. WO en route but had not left.

WO drops 1 at 1500 Monday and Wednesday; and drop 1 at 1600 Tuesday. Leaves +4.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
0	-2	+4	-2	+1	+1

from 575 over +2.

(10 minute break -- 9:37)
(9:55)

Has slide on screen which shows:
Deletions -- to get to column G.

AA: Five minutes.

AL: Drop 1 at 1900.

BN: Drop 1 at 1600, 1700, 1800.

DL: Drop 1 at 1700, 1900.

EA: (gone) 1 at each hour.

AA: Drop 1 at 1500, 1600, 1700, 1800.

FT: Tuesday-Friday, 1 at 1500, 1900.
(Pause while Coleman makes new slide.)

MVA: We have deletions -- 1500, 1600, 1900 drop 1 (for exercise).

Question of what for PA -- drop 1 at 1700, 1900 -- missing (lots of decisions being made for missing carriers).

(PA -- set at 1 at 1800 all week.)

PI: Looking at schedule.

RC: Nothing, as we are at 48.

TW: Unchanged.

UA: 1 at 1500, 1600, 1700, 1800 -- will have to call office.

Chair: We don't know about EA and other carriers. Suggests recess until 1 PM. Asks for guidance.

TW: EA and AC won't make all the slides. Should go ahead.

Chair: Things may change after lunch, but will take slides now. Also EV has representation here -- is a Saturday only submission.

AL: Can move but don't know if it will help. But don't know what EA and AC will do; e.g. can go from 1 at 1700 to 1800, but if EA puts something into 1700 makes a mess.

Chair: AA?

AA: Nothing to offer now -- should wait.

Chair: UA?

UA: Should wait. Have a call in to be sure this will be more than an exercise.

TW: I'll do what people want.

UA: (who was on phone awhile ago) Asks clarification as to slide being shown.

Chair: OZ?

PZ: Only a few minutes anyway. Should wait.

Chair: 11:10 -- recess to 1:00 PM.

ORD AFTERNOON SESSION, JULY 25, 1979

(1:03 PM)

EA: Two carriers said need to make a call -- ZW and MVA. Are there any others? In the past some have gone along and said just an exercise. Are any carriers that will need to check with home offices?

AA: Nobody home. Can't call them, i.e. no need -- won't call. Yes.

AL: No call. OK.

BN: No. OK.

CO: No. OK.

DL: OK.

EA: Pass.

FL: OK.

FT: OK.

MVA: Must ask.

NW: OK.

OZ: OK.

PI: Gone -- voted as OK.

RC: OK.

AL: Offer of 1 at 1800 slide to 1700. If helps, put it up as offer (offers shown on screen).

RC: Can go from 1 at 1800 to 1700 and 1 at 1700 slide to 1600. This is an offer. Don't know if it helps.

Coleman: We take 1 at 1700 slide to 1600.

Chair: BN?

BN: No.

Chair: DL?

DL: offers to slide 1 at 1800 to 1700.

Chair: FL?

FL: No.

Chair: FT?

FT: No.

Chair: NW?

NW: Not at this time.

Chair: OZ?

OZ: Would only undo what you just did.

Chair: TW?

TW: Pass.

TW: OK.

UA: Based on exercise, OK.

EA: Will not live with 17 (some tension).

EA: Carriers like UA have big investment at ORD. So EA drops 2 mo to 15. Ties this to DCA. EA has big investment at DCA. Wants help there. Down 1 at 1600, 1800. Can't slide.

Chair: Thank you. Confident that the understanding will last. Your colleagues will understand and help you in other areas.

Chair: AC? Good news?

AC: Have given you all the good news that we can.

TW: What about PA and SB?

Coleman: We put PA down 2 and held WO down 4 with approval. So could be worse off by 2 if PA doesn't go along.

MVA: This for exercise, we go along (laughs).

TW: Slide from 1 at 1800 to 1900; 1 from 1700 to 1500.

Totals now:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
-3	-3	+2	-3	+1	-1

CO: 1 at 1800 slide to 1500.

Chair: Thank you. (1800 biggest problem; around 120 most days; 1500 and 1900 slack.) AA? Help?

AA: No. Sorry.

Chair: UA?

UA: We are studying.

Chair: AC?

AC: Have done it already.

ZW: I have 1 at 1800 slide to 1500 or 1900.

Coleman: Slide 1 from 1800 to 1900.

MVA?

MVA: No.

As I read the board, have open slots. I will move 1 from 1800 to 1900 if I can get a 1500 on days open.

Chair: TW?

TW: To hasten meeting, I have capability and everyone knows it. We have a serious problem at DCA. Need additional moves at DCA. I want you to hear me and know we need help. Drop 1 at 1800. 1 at 1700 slide to 1600. Add 2 at 1500.

Chair: Thank you TWA.

NW: 1 from 1800 to 1500.

Chair: Thank you NW.

Chair: UA? How is your studying coming along?

UA: I'm waiting for a call from Chicago.

AL: Slide one from 1800 to 1900.

Chair: Thank you.

Update:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
-4	-4	+1	-4	0	-2

OZ: Let's take MVA's move.

Can go from 1600 to 1700 or 1800.

AL: To add to confusion, go back to 1800 -- checking to see if possible.

MVA: 1800 to 1900 if add at 1500.

TW: 1 from 1900 slide to 1800 and drop or slide 1 at 1500.

UA: Probably 2 at 1600 slide to 1500 and 2 at 1700 to 1900.

MVA: We sacrificed -- number of slots more important than hours.
Will take 1 at 1600 and 1900 or 1500 and 1900 or 1700 and 1900.

Chair: But you want extra slot. Don't forget PA.

MVA: This is all an exercise.

ZW: I won't get OK to come out with 1 if MVA gets 2.

Lets have MVA and I each take 1. Next meeting is going to be the bad one.

MVA: ZW got 2 at its first meeting and that is what I want.

ZW: I must make phone call before too late.

(TW and ZW in private talk)

AL: Slide 1 from 1900 to 1800.

Coleman: Blip at 1800 on Sunday is caused by EA, WO, AT.

(2:08)

(PA arrives.)

Chair: Welcome PA. I'm sure you will be happy with our progress.

PA: Will go along if an exercise.

Chair: AL?

AL: Nothing now.

ZW: We need 1 more at 1500 in order to continue with exercise.

Chair: MVA, you want 2 slots also. Might as well not kid ourselves.

MVA: I want 2 -- don't much care when. 1900 is all right.

Chair: You can see what this is taking us to. OK, where do you want it? 1900 for exercise?

MVA: Yes.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
-2	-2	+3	-2	+2	0

Coleman: Will MVA slide 1 from 1800 to 1900?

MVA: I don't see that it will help, but will consider it if it helps

(2:33 -- 10 minute break)

(2:55)

Chair: Can we get help in isolated hours?--if someone has capability.

TW: If someone can slide from 1600 to 1500 at odd hours, will drop one at 1500.

This is in spirit of cooperation, but I want cooperation at DCA.

DL: Sunday only, slide one at 1800 to 1900.

AA: Slide 1 from 1600 to 1500 -- (so TW drops 1 at 1500).

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
-3	-3	+2	-3	+1	-1

Chair: UA?

UA: No.

AL: If it weren't for TW, EA, and AC, we wouldn't be where we are; if ZW and MVA hadn't put in for extra slots, wouldn't have problem. Suggest they look closely at schedule to see if they can get problem resolved.

Coleman: AA, Sunday and Monday, 1 less than other days?
(A bookkeeping question)

AA: Yes.

Chair: Executive committee at 6:00 in 2120.
(Some banter about cocktail hour)

Coleman: Can we put it down?

MVA: No, I will consider it later.

Coleman: Don't forget it.

MVA: I won't.

UA: Offers to drop 1 at 1700, drop 1 at 1600 and add 2 at 1500.
This is an offer -- wants to do it if possible.

MVA: Sunday only, slide 1 at 1800 to 1900 if doesn't complicate things.

Chair: Thank you.

ZW: What was UA's question? I have 2 at 1500; could go to 1600 or 1700, but not 1900.

(So ZW down 2 at 1500, up 1 at 1600, 1700.)

MVA: Wants to change his Sunday move to slide 1 at 1800 to 1700.

Coleman: OK.

RC: Can rescind earlier move if helps. Offers to slide 1 at 1600 to 1700.

TW: 1 from 1500 slide to 1900.

Coleman: Gives summary on slide with the changes.

EA 15, TW 84, ZW 4, MVA 2, international carriers 17.

Total -- 577 (2 over).

OZ: Drop 1 at 1800 Sunday; Friday, slide 1 from 1800 to 1900.

TW: What are the supplemental numbers?

Coleman: Did not get much submission on that. CL chose to take it on an ad hoc basis.

AL: Any use to ask MVA and ZW to cancel on days over and keep on others?

