CHAPTER 2

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1. INTRODUCTION

The air cargo industry is being dramatically impacted by the rise of e-commerce. This evolving trend has put pressure on sales channels for faster delivery and optimum supply chain services. We are seeing growth and specialization of door-to-door services offered by the all-cargo express carriers and greater attention and services offered to air cargo customers by the passenger carrying airlines as larger cargo-friendly passenger aircraft come onto the aviation market.

As the prospect of global markets becomes more and more of a reality, the demand for air cargo movements will continue to grow as part of an expanding logistics system that will emphasize higher processing speeds, greater efficiency, more specialized customer services, time-definite delivery, and reduced costs.

How can an airport climb aboard this air cargo growth train?

This chapter focuses on successful marketing and facility development strategies to overcome the obstacles an airport may find in its path to take advantage of the potential for this future growth in the air cargo industry. The purpose of combining a discussion of marketing, infrastructure and facility development in one chapter is the belief that they cannot be successfully pursued separately. They must be unified under one policy or focus to achieve the best results. Many well-intentioned marketing plans end up gathering dust on shelves because they were either not grounded in reality or were not supported by the entire organization. What happens when the marketing side of an organization is permitted to freely pursue field-of-dreams type development? What are the prospects for future success if the commercial development and financial side of an organization are so risk averse that possible air cargo opportunities are not even recognized and go to other airports?

It should be emphasized that the marketing and facility development strategies discussed below represent a snapshot of a moving target. The dynamic changes underway in the air cargo industry require constant attention to adjusting these strategies, discarding some, and developing new ones to keep pace and take advantage of the future growth that will surely come to this industry. It is important to remember that development is always subject to the cost of money.

How can an airport participate in future air cargo growth?

To successfully participate in the growth of air cargo, every airport needs a clear set of objectives and a comprehensive air cargo marketing and business development plan. The first step in the process is to identify the strengths and weaknesses of the regional market, the air cargo facilities, and the service infrastructure. Although market potential is the driving force that attracts air carriers and a wide range of supporting businesses to an airport, a combination of other factors including government agencies, the availability of roadway access, warehousing, aeronautical infrastructure, and ramp space also influences the decision to establish an operation in a given area. Thus, it is essential that the marketing effort be closely coordinated with a comprehensive plan for the development of cargo facilities (if needed). The second step is to establish specific objectives, identify your target audience and design a marketing strategy that will reach your customers and achieve your goals.

2. IMPORTANCE OF AIR CARGO TO THE REGION

The existence of a well-developed air cargo infrastructure benefits not only the airport, but a region's economy as well. A solid infrastructure consists of a good roadway system, a strong forwarder community, sufficient lift to meet the needs of the region's shippers, and other services particular to your community.

The region becomes more attractive as a location for a manufacturing plant if, for example, air service exists to expedite products or components to the marketplace. However, as an airport evaluates its potential for air cargo, it is important to remember that for cargo service to work, there usually needs to be a balance between inbound and outbound tonnage.

Airports are magnets that attract major industry to an area. In 2009 Kia Automobiles opened up a new car plant in West Point Georgia just 50 miles Southwest of Hartsfield-Jackson Atlanta International Airport. The close proximity of the airport and its cargo operations offered just-in-time shipments to this new car assembly plant and the 4,000 workers. The addition of this car assembly plant not only had a $4 billion dollar economic impact on the state of Georgia, it also added new cargo capacity to the Atlanta market when Korean Airlines added additional frequencies along with ASIANA Airlines beginning service to Atlanta with daily all-cargo flights.

3. ASSESSING THE MARKET

Many airports assume that because they have a runway they can serve the air cargo segment of the industry effectively. This is not necessarily true. There are many variables that will determine the potential success of an air cargo operation. These include, but are not limited to, the physical capacity of the airport and its landside and aeronautical infrastructure, regional consuming and producing markets, roadway access, redistribution capacity by air or land, aircraft capacity, and competing airports. Even with several of these attributes, many airports will still be very challenged to successfully implement air cargo service.