Coleman: Good idea.

ZW: No. Can't settle for that.

MVA: You want us to drop one Tuesday and ZW drop 1 on Thursday?

ZW: We discussed that before and can't. We are in commuter slots and it creates chaos.

MVA: How bad is it?

ZW: What we get here requires dropping commuter slots. If we delete on a day to day basis, they (the commuter people) can't handle it. Only one guy is running the show and he doesn't know that much.

ZW: I would like to caucus with MVA.
(10 minute break -- 3:10)
(3:30)

Chair: All right. Let's begin. How was the caucus?

ZW: No solution.

FT: No.

FL: No.

EA: No.

DL: Not right now.

CO: No.

BN: No.

AL: No.

AA: No.

TW: No.

TW: Can't see sitting here for two days to get 4 moves down.

RC: Are these overages all day, all season (new person replacing man who left).

TW: You look forward to next meeting. It's going to happen. Won't be all one carrier. I will take lumps now, but remember, at next ORD meeting -- Drop 1 at 1700. That's three already by me. Now have 116 at 1900 Tuesday and 1600 Thursday. All else works at 115 or less.

Current tally:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
-4	-4	+1	-4	0	-2

Chair: Any hope?

ZW: Not at this time.

Chair: UA?

UA: No.

TW: What about international carriers?

Coleman: In the days we are over, some absent carriers could help. Thursday should be OK. Tuesday is less clear.

(3:40)

TW: Can you poll carriers to see if can go down on odd operations?

ZW: No.

UA: No.

TW: Pass.

RC: Not right now.

PI: No.

OZ: We have already.

NW: No.

MVA: No.

Chair: It appears this is about all we can do at this time. Hopefully tomorrow when other carriers arrive, will get help. Nice if can put this in as an exercise that domestic carriers will live with.

EA: I would prefer it not an exercise. I'll firm it up.

TW: Earlier I said OK, could live with, and didn't have to phone.

AL: Poll carriers.

AA: Absent -- voted yes.

AL: Yes.

BN: "

CO: "

DL: "

EA: "

FL: "

FT: "

MVA: "

NW: "

OZ: "

PA: I would like to say yes for meeting here, but to accelerate

international carriers, would like to make decision tomorrow.

(Says international carriers think of PA as one of them.)

PI: Yes.

RC: "

TW: "

UA: "

ZW: "

AC: "

Chair: OK, neat. I can't believe it. This is fantastic! We have a strong case to present tomorrow. All of you should be congratulated.

Any other comments?

Recess until 8:30.

O'HARE SESSION, THURSDAY*

(8:38 -- call roll)

Nelson P. Up to date at O'Hare. Will miracles never cease. Submissions for O'Hare were quite high -- total 63 [?, illegible] moves. After some dedicated good work on part of domestic carriers, the result is agreement for purposes of our exercise, the level was reduced to an acceptable figure, then made some minor adjustments.

The domestics signed off.

We are in the fortunate position of presenting an optimistic figure and picture.

We are only a couple of moves over limits.

I believe we can resolve O'Hare in very short order this morning.

Our assumptions are: the figure for international operations Mexicana canceled at 1500 all season.

SAS moved at 1700 from Thursday to Friday.

In essence this is our position. We need help but it looks very very good.

PA: I believe we have what we did in the exercise -- all slots given up -- except the one in 1700.

Coleman: At 1800.

PA: OK.

Nelson P.: You can see on Thursday we do have room. Tuesday that is not the case -- we are one over.

(much individual talking)

**These notes cover the sense of the meeting but are not necessarily verbatim. Some words by Ray Bell. JCB*

Nelson P.: We need help in a couple of spots as shown on the slide.

I trust you are reviewing your records to see if you can be of help.

(Much individual talking -- Air France and two others confer with Walt Coleman, then return to places.)

(Air France says to my neighbor that he made a proposal and Pan Am responded -- cannot hear whole exchange.)

(Ten minutes pass.)

Nelson P.: Please take your seats. I understand there are some adjustments.

Coleman: Icelandic has canceled at 1700 and 1900 on Mondays for the whole season.

There is an internal swap. Pan Am prefers a daily 1900, with the approval of committee, Air Wisconsin takes the 1800 slot. This does not change the totals -- just the mix of carriers.

But, there is still an overage at 1700 Tuesdays. And Thursday we are one over but there is room to slide. If someone could move 1600 to 1700, then perhaps there could be a slide from 1700 to 1800.

RC: Offers to slide, but would need to do so all week, so wouldn't work well.

(Much informal intracarrier teasing)

WO: Moves slot, 1600 to 1800 to solve Thursday problem.

Coleman: This does us a world of good. The white hat is floating in the building.

Nelson P: Agrees.

AF: Suggests could move from Tuesday 1800 slot provided can move Thursday from 1700 to 1900.

Coleman: Could World go to 1900?

WO: No.

Coleman: Can someone?

Eastern: Suggests Mississippi Valley (MV) or Air Wisconsin (AW) move because it wouldn't hurt them -- for them, it is not the timing of the slot but the total number that is important (reference is to holding commuter slots as well).

Coleman: Air France would delete Tuesday but needs a 1900 to move to 1700. Who would like to participate in this rewarding exercise?

MV: But continuous problem for commuter carriers, as Wayne pointed out yesterday.

AC: I want to comment on Mississippi Valley and Air Wisconsin. We are international. We have come forward with a bilateral and require O'Hare slots, which we have rights to. We have accepted these procedures to the utmost. If we don't get slots, we have no options. We ask you to consider that you have an exemption to act as an air taxi. If you don't consider this, we could sit here for days. You could have housekeeping problems, i.e. allocation of air taxi slots between carriers. But for us, this is a question of landing at all.

Nelson: Thanks, Air Canada.

(Much individual pressure on AW and MV)

Coleman: The offer on the table could solve Tuesday. Shall we open there? Any response?

MV: Please review the proposal.

Coleman: (does so)

Therefore we need a move from 1900 to 1700. Totals would be the same but with clean board. Could you move from 1900 to 1700?

MV: We are here for the first time. We follow AW. Their exemption is shorter than ours. We are not in the same boat as AW because of shorter exemption. AW is larger, and exemption runs out sooner; if we continue as we have here, we can fit into the carrier slots within the time the exemption runs out. AW needs many more slots, given their current capacity, etc. Majors have made heroic sacrifices. Don't think of us as the same as AW -- for us, one is a lot of slots. I will move 1900 to 1700 but this would require a few minutes and a phone call to see if a slide can be made.

Nelson: Urges coffee -- chat while waiting for MV.

(Reconvene)

Nelson: The white hat is still floating in the room.

MV: We move 1900 to 1700, Thursday only. When do we discuss Saturday?

Nelson: Saturday has only isolated problems.

Coleman: Accept AF move from Tuesday, 1900 and 1700 to 1900 Thursday. And MV moves.

Nelson: Congratulations! We are in resolution. Will go to JFK next. All months look OK.

Will talk to MV and AW on Saturday questions. They are not at issue, so can handle privately.

Chicago is solved; we can adjourn.

TRANSCRIPT OF SLOT COMMITTEE, AUGUST 1979

APPENDIX D

NOTES FROM AIRLINE SCHEDULING COMMITTEE MEETING*

ALEXANDRIA, VIRGINIA

August 7, 1979

Call to order 1:35 PM

Roll Call. Aeromech absent.

Mr. Coleman: Old Town Alexandria Holiday Inn

703/549-6080, ext. 144

Room 348 for phone calls.

Refer to sheet #1. 656 is actual score.

Progress was made in Denver. Started: 692, now at 660.

Projection: Original 692

End of Denver 656

Now 660 because TW sent wire changing

50 + 54.

07-2259 hours (10 o'clock) There's room for 640 slots.

We are 17 over total.

Need to de-peak and delete.

Call for offer of deletions.

"We assume you've come prepared to offer such deletions."

No volunteers.

*These notes were taken by Debra Aron, staff economist, Office of Economic Analysis, CAB, at the slot allocation meetings for Washington, D.C. National Airport. Meetings were held in Alexandria, Virginia from August 7, 1979 until temporary recess on August 10, 1979. The notes are as close to verbatim as could be taken longhand, with every attempt made not to delete any ideas expressed (sometimes at the expense of redundancies or non-business related comments which weren't caught).

AA: "No offer."
 AK: "Likewise."
 US: "No deletions, Mr. Chairman."
 BN: "No."
 DL: "No."
 EA: "We made offer in Denver."
 "started at 142, came down to 138."
 Question: "Was that conditional?"
 Answer: "No. I just said I'd give them up."
 CH: We'll hold that in reserve.
 NA: "No deletions."
 NB: "We made 2 in Denver--that's all we can delete."
 NW: "No deletions."
 FI: "We're down 2. We have sliding capabilities. No deletions."
 QH: "No."
 RC: "No."
 TW: "No--we all must cooperate."
 UA: "We can't--we'd have to cancel scheduled flights."
 UR: "No."
 WA: "No."
 CH: "Interesting poll. Most encouraging."
 EA: Will Aeromech be here?
 Answer: We expect so.
 CH: We must all cooperate and contribute to this joint effort.
 Nothing will happen by itself. We have commitment from EAL
 to reduce 2 more moves but it will take at least 1/2 dozen

CH: NA, everyone but you is willing to consider this and
 explore with management.
 NA: "With the exception of WA and NA everyone has increased.
 We've done our share. More than our share. I goofed in
 Denver. I went to 34 then had to go back to 38. I won't
 come down more. AFlorida, small carriers are presumptuous
 to want 10. So is TW to go up 10 at a time like this."
 TW: "Eight is better than nothing." "It's a start."
 CH: We may have possibility of 10, I figure.
 Allegheny, still consider this without National?
 AL: Yes.
 BN: Maybe.
 NW: Maybe.
 AL: Ask please QH, etc. if they will participate. They must
 cooperate.
 QH: No. We understand need to compromise, but we only have 10.
 Dropping 2 would be 20 percent of our slots. We'll come
 down 3 percent like everyone else. We won't come down.
 We're all equal. If we all started out with 100, I'd
 come down too. I say everyone should start out with 10.
 People who want more can fight it out.
 NB: I'll agree to any goddamn thing at this point. I already
 came down 2. Put me down yes. I'll do what I have to,
 what I can. I'm flexible.
 KC: (entered) "I'd be willing to contribute a deletion in the
 exercise."

more offers of 2 each so let's get on with it.

Pause. Staring into space.

Allegheny with printout, figuring. Talking only between
 associates from same carrier.

CH: Eastern, do you have any suggestions?
 EA: What does TWA plan to do?
 TW: We'll have to come down. We all know that. But it will
 happen as a group. Not just us. Propose 6 carriers drop
 2 each. These carriers have been returning slots month
 after month. AL, EA, BN, NA, NW, TW -- they've been releasing
 all summer.
 EA: 2 from my original 142? I'm already there.
 TW: 2 from 140.
 EA: That's 4 for us.
 Request to put numbers on screen.
 CH: Reaction to suggestion?
 AL: Suggestion is correct. We've released 2, not 1. I'm under
 orders that we need 89. I'm stuck. I'd consider verifying
 with management if others will do the same.
 BN: We need our 28. I have quite a lot of freedom.
 EA: TWA has asked us to come down 2 more. We can do that.
 I'm willing to go to 138, as I said in Denver.
 NA: We pulled service from DCA due to grounding of DC-10's.
 So this is misleading. We've reduced more slots than any
 other carrier. We won't agree, when TWA is going up by 10.
 They should come down by 5-8.

CH: AL, BN, EA, KC, NW, NB, TW willing to make certain
 moves to help get closer to goal.

Side talk -- CHMN and Coleman. Coleman reseated.
 Silence.

CH: AL, do you need some time to call?
 AL: Won't be today. I'll try to get number down, but I must
 go back to office and talk to management. I don't know
 if I can do it.
 CH: Can we take these on a tentative basis, in form of exercise?
 AL: Yes.
 BN: OK.
 KC: Yes.
 NB: OK.
 NW: OK.
 CH: Let's make a new column (on screen). We're starting from
 post Denver numbers.

	AA	60	American
	AK	8	Altair
-2	AL	80	Allegheny
-2	BN	26	Braniff
	CJ	-	Colgan
	DL	34	Delta
-2	EA	138	Eastern
-2	KC	8	Aeromech
	NA	38	National

-2 NB 4 New Haven
 -2 NW 40 Northwest
 PI 70 Piedmont
 QH 10 Air Florida
 RC 4 Republic
 -2 TW 52 TWA
 UA 66 United
 UR 4 Empire
 WA 4 Western

646

NB: I can't give up 2 because I don't have any place to put plane for 4 hours. I can do sliding.
 TW: "We're making great progress."
 CH: National, are you inspired to come down?
 NA: No. I can't come down any more. I've come down 16 since January. That's enough.
 PI: "We canceled 2. We operate every slot we've ever held. We made 2 available since July. We will slide but can't come down."
 UA: We're higher than summer, but that's due to strike. We use our slots. New carriers should participate. Air Florida particularly has to give. They are asking for significant increase. I'll try to get an answer tomorrow, but Air Florida will have to come down.
 QH: I'm still very firm. I'd like to help, but we don't have much to help with. We only want 10. Our competitors

have 138 and 80. We want a slim number of slots. If I had 66, I'd come down but I don't have anything to play with. There's no fat. We've done what we can do.

10 minute break.

Aeromech on phone.

TW and Piedmont went outside for "a little talk"

3:10 PM: Call to order (25 minutes later).

CH: Where are we going to get extra help from?
 Pause. Silence.
 QH, can't you do anything?
 QH: We only have 10.
 CH: What about the extra 4?
 QH: We can't do anything. 10 isn't many compared to what the others have.
 Silence.
 TW and Piedmont still talking.
 CH: "TW, any further suggestions?"
 TW: Nothing more than calling for further moves.
 CH: Would you be willing to firm yours up?
 TW: Yes sir.
 CH: NW, how about you?

NW: For purposes of the exercise.
 CH: New Haven?
 NB: Not yet.
 CH: Aeromech?
 KC: Just for exercise. We must wait.
 CH: Eastern -- you want to wait too?
 EA: Nod (yes).
 CH: Braniff?
 BN: Can't firm yet.
 CH: Only 2 can firm now, then.
 TW?
 TW: We can't move one more unless someone else does.
 CH: So that's contingent on everyone else.
 TW: Yes.
 Silence.
 Eastern got up, sat next to TW. Talking.
 15 minutes.
 CH: We need suggestions. WA?
 WA: We're not in position to give anything up. We must cut by carriers with slots to give up, and nobody wants to. But in a couple of hours we've made more progress than 2 days in Denver. It's encouraging.
 CH: TW?
 TW: Everyone's waiting on us. That's part of the problem. Someone else must move, and it's got to happen sooner or later.

CH: United? You've been very quiet.
 UA: Nothing I can add.
 CH: We should try to put together a total package, so we'll all have something to study and think about.
 TW: Can we firm up the other 10?
 CH: On last poll 2 carriers could firm. Braniff?
 BN: We can firm.
 CH: Good. Aeromech?
 KC: We'll wait.
 CH: New Haven?
 NB: We'll wait too.
 KC: We're willing to cooperate, but I notice lack of cooperation by some.
 CH: NW?
 NQ: We will have to wait.
 CH: So we firm 6 moves. TW, do you want to firm or are you waiting on others?
 TW: We're waiting on others -- only the 2.
 CH: Well, how about it?
 TW: 2 deletions. No hours yet.
 EA: 2 deletions.
 BN: 2 deletions.
 CH: OK. 6 down.
 WA: "I suggest we take lower of columns B and E and use that as base to talk from. The silence is boring."
 CH: Altair? What do you think?

AK: I feel much as Air Florida.

CH: Eastern?

EA: OK.

CH: National?

NA: No sir.

CH: TW?

TW: No sir.

CH: New Haven, when do you think you'll be able to move?

Are you waiting for others or do you need to study?

NB: I'm thinking of taking a hard line. No one wants to cooperate. I don't want to be obnoxious. I'm thinking of upping my dosage of valium.

Silence.

Call by Delta for review.

DL: Aeromech is up by 4. NA is up 10.

NA: (mad) No. We're down 16.

Don't compare us with June.

DL: Of all lines, FA is only one who is offering that was not a problem to begin with. The others should come down.

CH: United?

UA: Barring strike, we would have scheduled 70. We'll fly 66 in fall. Delta is on right track. But we have nothing more to offer.

CH: TW? Anything to say?

TW: No.

CH: I share your frustrations. But we can't think of adjourning now. It would be irresponsible.

NB: We can table my motion.

WA: I share New Haven's frustration. We are working contrary to our purposes. We must try to reach some solution. It's going to be more frustrating than ever.

NB: It's harder when we're working at cross purposes with the government.

CH: It can be solved but it's got to hurt a bit. It should hurt relatively equally. Others must join in. We will solve this airport. Unfortunately it takes so damn long.

Silence.

Break.

5:15 Reconvene.

CH: Let's go around the room and see if we come up with anything.

UA: I suggest we have each carrier consider reducing movements overnight. We must reach a realistic number. We can talk to the home office and see if there are opportunities for further action. I will talk to my office tomorrow morning and we'll see if there's anything we can do.

NW: No comment.

KC: No comment.

AK: No comment.

UR: No comment.

DL: No comment.

CH: Florida?

QH: I agree with Delta. Carriers must come off high numbers. 10 isn't a high number. We've used all our slots.