When people discuss logistics, they typically refer to shipping chains. Simply stated, a shipping chain is the number of firms that it takes to move a product from its point of origin to the ultimate consumer. Given the relative cost of trucking cargo versus flying cargo, shippers and manufacturers are more than willing to put their products on trucks to be taken to the most economical and efficient airport from which to ship by air. Many airports throughout the United States experience a loss of cargo volumes or leakage due to excess capacity at other airports where cargo markets may not be as strong, or that particular airport is a destination airport where airlines have high volumes of flights and not enough cargo to fill them. Much of the air cargo traffic is driven by freight forwarders who typically consider when determining cargo bookings:

Availability of Air Service

The primary factor in the routing decision is the availability of direct airlift to service points. The majority of shippers and air freight forwarders prefer delivery to the final flight's origination point instead of using connecting flights from local airports.

Compatibility of Aircraft Capacity

Depending on the commodity, a shipment may be restricted to certain aircraft types, so a shipper may require wide-body lower deck or all-cargo configuration for oversized cargo, hazardous materials, or live animals. Shippers and agents also indicated a preference for backup airline services to a particular destination.

Economies of Consolidation

Many large international forwarders employ the "gateway" concept, consolidating regional air cargo shipments at a single gateway airport, thus enabling the forwarder to negotiate favorable rates with air carriers for large shipments. In addition, the forwarder is able to optimize the utilization of unitized capacity by mixing dense and light cargo.

Total Cost and Time Efficiency

Within the range of air freight commodities, certain items such as fresh seafood, cut flowers, pharmaceuticals, emergency parts for a grounded aircraft or plant assembly line, or parts to supply a JIT (Just-In-Time) manufacturing schedule, are more time sensitive than others. Similarly, global competition in the world market may create price sensitivity for the commodity. For these reasons, shippers of commodities in these categories may place a greater emphasis on total cost and time efficiency when routing shipments via an airport.

Service Market Information

In the fast paced air cargo environment, shippers and forwarders have a need for up-to-date and accurate service information. Although a particular airport may in fact have a number of advantages or strengths such as service availability ease of access and/or superior infrastructure and facilities, the shipping community may be unaware of these factors. It is very important therefore, that shippers understand the competitive advantages of your airport.

4. SETTING OBJECTIVES

Most airports have established a general plan that sets out a strategy for the development of air services. The plan typically establishes priorities for near, intermediate, and long-term implementation. These priorities are designed to meet the needs of the traveling and shipping constituents in the region. Within the overall plan, the cargo marketing plan is a subset and serves to establish objectives and goals specific to the airport's air cargo business, ensuring participation in future growth opportunities.

An assessment of the regional market area, combined with an assessment of the airport's strengths and weaknesses should be the basis for an important question in the marketing plan design: "What is my product?" For example, the plan should provide answers to questions such as "Are we promoting an international gateway because of a heavy concentration of European, Asian, or South American air services?" "Is our airport a domestic hub with a strategic location and excellent domestic air and road feeder (RFS) connections? Or are our airport's services and facilities conducive to a trans-shipment operation such as that which typically occurs at Ted Stevens Anchorage International Airport to and from the Far East? You also need to outline those steps that are necessary to overcome weaknesses that have been raised, and determine how these factors are addressed in the plan. Keep in mind that the plan should have a clear strategic focus such as: a) addressing deficiencies over which the airport may have some influence, such as building up service to a particular region, or increasing the presence of all-cargo airlines at the airport, or b) capitalizing on a unique strength or niche such as a regional perishables market.

Keep in mind that the plan should concentrate on the deficiencies or advantages over which you have some influence.

Once these factors are determined, it is time to formulate a set of general objectives, which establish the basis for all subsequent actions, justify future expenditures, and drive the cargo marketing plan. These objectives should be aggressive but attainable, such as:

- Increasing the cargo throughput handled by the airport for a given year
- Focusing on increasing the number of air freight carriers
- Increasing the amount of perishable business handled by airport carriers (percent by year)
- Attracting additional integrator/express carriers

- Promoting the airport services to attract new manufacturing companies to the region

A more detailed discussion of potential air cargo performance measures is included in Chapter 8.