NH: We're going to ask for our slots back. We've got flights waitlisted we were going to ignore. I can use my 8. If we're going to play hardball we have equipment we can use.

KC: What must we do for QH to contribute a deletion?

QH: Fair is fair. We all come in with nothing. Everyone should be given a minimum number. The large carriers should come down. I feel everyone should get 10 and fight for the rest. I'd like to operate 20 a day but I'm only asking for 1/64th of the pie.

NB: There are other airports available. We should be flexible.

KC: We all have the right to operate but not an inherent number. So, again, what would it take for QH to contribute?

QH: I should have asked for 14 originally and been a hero now and come down 4. Everyone would have taken me to dinner.

NB: Can you shift to another airport?

QH: No.

NB: Then I move we adjourn. We haven't progressed at all.

CH: This is important.

NB: I know. But how can we negotiate any more? Let's pitch in the towel and get roller skates and try again next time.

CH: Sessions are frustrating, but we must get it done.

NB: I get scared to hear CAB talk about lotteries and auctions but if we babble incoherently it's not a service to consumers or what deregulation is all about.

EA: We came down many slots in O'Hare. We'll do anything to solve airport but we won't cut our own throats. We've invested a lot at DCA.

WA: No comment.

BN: No.

AA: We need everything we've got. We can only help in slides.

NA: Echo American

AL: No comment.

PI: We canceled 2 prime slots at O'Hare. We've tried for 5 years to increase slots here but they're not there. For new carriers: take a good look at what you're asking. We've always used out best efforts to solve these meetings but I question what has gone on today.

TW: We need group participation. We reduced movements at O'Hare.

QH: No comment.

NB: Just trying to work it out.

CH: We've done as much as we can today it seems. I trust you will be able to use additional time constructively. We can solve it. It takes cooperation.

Coleman: I'd like to recap.

Target is 640. In Denver we were 52 over.

7/23 +52.

8/7 1330 + 20.

8/7 1700 + 14.

possibly +6

with 3 0600-0659

52 to 14 is considerable progress. The big price is behind you.

Recess until 8:30 AM tomorrow.

8/8/79: Call to order 8:35 AM.

12 members present.

AL: We will continue with 82 as long as other carriers are requesting increases. Until all other carriers requesting increases decrease, we won't reduce.

TW: Did you say all carriers that have increased?

AL: All carriers that are asking for increases must participate in decreases.

CH: Alleghany, I trust you will come up with some proposal to encompass that.

AL: I'd like to think we would.

Pause.

CH: NW, yesterday you indicated a willingness to delete 2 moves for purposes of this exercise. How do you stand?

NW: We will do what we must to come to a solution. We will delete. If the exercise fails we will reconsider.

CH: KC?

KC: We will continue to delete as a group effort. We feel some carriers are not giving their best effort.

CH: I trust you've all given some thought to the proposal we've been exploring here. What has happened?

in these markets. Just because you've had them before. We should make it like a bidding -- start at zero and let everyone bid 2 at a time. This way it's unfair to the small carriers.

EA: If we're going to start that, I'd rather use Mr. Levine's method -- paying for slots. We'd come with a check for 160 slots and let the QH's and KC's bid for them. I don't like it but if it comes to it we'll do it.

UA: The gentleman from QH thinks he has the answers but he is inexperienced and uninformed. We've always been open to new carriers. Deregulation didn't cause us to change. CAB has changed its approach to certification. We've always been cooperative to new carriers.

KC: The reality is 40 slots an hour. All must sacrifice. We can't solve this by changing the procedure. That's not in our control.

NA: Deregulation has not changed the structure of this committee. No one has ever been entitled to anything or forced to move anything. No matter what the system -- auction, charging for peak hours, dice -- most won't get all the slots they want. The committee should, of course, be open to new exercises and we can explore QH's suggestion.

CH: QH, did you intend to get us involved in this kind of exercise?

QH: At least we would be doing something. We must recognize certain things. DCA is a crowded airport and not everyone

Pause.

Newspaper reading, staring into space. Most members have by now arrived.

20 minute pause.

CH: TW? Pearls of wisdom?

TW: I have no other proposal than that I gave yesterday. I explained it then. If we can persuade QH to join, we'd have unanimous participation and we'd have 18 moves.

CH: QH? Care to participate?

QH: No. I have no good news, and may have bad news later on in day.

CH: Now I know how the captain of the Titanic must have felt.

QH: We may be getting more equipment and need more slots.

UA: Many of carriers could say what QH has -- they have reconsidered and want more slots. But we're trying to reach a solution. To say "we're getting another airplane so it may get worse" is really unfair to the committee.

QH: In my opinion the problem is one of concept. Who has rights and all that. Maybe the way we should have started should have been to start everyone with 100 slots and let everyone come down, going around the table, rather than giving preference to larger carriers. They feel they've been operating with these slots and thus have a right to hold onto them and no one will take them away. But we have a new law now -- *small carriers have a right to enter new markets. No one has prior interest*

will get to do everything they want. Also, it's a convenient airport. Everyone with a certificate should be guaranteed a minimum number of slots. Why should I give up 20 percent of my slots when a major competitor is sitting with 138? I only want 10. I'm just as good a carrier. We should recognize that no one has a right to anything. We should all start at zero.

CH: It's all relative. 10 slots in relation to your corporate structure may mean the same as 138 elsewhere. It's a proportionate thing.

NB: My experience here is limited. But my experience has been a lot of give and take, even from the smaller carriers who were brand new then. Now, all have made an effort but QH. So we're where we were in Denver. I can see taking a hard line when there is no spirit of cooperation -- the spirit which has saved us from CAB and FAA in the past. It would start the ball rolling if QH would move.

QH: I asked for an absolute skeleton number of slots. Had I known better I'd have asked for everything we wanted, then come down to 12 or 10. This is the bare minimum -- 5 lousy flights.

KC: I take offense at that. This isn't a game of cat and mouse. We're all asking for bare bones. We're not trying to look good on paper. It's not a game.

NA: I'm concerned that someone qualified to make decisions is not here.

QH: I am qualified to decide. I'm involved in the scheduling committee. We all use the phone to call the management.

UA: We are here due to route authority we hold in and out of the Washington area. The only reason a carrier like EA is asking for 138 slots is due to the fact that they have that route authority which is because there are people who want to fill those planes. They have a larger system to support.

NB: Why don't we go through exercise, "what if" QH had asked for 8 rather than 10? Where would we have come out? Perhaps that would bring us to solution.

TW: That's the proposal I made yesterday.

QH: Any exercise is fine. But I need 10 slots. I understand that the larger carriers have more extensive route structure. I'd be happy to justify slots based on load factors. I'm sorry but I need 10 slots.

AL: There is a way that requires cooperation. We will end up at 640. Perhaps it's worth pursuing. It won't be acceptable to some. All carriers won't get all they want. QH has asked for 66.6 percent increase, if we want to talk percentages. Maybe we should start from proposal to FAA.

Proposal

AA	60
AK	8
AL	82
BN	26
DL	34

EA	138
NA	36
KC	6
NW	40
PI	70
QH	8
RC	4
TW	48
UA	66
UR	4
WA	4
-	0
NB	6

This gives everyone an increase that is asking for one. It also reduces those who said they would. We won't all get what we want. But we must resolve the meeting.

AA: OK.

AL: OK.

BN: OK.

DL: OK.

EA: OK.

KC: Yes.

NB: Yes.

NW: Yes.

PI: Yes.

QH: No.

RC: Yes.

TW: No.

UA: Yes.

UR: Yes.

WA: Fine.

TW: The reason we oppose is that we built a schedule and I'm at 52. I can't live with 48. Allegheny is coming out with an increase and they weren't using what they had. BN is picking up slots they didn't use. Same for NA -- they picked up 8 slots they didn't use. If carriers would release slots they weren't using we could go home.

Break.

10:15 Reconvene

NA: I can't accept. I've come down 10. That's all I'll do.

QH: I have a suggestion. QH will move one of our 0700 flights if it will solve the meeting.

NA: Can't if it's a jet. Not at 7 AM.

QH: Scratch that.

CH: The regular carriers: on what basis would you accept the proposal? National? What would your figure be?

NA: 38. We've come down 10. I don't know what TW wants. They're being more ridiculous than QH.

CH: TW? How many?

TW: 52. We need 52 slots. I'm not waiting on any particular carrier. We need 52.

CH: Well, we're within 8 this morning.

QH: The slots in question are departure and arrival times, right?

NA: The rule is no jets before 0700 or after 2200.

QH: Suppose we schedule for 6:59 and take off after 0700?

CH: It's logical and possible. I'll speak informally to FAA on it.

QH: Could we poll informally as to who would move into 0600? We won't get 40 there but if 10 people will move there, it might be worth exploring.