Once the objectives are formulated, the design of a cargo marketing plan sets forth specific actions necessary to achieve these goals.

5. THE CARGO MARKETING PLAN

The cargo marketing plan maps out the specific strategies for achieving the general objectives. Each strategy should seek to promote the airport's and the region's strengths. In order to achieve the objectives, a well-defined marketing plan should be targeted at decision makers in key segments of the industry. Generally speaking, the two primary targets (or customers) are:

- Air Carriers (all-cargo and passenger)
- Air Freight Forwarders

Key decision makers of air carriers must be made aware of a region's and airport's advantages as a location to do business. In many instances, the potential passenger market will be the major factor for a combination carrier in determining a service location, but the cargo market potential is becoming increasingly important.

The presence of a large and diverse base of air carriers is one of the key factors fueling air cargo activity from a particular region.

The air freight forwarder is another key player in the air freight process. The forwarder assembles shipments from a large number of shippers, to form a consolidated shipment for a specific destination. Typically, the forwarder selects the airline service, prepares the airway bill/airbill and other required shipping documents, and delivers the consolidation to the airline for transport. Also, since the incorporation of the E-AWB (electronic air way bill) there is no longer a need to print, handle or archive the paper, largely simplifying the air cargo process. In the case of international shipments, the forwarder will arrange for customs clearance at the destination, and if required delivery to the consignee. According to recent cargo studies "routing responsibility was primarily attributed to the forwarders and brokers in the cargo industry survey, with the shippers and consignees having little input."

Each of these customers (airlines and forwarders) is important to the successful cargo operation of an airport. They share a close relationship and are dependent upon one another. With the notable exception of integrated/express carriers, the majority of an airline's air cargo revenues are derived from air freight forwarders, and a forwarder's decision to establish a gateway operation depends in large part on the availability of air service at a given gateway airport.

In some instances, where actual air cargo flight operations are a longer-term goal, marketing may be focused on developing a manufacturing complex on, or proximate to the airport. With a concentration on industry that produces air eligible products, an airport and region can begin to develop part of the broader business dynamic that may eventually attract cargo operations.

The marketing plan design should also seek input and participation from partner organizations such as trucking companies, the local air cargo association, U.S. Government agencies such as Customs and Agriculture, state aviation agencies, and state and local economic development agencies. The exchange of information among these groups support expansion efforts and helps foster the region and the airport's development.

6. AWARENESS

In the initial phase, the marketing plan should seek to highlight the advantages of using the airport by raising awareness among the cargo constituents. This can be achieved through a series of programs aimed at selling the airport to air carrier and air freight forwarder decision makers at the local, regional, and head office level. These selling programs usually take the form of cooperative or informational presentations focusing on the competitive advantages of the airport's services and facilities. Keeping in mind those factors, which influence shippers' routing decisions, some airports highlight their strategic location and extensive international and domestic air service connections. Others cite the large manufacturing base within close proximity, combined with an extensive road feeder network and well-developed interstate highway system. The availability of modern well-designed and cost effective cargo facilities remains a key advantage in highlighting the airport's benefits and attracting additional air service or forwarder consolidations. Such facilities however, should be developed within the context of a strategic development plan that allows for both expansion and the integration of critical ancillary and supporting services.

7. TARGETING

As the cargo marketing plan matures, an appropriate strategy may be to target specific carriers or forwarders by providing detailed analytical information that supports the viability of the establishment of an operation in your region. By doing research such as reading a carrier's most recent annual report or Securities and Exchange Commission’s Form 10-K, the airport will be able to become more familiar with the company's operation and determine their goals and philosophy for future expansion. Armed with this information, the airport can prepare a report and present it to the airline's senior management. Regional and/or state economic development agencies are often willing to lend assistance in preparing such a report as the prospect of new business to/from the region is consistent with their mission.

The availability of modern well-designed and cost-effective cargo facilities remains a key advantage in highlighting the airport's benefits and attracting additional air service or forwarder consolidations.