NA: You don't think there's any chance of relief from FAA do you?

CH: I don't think so. But it's worth exploring. Which carriers could be pushed back?

DL: Delta could probably help.

QH: We could.

EA: We might be able to.

PI: Piedmont would consider that.

WA: We would be unable to do that.

AA: No.

AL: No.

NW: It's conceivable.

UA: No.

TW: We'll look at it.

BN: No.

CH: So we have 6 possibilities.

TW: Who could move to 2200 hours?

AA: No. I would be unable to.

AK: No.

AL: Yes.
 BN: No.
 DL: No.
 EA: Yes.
 KC: No.
 NA: We would try. I don't know.
 NB: Can't.
 NW: No.
 PI: Unable.
 QH: No.
 RC: No.
 TW: Maybe.
 UA: Maybe.
 UR: No.
 WA: No.

TW: So we're kidding ourselves. We need many more deletions.

Pause. 25 minutes.

UA: I'd like to propose an exercise. Use column D as a base.

AA	60	
AK	8	
AL	80	
BN	24	They didn't use the last increase of 4.
DL	34	
EA	138	

KC	6
NA	30
NB	6
NW	40
PI	70
QH	8
RC	4
TW	46
UA	64
UR	4
WA	<u>4</u>
	626

Any carrier wanting an increase above that would take slots in 2200.

CH: Let's poll carriers on the United proposal:

AA: Yes.
 AK: Yes.
 AL: No.
 BN: No.
 DL: Yes.
 EA: Yes.
 KC: Yes.
 NA: No.
 NB: Yes.
 NW: Yes.

PI: Yes.
 QH: Possible.
 RC: 4.
 TW: No.
 UA: Yes.
 WA: Yes.

CH: You could get a little plane, paint your logo on, and fly it in during that hour.

Pause.
 Lunch.

1:15 PM. Reconvene.

CH: Allegheny, what would you need to live with this?
 AL: As long as every carrier is asking for an increase we will ask for an increase also. I agree. We should be at 80 but until I think it over, we'll stay at 82. That's our schedule.
 BN: We'll go if it's unanimous.
 NA: No. We need 38.
 CH: Is there some other level of participation that would change your mind?
 NA: No. Other people's moves don't matter. We've reduced more than anyone.
 CH: Others have reduced flights actually operating.
 NA: So have we.
 CH: TW?
 TW: We need 52.
 CH: I suppose you appreciate that everyone is making sacrifices.
 TW: No one is dropping slots they were actually using.
 CH: But many carriers are not increasing from June levels. This itself is a sacrifice.
 TW: Year after year slots go unused. It will happen again this year. It should be proposed that any slot not used must be returned and you wouldn't get it again.

AL: We will accept exercise II (United proposal) if it is agreed to by all carriers present.
 BN: We will accept under same conditions as Allegheny.
 QH: We could effectively go down to 8 if we slid one to 0600 slot and 2200 slot if we could operate jet equipment as we said before.
 NA: No. I need 38 slots.
 TW: We need 52 slots. I'll go to 50 knowing I can pick two up at 2200.
 EA: Yesterday several carriers said they could go down 2 each. If they did EA would go down to 137, bringing the number to 640.
 AL: We will only reduce to 80 contingent upon the numbers in exercise II. That is the only way we will accept 80.
 NA: I can assure you National will not accept exercise II.
 CH: If TW's and NA's figures were different, who could go along with the balance of them? (in exercise II).
 AA: OK.
 AK: OK.
 AL: No.

BN: No.

DL: Yes.

EA: Yes.

NB: Yes.

NW: Yes.

PI: Yes.

QH: Maybe.

RC: Yes.

UA: No.

WA: No.

KC: No.

EA: AL, BN, EA, NW, TW, KC said they'd come down 2 each yesterday. TW said today they would come down 2 more. We would come down to 137 to reach 640. But I won't do it if no one else will come down.

TW: It's apparent that we're at the point where carriers can do certain things. Carriers have said they can come down so if it depends on what's on the board it's a game. You can either do it or not. We're wasting time now. There are certain numbers you can live with. Now we're just playing a waiting game.

UA: We're not playing a game. I was willing to take 64 because it left slots open at 2200. Giving UA 64 and using up 640, we can't accept.

EA: Can KC come to 6? Yes.

NW " " 40? Yes.

NB " " 4? No.

CH: National, what would you think of 36?

NA: No.

AL: Do we have any hope of being able to publish schedules at 0650 and taking off after 0700?

CH: I've tried to reach FAA but couldn't. I would be astounded if they allowed it.

TW: FAA can control takeoff. But can they control what we put on schedule?

CH: The restriction is keyed to scheduling. That's the word they use.

QH: There's nothing written about operations before 0700. What is it, a law, a rule?

CH: The nighttime restriction takes the form of FAA unwillingness to allow jet craft to be scheduled between 2200 and 0700. They've made this clear. It is in our interest to not have a formal curfew.

QH: But if it were written, it would restrict takeoff and landing if not scheduling.

CH: We should do what we can to help the curfew from being formal. Other airports would immediately follow suit.

QH: In any case, it's worth looking into whether we can schedule at end of 0600. It's worth looking into.

Pause.

Coleman: There are slots available for O'Hare. You'll get notes on it. They'll be offered on co-equal basis.

Break.

BN come to 26? Yes.

EA " " 137? Yes.

AL " " 80? No, unless we get to exercise II.

NA: You can wait forever. I won't come to 30. No way.

TW: I suggest:

KC -2

NB -2

BN -2

EA 2 + 1 = -3

NW -2

TW -4

UA -2

Based on yesterday's conversation. That brings us to 640.

UA: I can't take the risk of losing the 2 slots, hoping to get them back at 2200 later.

NW: Yes.

EA: Yes.

BN: Yes.

NB: No. We can't go to 4.

KC: Yes, to 8.

UA: Can't accept if total is 640 without our 66.

Pause.

I guess UA wouldn't can me if I came back with an additional one at 2200. This proposal has merit.

AL: We can't accept.

TW: Based on past experience, getting to 640 will be easy compared with getting the hours to work.

CH: Allegheny, you had a suggestion. Any more?

AL: No, but I'm working on it.

UA: Back to exercise II. I'm looking for a compromise between it and exercise I. What I need is a firm feeling from NA, TW, and AL -- what their bottom number is and if they accept each other. I might be able to convince United of a firm 64.

TW: We're not waiting on anyone. We can't go lower than 50.

NA: We're not waiting for anyone either. We need 38. We've come down from 48. You can read it as an increase from summer but I've explained that. I say we've come down 10. We will not come down more. 38 is the bottom number. We don't care what others do.

TW has been operating with 40 slots. "Need" doesn't mean anything. We all must pull in at DCA to accommodate the new carriers. TW has not been cooperative.

TW: We can't contract when we have new routes.

NA: Take off flights from old routes. TW is being irresponsible.

TW: We helped at O'Hare. Now we need help at DCA. That's all there is to it.

NW: I must leave. I'll be back Friday or Monday. I leave you with the 2 we dropped yesterday.

BN: I'll go with 24.

AL: We will accept column A at this time. If it is unacceptable, then the minimum is 82.

CH: Can we put you at 80 then?

AL: Yes. For column A only. Otherwise 82.

UA: I propose we change column B (exercise I) and call it exercise III.

AL 82

BN 24

UA 64

Total 643

with 3 slots at 0600 that would give us 640. But sliding would be difficult.

Coleman: It's an approach that's better than the rest.

AL: We could probably adjust to the 0600 if we could take the Toronto (schedule 0600, take off 0700) approach. What if we resolve with 40 movements in 2200 hour?

CH: I'd rather not. But there will be a lot of talk about it.

AL: It appears we're not going to get to 626. So it looks like this is the way to go.

CH: Let's see if we can firm up exercise III. Does anyone have problems with accepting it as it stands? Good. No problems. Let's start identifying the hours.

February 1980

0600	0700	0800	0900	1000	1100	1200	1300	1400
3	34	44	45	40	37	39	37	40

1500	1600	1700	1800	1900	2000	2100	2200	2300
43	50	50	45	47	47	39	20	

TW: Pass for now.

UA: Minus 11 and minus 13.

0600	0700	0800	0900	1000	1100	1200	1300	1400
3	34	44	45	40	37	39	37	40

35	42	44	42	36	38	36	39	
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36	41	43	45	35	37	35	40	
----	----	----	----	----	----	----	----	--

37	40	42		32	36	36		
----	----	----	--	----	----	----	--	--

38	41	41		34	35	35		
----	----	----	--	----	----	----	--	--

39	40			32	36			
----	----	--	--	----	----	--	--	--

				31	35			
--	--	--	--	----	----	--	--	--

				33				
--	--	--	--	----	--	--	--	--

				34				
--	--	--	--	----	--	--	--	--

				35				
--	--	--	--	----	--	--	--	--

				36				
--	--	--	--	----	--	--	--	--

1500	1600	1700	1800	1900	2000	2100	2200
43	50	50	45	47	47	39	20

44	49	49	43	46	46	41	18
----	----	----	----	----	----	----	----

48	48	44	45	43	42	16	
----	----	----	----	----	----	----	--

49	49		44	42		17	
----	----	--	----	----	--	----	--

48	50		43			18	
----	----	--	----	--	--	----	--

47						19	
----	--	--	--	--	--	----	--

46							
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BN: I'll give you 1 in 12 and 1 in 13. The other 2 I'll have to check.

TW: 1 11, 12, 2 at 22.

NW: Minus 2 at 22.

KC: One at 19, one at 20.

EA: Pass.

EA: Take 3 at 11.

CH: OK. Let's begin. Let's get into some sliding. Eastern?

EA: +1 at 7, -1 at 9, +2 at 10, +2 at 11, +1 at 13, -1 at 16, -1 at 17, -2 at 18, -1 at 19, -3 at 20, +2 at 21, +1 at 22.

TW: +1 at 7, -2 at 8, -1 at 9, +3 at 10, -1 at 11.

CH: Who else is ready?

NA: +1 at 7, -1 at 8, -1 at 12, -1 at 13, +2 at 11.

AA: -1 at 16, +1 at 15.

TW: -1 at 12, +1 at 11.

PI: -1 at 8, +1 at 7.

KC: -1 at 9, +1 at 11, -1 at 14, +1 at 12.

UA: -1 at 19, +1 at 22.

AL: I'm waiting on a phone call. I may.

BN: No moves.

DL: 17 + 16, 12 + 11, 19 + 22, if it helps. I can do this at any time.

Break.

We should make immediate plans. Should we recess until tomorrow? Tonight?

EA: Either way.

CH: Let's just continue for awhile then.

AL: 20 + 21 is my adjustment.

NA: My 8 + 7 move has a problem. I can't make it good till December 12. Can anyone cover it till then?

AL: We can.

NB: 16 + 17.

NA: 16 + 18.

AL: 9 + 8.

NA: Effective December 13 I can move 20 + 21.

CH: Can anybody move 20 + 21 until December 13?

NA: We're up 22 in 1 through 21. New carriers don't take up 22. So we can't blame it all on the new carriers. It's the old carriers who have increased those hours and they're not operating and they've got to come out.

TW: 16 + 14.

NA: USAir will take the whole 8 + 7 move we were going to do join

More private talk between EA, NA, and AL.

CH: Any more slides?

EA: Checking.

AL: Looking.

NB: Looking.

NA: We're waiting for TW to move. They have 12 in the red hours.

AA: Nothing.

BN: Nothing.

UA: Nothing.

AL: 8 + 7.

I move we adjourn for the day.

We will reconvene at 9 AM.

8/9/79. Call to order 9:10 AM. 15 members present.

0600	0700	0800	0900	1000	1100	1200	1300	1400
3	39	40	41	45	35	36	35	40
	40				34	35	36	41
						34	37	40
						35	38	41
						36	37	40
							36	

1500	1600	1700	1800	1900	2000	2100	2200
44	45	50	44	44	42	42	18
45	44	49	43	43	41	43	20
44	45	48	44	42	40	44	
43	44	49	45	43	39	43	
		48		42	40	44	
		47		44	41	43	
				43	42		
				42			

8/9/79. Reconvene (9:15)

NA: Unless TW makes a substantial move out of 15-21 hours, we will not participate in the meeting. They are up in those hours and down in 22.

TW: I won't move all my slots out of these hours. We all must participate. I made a summary of who is up:

AA +17 +20 -22

AK +16 +19

AL +15 +16 -22

BN +16

DL +21 -22

EA +16 +17 -15 -14

NA +15,17 +2 at 18,19, 2 at 21

NB +2 at 17, -1 at 18,19

NW None

PI -16 +17 +20 -21 -2 at 22.

QH +19 +20

RC +2 at 19 -2 at 20

TW 2 at 15, 16, 17, 18 1 at 20 -3 at 22

UA -3 at 17 +1 at 18, -2 at 19, -1 at 21

UR +19 -20

KC +15, 18, 19

WA None

NA: Still, unless TW comes off a substantial part of that increase, there is no point to this meeting.

CH: We all must participate.

TW -19 and 20, + 2 at 22.

CH: American?

AA: Nothing.

DL: Nothing.

BN: Nothing.

EA: "

DL: "

KC: We're going to delete 2 slots. I hope you think they are helpful. I will delete one in 11 and one in 12. That's the maximum we can do.

That puts us 10 over in 14-16 hours. We may have to undo that but it depeaks 17.

AL: I would like to move a 12 + 7.

CH: That's good. 16 | 17 is still the dividing line. 16 and below should move to the left and above 16 to the right.

CH: Piedmont?

PI: No. Sorry.

TW: 21 + 14. 7 hours is the last move I make until other carriers start to participate.

PI: We'll go 14 + 17 then.

CH: That's counterproductive. Let's scratch that and keep it for use later, maybe.

AA: 14 + 13.

EA: I could go 18 + 19.

How about 19 + 20 instead.

CH: Any further moves?

AL: No.

NA: No.

AA: No.

BN: No.

WA: No.

UA: No.

Break. Aeromech had to leave.

CH: It has been suggested that we reconvene in a couple of weeks. I think it is inappropriate.

PI: I will go 20 + 21.

QH: I will offer 10 + 9. Also we can change a 15 + 16 or vice versa.

CH: I don't know if that will help. We will note it and see if we can use it later.

RC: No change.

UA: I have one I would make but I don't know if it will help: 17 + 19.

CH: Yes. It has got to go that way.

Eastern and National conversing privately.

NA: 20 + 21 (also a switching arrangement with Eastern until December).

AL: 16 + 14.

DL: We still offer 17 + 16 if it helps.

CH: It means more now because of Aeromech deletion than it did before.

Phone rings for Eastern. He takes it, speaks about 2 minutes, sits down, gets up to talk to TW, and sits down again.

Long pause (15 minutes).

TW: We will go 21 + 13.

PI: I will offer a 16 + 17.

CH: I think everything from 17 can move to the left. Delta 17 + 16, QH 16 + 15. Net is 17 + 15 -- we will take these.

DL: We think a recess is appropriate. 40 slots in the 2200 slot is unrealistic. Carriers are shifting around to prime time slots. We don't think anything is going to happen. TW is up 7 in the prime time spots. Any increases over 2 should automatically go in 2200.

TW: Many carriers are up.

DL: But no one is up 7. All the other carriers would have to screw their schedules up to accommodate these increases.

UA: My proposal for 626 total was not accepted. We got to 640. There hasn't been sufficient movement into 2200. There must be at least 38 slots there or we're not going to resolve. Unless there's some quick movement we may have to recess. I tend to agree with Delta. Unless there's a quick movement into 22 we will have to recess.

CH: Let's wait and see. Once we start talking about recess, no one will do anything.

DL: Would AL, TW, and EA be willing to move all but 2 of their increases in 16-20 into 22?

AL: We're not up in 16-22.

DL: But you are up total. More than is realistic.

CH: National, any help from you?

NA: No.

CH: Waiting on anything?

NA: No. The problem isn't our fault. We are not going to move unless there are some deletions.

TW: If we pulled 5 out, which won't happen, what would happen?

Let's hear some moves:

NA: 15 + 14.

NA: There is still a possibility for us.

TW: We already moved 2 to 2200.

AA: TW is actually down in 2200 and is up 6 slots.

CH: It's fine to be pointing fingers at each other. But we need additional moves. That's what it's going to take.

Lunch.

Reconvened 1:20 PM.

CH: New Haven, can you be of some help? The cutoff is between 16 and 17. Everything below 16 should go to left, 17 and up to right.

NB: We have flexibility between 17, 18, 19 but I don't know if it will help.

CH: Any movement to right would help.

NB: How about 17 + 18?

CH: That would help. Piedmont?

PI: -1 at 14 and 1 to 20.

CH: TWA?

TW: I have offered 21 + 14. I still think eventually that's the direction you will want to go. You can't fill 2200.

CH: Eastern?

EA: Someone has to move to 22 or move out. Seems like no one wants to do that. We are just fiddling around with the middle of the day.

CH: USAir?

AL: None at this moment.

Long pause.

CH: United? You are working hard.

UA: Nothing

AK: "

NB: "

AL: Where are Air Florida and New Haven?

CH: New Haven is being represented by Altair. QH will be back.

AL: They're all part of the problem.

AA: The problem is not so much the peak hours but how we solved the 640 slots. I'm not about to change my schedule until I see some big movement.

TW: The meeting is not going to be resolved if we can't make moves. AA is up in 17 and down in 22. That's part of the problem.