8. MARKETING PROGRAMS

Initial marketing programs can take several different forms depending on the target audience. The programs can be grouped into two categories; (1) cooperative, and (2) informational. The cooperative programs are centered on a social gathering, typically a luncheon or evening cocktail hour. The informational program takes the form of a business meeting held in the office. Both programs should focus on the competitive advantages of conducting business at your airport.

9. COOPERATIVE PROMOTION PROGRAMS

9.1 Overseas Forwarders

The overseas forwarders' joint promotion program targets air freight forwarders in markets outside the home market. This program is typically organized in conjunction with selected airlines that wish to stimulate business from/between a particular region(s). The objective of the program is for the airline and airport to tell their story to the people who are most responsible for routing air cargo. The promotion may take the form of a slide presentation about the airport and airline services, followed by a luncheon. The value of this type of program is that it reaches a large group of influential current and potential customers at one time, in a friendly relaxed atmosphere. All costs associated with the program are divided equally between the airline and airport hosts.

9.2 Shippers

The shippers' program mirrors the overseas joint promotion program but with two important distinctions: it targets shippers in the U.S. market, and an air freight forwarder is the co-host of the event. The forwarder extends luncheon or evening cocktail invitations to current and potential customers and explains through a slide presentation the advantages of doing business with the forwarder via the airport. It is a prime opportunity to update current customers on services such as a new consolidation schedule, and appeal to potential shippers for a share of their business. Once again, costs are evenly divided between the co-hosts.

10. INFORMATIONAL PROGRAMS

10.1 Airline

The airline program is targeted primarily at U.S. headquarters of American and foreign flag carriers. The program's objective is to raise awareness of the airport's cargo product to senior management as a first step to promote the viability of the airport and attract additional combination or freighter service. As discussed above, this program involves a smaller audience, and may take the form of a business meeting. However, a variation of the cooperative slide presentation can be adapted to this program so that the airport's advantages are highlighted.

Programs should focus on the competitive advantages of conducting business at your airport

10.2 Freight Forwarder

Once again, a similarity exists between the airline and forwarder informational programs; the difference being that the latter is designed to encourage additional consolidation activity. A market and services presentation given to senior management at the head office should stress the airline and road feeder service (RFS) connections at the airport as well as the availability of warehouse facilities.

These programs can and should be varied to fit the particular market, marketing objective and target audience. It is helpful if a basic slide presentation is developed which can be adapted to each audience.

11. ADVERTISING AND CARGO EXPOSITIONS

Two essential elements to the overall marketing program are advertising and cargo expositions. A well-designed advertising strategy allows you to target a wider audience, raise awareness of your product, and influence the target audience. Over time, the advertising campaign will reinforce your message. Basically, advertising allows you to deliver the right message to the right people, the right number of times.

Participation in cargo expositions and conferences is an important part of the cargo marketing plan as well. Several levels of participation are available:

- Conference Attendance
- Exhibiting (display booth)
- Participation on a Speaker Panel
- Event Sponsorship (luncheon, happy hour)
- Partnerships with local Chamber of Commerce and State Organizations

With each level of participation you will get a different degree of visibility for your airport's services. Active participation in a speaker role or sponsoring a conference special event affords the highest visibility to the largest audience. However, it is important to note that not every cargo conference is focused on airports. Staff should research the intent of and typical participating business elements in a conference, before committing to attend.

12. CONCLUSION

The concept of aggressively marketing an airport's cargo services should be part of your airport's marketing and business development plan. .. Most major airports recognize the importance of air cargo to their overall development plan and have committed financial resources and professional personnel to the task of enhancing their cargo product.

The strategies suggested here represent one approach to the cargo marketing effort. The message is to recognize the dynamic nature of air cargo and through coordination with facilities development, meet the needs of a more demanding and sophisticated air cargo customer. Capture your airport's uniqueness to your air cargo marketing approach.

13. AIR CARGO MARKETING AND DEVELOPMENT – A PARADOX FOR THE NEW CENTURY

Aggressive development years in the 1980's was possible because financial institutions, insured by the United States taxpayer, offered real estate loans based on an appraisal of a property's future potential! When 100 percent financing was possible and tenants ready, willing, and able to pay the rents were always assumed to be in plentiful supply. Speculative building was considered by some as a rational development strategy: things have changed.

The industry operates under a different financial paradigm, the era of cost pressures and reduced credit availability. Today, the tightening of credit requirements combined with the volatile condition of the airline industry has made it difficult in many cases to secure financing and proceed with development of air cargo facilities without a guarantee up front on the debt by either a pledge of the overall revenues of the airport itself, or by the credit of an individual airline or group of airlines; by the security of a group of tenant leases assembled under a private developer; or by the credit or equity contribution of a private developer. Speculative development is far more limited.

Potential air cargo tenants have also witnessed this changing financial landscape. They may be financially less able today to construct their own facilities and may be hesitant to commit to a lease sponsored by a private developer if there is uncertainty as to when a sufficient number of leases can be assembled and/or an equity contribution made to secure the financing and then proceed and erect the facility. This can be a challenge and the airport should seriously consider all aspects of your individual air cargo tenant's needs. Today's financial realities with the goals of an air cargo marketing program should be constantly reviewed and evaluated based upon our changing industry.

Combine today's financial realities with the goals of an air cargo marketing program and you have identified a paradox for air cargo marketing and developments.

How can an airport conduct an air cargo marketing program and yet be confident that it can deliver the necessary facilities for new tenants on a timely basis? An airport cannot ask air cargo tenants that want to expand or move onto the airport to sign a lease and sit tight for a couple of years while attempts are made to secure the financing and erect facilities. If an airport cannot deliver the necessary facilities in a timely manner, in response to the new demand evolving from its marketing efforts, those efforts will be frustrated and the potential new tenants might go elsewhere. What can be done to unravel the paradox? What strategies can an airport undertake to provide the necessary facilities required by tenants responding to an air cargo marketing program?

14. REASSESSMENT OF RISK – STEP ONE FOR A CARGO DEVELOPMENT STRATEGY

What may be required is a more refined allocation of risk and/or a pooling of risk among the different parties that develop and lease air cargo facilities in order to identify development strategies. These strategies must be more timely and responsive to market demands and yet consistent with an airport's airline operating agreement and overall commercial goals and objectives. Any reappraisal of risk among the various parties involved in air cargo development must first be viewed through the airport's master business agreement with the airlines; that itself allocates or influences the allocation of risk among the parties (i.e., the airport; the signatory airlines; and indirectly, private developers). These operating agreements are broadly classified as either residual or compensatory ratemaking methodologies but in practice many of the newer airline operating agreements may be hybrids that contain features of both methodologies.

14.1 Influence of a Residual Ratemaking Methodology

An airport under a pure residual ratemaking methodology pledges its revenues to ensure a breakeven operation with the airlines. Airports under this ratemaking structure theoretically have the signatory airlines carrying the risk to make up the residual or remaining amount necessary to service the debt and operate and maintain the airport, after the pledge of the airport's revenues (i.e., concession revenues). This risk may be considered more illusory today under deregulation as the strength of an airport's origin and destination market may have more of an influence on the airport's financial security than the individual airlines that use it. Given the pledge of its revenues, airports under this ratemaking methodology are generally not blessed with large amounts of discretionary revenues to pursue air cargo development goals. Moreover, an airport interested in pursuing the development of air cargo facilities with general airport revenue bonds will first be required to gain majority-in-interest approval from the signatory carriers. This can prove to be difficult as the signatory carriers may have their own list of priority development projects that may not include air cargo.

Airports with residual ratemaking agreements are generally not blessed with large amounts of discretionary revenue to pursue air cargo development goals.

If approval is granted, it will typically be contingent on having long-term leases in place to guarantee the debt. The signatory carriers will not care to be the backstop in ultimately securing the debt on facilities, which many of them may not use. Individual airlines, on the other hand, are less likely today to add to the existing debt on their balance sheets by guaranteeing the financing for their own exclusive-use air cargo facilities. It is far more attractive for them to commit only to a lease of the space they require and have another party guarantee the debt for an entire facility.