AA: It's not the major problem.

TW: One's and two's add up.

CH: Altair?

AK: No?

TW: Altair is up 2 slots. Where are they going to come from?

AK: Half our slots are in the gutter ends.

TW: Half are in controlled times.

AA: I don't feel the problem is in the peak hours. It is what can you move out. We should take a poll to see who can go to 22. If no one can, we will have to go back to totals.

CH: Allegheny, you said you'd consider moving to 22.

Eastern also.

EA: One of the 2 I dropped was in 2200. I can't come down more.

CH: National?

NA: No sir.

CH: American?

AA: Nothing.

CH: Western?

WA: Nothing.

CH: Delta?

DA: Nothing. Those with increases above 2 should slide into 22 hours.

CH: BN?

BN: No.

RC: No.

CH: United?

UA: I can't offer changes without dramatically altering my schedule. I can't do that here. Last February between 0700 and 2159 there were 29 open slots. There are new carriers now -- Altair with 8, New Haven with 6, Air Florida with 10, Republic with 4, Empire with 4, Western with 4, Aeromech with 6, so that's 42, in addition to older carriers. We need reductions or wholesale movement into 22. I've moved to 22. That's all I can do.

TW: I will move 15 + 13.

United speaking privately with Coleman: they leave room, reenter a few minutes later.

Silence.

Break.

Reconvene at 2:30 PM

CH: Staying until tomorrow? We intend to reconvene.
 AA: Yes.
 BN: No.
 DL: No.
 EA: Yes, but I have to leave in the morning. I'll be calling in.
 NA: Yes.
 PI: Yes.
 TW: Yes.
 UA: No. I will be available by phone.
 NA: Yes.
 AL: I'll go 19 + 20 if it will be beneficial.
 CH: We'll take it.
 TW: I can go 13 + 11 if someone can go 11 + 12.
 NA: I can go 11 + 12.
 EA: Move us 13 + 12.
 TW: I can't do anything more at DCA. I can't make any more deletions. I've checked with the management. They say we're in dire need of additional slots at DCA. They say we can offer to soften at O'Hare. We would consider, if we could obtain slots at DCA, to release slots at O'Hare. I've been asked to ask the carriers if this would be possible -- if they're interested. I know the other carriers are waiting to some extent on TWA but we're not the only ones.

0600	0700	0800	0900	1000	1100	1200	1300	1400
3	40	40	41	45	34	36	36	40
			40	46			37	39

1500	1600	1700	1800	1900	2000	2100	2200
43	44	47	45	42	42	43	20
42	43	46	44	41	41		
		45	44	42			
			43				

TW: Take them off across. 15 + 19.
 NA: Take off a 17 and 18.
 AA: Take off a 20.
 NA: Move 9 + 10, 14 + 13. That's all I could do.
 AL: We can't do anything.
 BN: No.
 DL: No.
 EA: I could go 18 + 19.
 NB: No.
 PI: Nothing.
 RC: Nothing.
 UA: Nothing.
 WA: No sir.
 TW: This shows what I said all along. They're not waiting on TWA. Only one carrier made any significant change. My O'Hare suggestion seems to be the only solution. Can we have some conversation on this?

CH: Any O'Hare adjustment would require contact with other O'Hare carriers. The DCA committee could not do anything about O'Hare. However, there is nothing wrong with contacting the O'Hare carriers and perhaps reconvening the O'Hare meeting. The O'Hare meeting is only technically in recess because these meetings are joint and not adjourned until all airports are solved.
 TW: I suggest we explore it.
 CH: There is no reason that the carriers here who also serve O'Hare can't consider it.
 NA: When TW can swap O'Hare for DCA slots and the DCA slots are reduced, I will be available by phone.
 CH: There are no "swaps." We don't have freedom to "swap" because no one owns anything.
 NA: I know. TW has no further contributions to Washington session so I have no point in being here. I'm going home tonight.
 TW: What if we come down? What would you do? NA, you're up 7 slots.
 NA: We are not.
 TW: You are too. You're at 34.
 NA: I had 26 slots in those hours last winter. I'm not going to move out to let TWA come in.
 CH: Let's do this as an exercise with hypothetical totals.
 TW: Take the 5 slots out and see what happens. I think they're just using it (blaming TWA) as a disguise.

UA: That is something I don't think I can handle here. I have done everything I can. The suggestion is very appealing to UA. We've always needed additional movements at O'Hare. But this would require considerable work by the management. I'll take TWA's message with me and see if it can work. I don't know if we can do anything.
 NB: I don't think we should talk about O'Hare at this meeting. We didn't come here to discuss O'Hare. You can't compare O'Hare and DCA. They're apples and oranges. It's out of line.
 CH: This is technically correct. This is not a matter for DCA meeting.
 NA: What happened with TWA's exercise shows this wouldn't solve our problem. The representatives here today I don't think have authority to cancel already operating flights. I certainly can't. I don't want to reconvene. I don't want the FAA to schedule for us. But we have to cancel flights. I suggest we reconvene later, after we have had a chance to talk to management. Flights simply have to be pulled out. We can't do anything about the new carriers. They'll get slots.
 TW: He's right. We're going to need deletions.
 NA: And those who have are going to give to those who don't have.
 PI: Over the years we have reduced from 78 to 70 to make room for new carriers. I can't go any farther without consulting management. I would like to take the O'Hare suggestion to management.
 NA: It boils down to how much we want to give up to keep the right

to schedule what we have left. That's the bottom line.

CH: I would sincerely hope that after all these years that no one came here without considering that movement to Dulles or Baltimore might be necessary. If not, we came unprepared to use our best efforts. I suggest that before we consider adjourning we explore other alternatives.

NA: I agree with what you have said. But logic does not always apply. When you say we should all come prepared for this but it's not the way it is.

CH: In my wildest dreams I never imagined this meeting was held together by logic. The agreement is too benign. I have trouble convincing other lawyers that it's really an agreement. But there are things we can do. We can call our managements. There are things we can do on the phone without going home.

AL: There were 2 proposals made in the last couple of days -- one of which had 3 no's, one had 5. We would participate in either now.

CH: Let's look at the United proposal again.

NA: The only carrier who has come down to any extent on this proposal is National.

CH: Is that column beginning to look any better to you?

NA: No way is that how it's going to end up. Even with this we couldn't get any slides. We were already at 631 before and couldn't get any.

Pause.

UA 64

UR 4

WA 4

NB 6

Total is 635, including 0600. So it's 632. And everybody (but EA) gets an increase.

NA: So what? It's no better than what we had. No one would move then either.

CH: Do you have a proposal New Haven?

NB: Not at this time. We're working on it.

CH: We're now 32 over. We started at 70 over. In the exercise we were 25 over. 32 isn't all that bad. All the moves are solved by moving one hour to the next. That's the way it goes.

UA: There has been a lot of progress made. I don't think it's hurting enough to cause enough movement to solve the meeting. It is not hurting enough yet. It's a very difficult situation. One agency is certifying new carriers that needn't be certified into DCA and the other not able to make room for them.

TW: (to UA) I'd like you to talk to your management about the O'Hare proposal. It may be a solution.

UA: I will bring everything back [to the management] that's gone on here.

DL: Air Florida, is it hopeful that you will go to Baltimore?

QH: The problem with serving two airports is an economic problem. It is in the hands of our economic people. With regard to

NA: Did you ever hear from FAA on the 0600 question?

CH: No, but I'm even more pessimistic.

Break.

QH: Our schedule reflects 14 slots from some airport in Washington. Because we have limited aircraft and certification we can't put more into 2200. I'm trying to put 4 slots into Baltimore. We started at another airport but we had to cancel flights because we couldn't get fuel. We would rather be at Dulles. But we can't do anything more. We're at bare bones. Any other slides would make it impossible to have a feasible schedule.

AL: The other proposal was as follows:

AA 60

AK 8

AL 82 This was before BN went to 24 and TW to 46.

BN 26

TW 48

DL 34

EA 137

NA 36

KC 6

NW 40

PI 70

QH 8

RC 4

DCA, if we saw TWA and others seriously considering it, we might consider it more seriously also. Why are you (DL) pulled out of Dulles?

DL: We simply canceled the flight. We couldn't get fuel. The flight didn't move anywhere.

QH: It irritates me that FAA does nothing at all to improve service metro service, parking, etc. at other airports. We get no cooperation at all. My disenchantment is with them making no long-range plans to help us out.

CH: Even if the administrator himself were here, it is unlikely he would address these questions in the context of these meetings.

NB: We explored these possibilities also. Dulles wasn't interested and Baltimore welcomed us with open arms. We are trying to resolve this but we get no help from the FAA. It's very frustrating. They don't do anything.