Finally, given the limitations placed on airports by a residual ratemaking structure and the current debt and profitability constraints placed on individual airlines, airports often do look to a new form of business relationship with third-party or joint venture partners to pool risk in order to be more responsive to an air cargo marketing program.

14.2 Influence of a Compensatory Ratemaking Methodology

The pure compensatory ratemaking structure will have rates and charges set to fully recover costs, with any excess revenues or deficiencies accruing to the airport account. An airport operating under a compensatory ratemaking structure has assumed a large share of the risk for the airport and therefore has the opportunity for the reward of discretionary revenues that may then be invested in or used to pursue airport air cargo development goals. It is the presence of these discretionary revenues that may give an airport the added flexibility it needs to be responsive to an air cargo marketing effort. While a residual or blended residual ratemaking structure may have a negotiated discretionary revenue set aside for the airport, the more the agreement is compensatory in nature the greater the propensity to generate discretionary revenues that are limited only by the financial performance of the airport rather than a predetermined negotiated amount.

It is the presence of discretionary revenues that may give an airport the added flexibility to be responsive to an air cargo marketing effort.

A limitation with this ratemaking methodology is that the airport now carries a large measure of the financial risk for the airport. It must balance decisions regarding debt for air cargo facilities with the overall impact on the debt structure for the entire airport. Moreover, there may be competitive demands placed on these discretionary revenues that can place air cargo development in a subordinate position to other unmet development needs (e.g., terminal, airfield, roadways, etc.). Individual airlines, as discussed above are less likely to guarantee the debt to build entire facilities for their own exclusive use. They will look to others to back the debt for facilities in which they lease space.

Finally, third-party or joint venture partners may present more flexibility under this ratemaking methodology if there is a pooling of funding among the parties, with the airport's share coming from its discretionary revenues.

15. AIR CARGO DEVELOPMENT STRATEGIES

What follows are three air cargo development strategies that may help an airport to be more responsive to facility needs identified through an air cargo marketing program.

15.1 Airport Discretionary Revenue Development Strategy

This development strategy would have the airport develop air cargo facilities based on the availability of its discretionary revenues. Here the airport has assumed the risk for air cargo development and has the opportunity for the reward of discretionary revenues that may help it to further pursue its air cargo development goals. This strategy is far more feasible under a compensatory rather than a residual structure.

The strategy first divides the development of a facility into two phases with the first phase being the facility infrastructure design and construction and the second and later phase being the design and construction of the air cargo warehouse facility and (as appropriate) aircraft parking apron. The purpose is to make a limited infrastructure investment up front and in advance of the construction of the air cargo warehouse and aircraft apron in order to limit risk and shorten the development time for the completion of the facility once prospective tenants have been identified through the marketing program. This development phasing may be further shortened if the airport retains a design-build contractor to complete both phases rather than complete the project under its own public bidding process.

Both phases in most cases cannot be developed simultaneously. One must precede the other and both together may require approximately 12 or more months to complete. Limiting risk by timing the development of the infrastructure phase early enables the second phase to be completed in about six months, especially with a design-build contractor, to better match the needs of prospective tenants responding to a marketing program. In other words by accepting a small measure of risk (in a reasonable market) the airport can position itself to respond to tenant facility-needs within six months instead of 12 or more: (i.e., an early investment of 1/6 of the facility cost can save l/2 the development time once tenants are identified).

A limited early investment in facility infrastructure can position an airport to respond on a timelier basis to respond to a marketing program.

Once the first phase infrastructure has been completed and an airport marketing program has identified one or more tenants ready, willing, and able to commit to a lease, the second phase of this strategy attempts to leverage the discretionary revenues to provide as much air cargo space as possible under defined levels of risk. The approach here is to satisfy both the needs of the first tenants going into the facility and to provide and continue to make available a residual amount of vacant space to meet the needs of subsequent new tenants.

Under an acceptable level of risk, an airport can have a residual amount of vacant space available to respond to a marketing program.

15.2 Other Risk Considerations

The guarantee of the debt for an air cargo facility may extend over a number of years and should therefore be evaluated from both a micro and macro perspective.