CH: Dulles certainly appears to have the capacity. We must accept that FAA is not going to accept expansion at DCA. There is a serious noise problem. We have petitioned FAA proposing an increase in daylight hours. The ambient noise level is higher then, making disturbance factors lower. But FAA is moving in opposite direction because of noise and to transfer 4 slots from the 40 to give to air taxi's.

NB: There are a lot of turbojets that make less noise than the Piper Navajos.

CH: The district court just ruled to uphold the right of Santa Monica airport to have single event limitation. This

could be relevant at Baltimore. The best way to put pressure on FAA is to move more and more to Dulles. Then they can't resist us.

AL: Congress won't like to see movement to Dulles.

NA: Dulles is the most inefficient airport I have seen anywhere in the world.

TW: Anyway, we're not going to get relief from any government agency. So what are we going to do with these numbers?

CH: What do we do?

NA: I don't think there is any way in the world we can hope to do anything tomorrow with four of the biggest carriers gone. I don't know what to do. I hate to reconvene.

CH: What would change by then anyway?

NA: Everyone is going to come down. It has to happen. Only the new carriers stand to gain by going to FAA.

EA: We will not cut our throats here. If they (the other carriers) want to sell the slots, fine. We will buy. But we are not going to come down any more slots.

QH: Our people feel the same way.

EA: People with authority don't even come to these meetings any more.

CH: Failure to attend meetings and have authority is a breach of the contract, which says we must put forth our best efforts.

AA: I believe a lot of success has been reached. The problem is that a reevaluation has to be explored with management by each carrier. I have been doing it every day by phone. But I don't think there is more we can do. I suggest we take time to talk to the management and reconvene.

Call to order 8:20 AM 8/10/79

AA, PI, TW, AL, WA, DL, AK (also representing NB), NA present.

CH: TW?

TW: My hands are tied. When I go home I will try my best to convince management that we have to come down. I don't know what else to do -- perhaps this proposal of softening one airport for another. It bothers me that the exercise we did with TWA moving still didn't come close.

AL: Nothing to offer -- except we will stay as long as the meeting lasts. I may have a proposal later this morning but I have to call before I try it out. Other than that I have nothing to offer.

NA: Nothing.

CH: When, Allegheny, can you make this proposal?

AL: After 9.

AA: I have nothing to offer. I think we will see a solution but not today.

WA: Not much we can do with our 4 slots, one in each hour. I would like to comment on TW's suggestion. Those carriers who don't have slots in both airports won't have as much to bargain with. Also, if a carrier can delete to get spots at O'Hare, why can't they delete anyway?

TW: It's a market shift.

AK: Nothing.

DL: Nothing.

QH: I think we need 10 to 15 days.

DL: A minimum of 10 slots have to simply come out and 8 more moved to 22. AFL, TWA, and Allegheny are all up more than 2. This is unrealistic.

TW: We did an exercise where we were down 8 and no one would move.

DL: It would be a psychological impetus.

QH: I'm amazed that an increase of 2 by smaller carriers can be looked at the same as that by carriers with lots of slots. No one has any more right than anyone else to these flights.

NA: Piedmont, for example, used to have many more flights than they did, and spent a lot of money to improve their ground facilities. Now it is quite possible that they will continue to deteriorate and what will he get for the investment? We built DCA. That is why we resent the smaller carriers. If my throat is going to be cut, it is not going to be by me. The government talks out of both sides of its mouth. I wish we could shut down operations at DCA completely for a month and let these idiots see what would happen without air transportation.

DL: To elaborate on what I was saying, the new carriers are getting some slots in prime time, and the new slots for old carriers are also in critical times.

QH: If we pulled 2 out of peaks for 4 more in nonpeak period?

DL: There is no nonpeak period.

AL: I move we recess for the evening.
Begin at 8 tomorrow.

CH: AL, without trying to get the details of your proposal, what would be the total?

AL: 628. It would put us at 80. If a carrier wanted more slots than they are getting, they would have to get them at 2200.

CH: Let's talk about a reconvened session. We generally hold these every other week but EA wouldn't be able to attend the week of the 20th. Suppose we reconvene the end of next week?

Decision: 1 PM Wednesday.

TW: Not counting TW, there were 34 additional movements requested at DCA. There is not even enough room for this. If the new carriers won't move into 2200, the existing carriers have to move operations already running. When we went through the exercise, no one wants to move. Unless they're all here a strong message should go out that the new carriers have to move to 2200. Carriers are going to have to be prepared to delete existing schedules. And that doesn't include the numbers from TW.

AA: I suggest that when we start next week, we look at a total without 2200. Then we are looking at true totals. Right now we're at 641. Maybe we should start at 620 before we even start the slides.

CH: The problem appears to be not the total number but lack of movement into 2200.

TW: We struggled for two weeks to get to 640. You (AA) are going to have to come down too.

AA: I don't deny that. It is going to hurt bad.

CH: TW, recognizing that this is the DCA meeting and not O'Hare, with respect to your proposal regarding O'Hare, do you envision this being explored by carriers with managements, or did you have something else in mind?

TW: I guess they will have to explore it with management. We have tried many ways to solve meetings. This may be another way, if we are not blocked by legalities. If so, it's a dead issue. Whatever you think is the best way is OK.

CH: Any carrier can be the requesting party for a new meeting. But these meetings would have to be run separately. I don't know if this would be productive. It's up to you. Meetings are generally called because there are more demands than slots. But that doesn't mean we can't call a meeting for readjustment.

PI: We have tried to increase our slots for several years at Chicago. From our standpoint this may be a way to increase our slots at Chicago. This doesn't mean we have surplus at National. It would take major reworking of our schedule. But it would be a way to increase our position at O'Hare. I'm not even sure we can do it. We certainly don't have surplus at DCA.

CH: So you would like the chair to communicate to other ORD carriers about this.

TW: It sounds to me like a general interest.

AA: It sounds like the only way it will work is with direct swaps

between TW and another carrier.

TW: It doesn't have to be a swap. We don't have any right to swap. We just reduce at one airport and give others the opportunity to gain those slots.

CH: We don't have the right to swap.

AA: Exactly. So the slots reduced at ORD may not serve DCA and may do no good to us here.

CH: This is true. We should not view this possibility as a sign that we don't have to do anything at DCA next week.

TW: I don't see any further value in sitting here. I would be of greater value going home.

CH: Allegheny, could you advance your proposal?

AL: If we take a break so I can call.

Break.

AL: The proposal is as follows:

AA	60	KC	6	UR	4
AK	80	NW	40	WA	4
AL	80	PI	70	NB	6
BN	24	QH	8		631
DL	34	RC	4		-3 at 0600
EA	137	TW	46		628
NA	36	UA	64		

Part II: if any carrier wants to increase over this, they must take it in 0600 or 2200. Otherwise, if anyone comes into any other hour, AL will go back to 82 and not budge.

I don't know what Allegheny's position will be regarding O'Hare.

TW: It looks like most everybody has already agreed to those numbers. I can't agree to that number. I'll have to talk to the management.

PI: No problem.

NA: We might go along with it.

AA: Fine.

WA: Fine.

DL: We support it.

AK: Agreeable.

DL: We have one problem Air Florida.

AL: I get upset with Air Florida. They haven't cooperated yet. We all have to expect to get less than we want.

TW: I had 44 before. 3 were in 2200. So I had 41 in 0700-2200. So I would get an increase of 5?

AL: No. You can only have an increase of 2.

TW: So I'd only get 43.

AL: I guess it would be 46. I'm not sure. Let's say 46 in those areas in addition to your 3 in 2200.

TW: So everyone would keep their 2200 slots and add any additional they want.

DL: So this gets us down some. Then we still have to shift some.

TW: The numbers don't work out on this proposal. Everybody isn't treated the same.

NA: If you say that the numbers in the 2200 are included in this maximum number, then it treats each carrier differently.

AL: No. I'm not deducting anything.

NA: I don't buy it. If those numbers include what they're operating at 2200, OK. But otherwise there won't be any slots in 2200. If you've got the 27 in the 2200 back in there, you will only be one away from 28 in 2200 which is what we need.

TW: Under the proposal, how many would you have in 2200?

DL: 1

AA: 2

TW: So there is a discrepancy. I have currently 44 operations. If I get my requested 50, 6 will be in 2200.

NA: So you have 44, 41 in prime hours. You would get an increase of 2 in peak hours and 3 in 2200. Then any further increase would also go in 2200. You would have 43 total in the prime hours.

AL: It needs to be thought out a little more. But that's basically it. It's a step in the right direction.

TW, Delta, and American, do you agree to this basically?

DL: Yes.

AA: Yes.

NA: The problem will be with Air Florida.

AL: Air Florida will have to participate in this and it's not going to work. They're getting an increase. That's as good as gold.

APPENDIX E

MARKET EXPERIMENTS: PARAMETERS, PROCEDURES,
SUBJECTS, INSTRUCTIONS