First, in a micro-sense, it would be ideal to have leases from tenants that fully match the term of the debt on an air cargo facility. Such an outcome would enhance the security of an airport's discretionary revenues in future years, as the initial leases would service the debt until its retirement. However, in today's less than ideal world, airlines and air cargo tenants may seek shorter-term leases (e.g., 10 years or less). Leases of

15 or more years are considered capital leases and as such are carried as a liability on a company's balance sheet. Leases of 10 years or less are considered operating leases and are not shown on the balance sheet. Given the debt on most airline balance sheets, it is considered a significant advantage to carry operating leases instead of capital leases. Therefore, the airport employing this strategy will need to assess the risks to its discretionary revenues for it will eventually be faced with the re-leasing of space in an older and perhaps dated air cargo facility.

In a macro-sense, an airport will need to evaluate its strategy in relation to its ability to influence the future competitive direction and inventory of air cargo facilities on the airport.

The airport, with its discretionary revenues at risk, must now view itself as a competitor with other air cargo facility operators leasing space both on and off-airport.

The airport must carefully evaluate what rights it grants for the development of competitive air cargo facilities and the conditions it places on approving tenant leases and subleases in competitive facilities. It will need to maintain a market based rental structure in its facilities instead of a cost recovery structure in order to safeguard and expand its discretionary revenue base. It must control the access of air cargo movements to the airfield to ensure that the tenants of off-airport competitors are not able to by-pass the on-airport facilities and subsequently weaken the on-airport rental base and place the airport's discretionary revenues at risk. Often the off-airport competitor can offer air cargo space at a rental rate less than the prevailing on-airport rental structure because of a variety of reasons including: (1) the off-airport competitor may have title to property (land and improvements) that can be pledged to the financing of subsequent improvements resulting in a lower rental structure, and (2) the off-airport competitor often receives the infrastructure investment for the property (i.e., roads, utilities, etc.) at a lesser cost than what occurs on the airport. The point here is that the on-airport tenant pays a premium for direct airfield access and this should not be diminished by also granting this right to tenants of off-airport competitors.

For financial reasons, all air cargo should pass through the on-airport air cargo facilities under a handling agreement if necessary, but for security purposes should not be permitted to by-pass the on- airport facilities and gain direct ramp access. Finally, the airport will need a business plan that considers the future market for air cargo; the land available to develop and the ability to finance additional facilities; and the competitive condition of the existing inventory of air cargo facilities, including the average age of facilities, vacancy rates, prevailing rental and expense rates, feasibility of remodeling existing facilities, and a profile of existing tenants and the remaining term for tenant leases in all facilities.

One significant event that could place the feasibility of this strategy in doubt is the Department of Transportation (DOT) Airports Rules and Charges Policy. The effect of the Policy is to dilute an airport's discretionary revenues from its air cargo facilities by forcing those revenues into covering airfield costs or by requiring a change from a market to a cost recovery based rental structure in airport owned air cargo facilities. Chapter 5, Financial and Management Strategies, provides more information concerning the possible impacts of this Policy.

Air cargo security guidelines have also dramatically impacted physical planning considerations. The extent of those impacts varies largely on the levels of inspection and screening of cargo that is required, and on the physical improvements (if any) necessary to provide screening capacity and to secure the perimeters of air cargo facilities both on and off the airport property.

16. THIRD-PARTY DEVELOPMENT STRATEGY

This development strategy would have the airport become more of a risk partner with a private developer. It differs from the first strategy in that instead of undertaking the development itself, the airport reduces its risk and relinquishes some of the possible financial rewards by employing a private developer.

Here the airport and the developer become partners in a long-term venture.

Air cargo developers are typically granted a lease of airport land with the right to construct, finance, operate air cargo facilities, and offer space for lease to tenants. The airport in most cases has no financial exposure with this type of venture. It derives land rental and/or percentage rental payments from the developer over the term of the lease and receives title and control to the developer's property improvements at the expiration of the land lease. The developer arranges the financing; contracts for the design and construction of facilities; maintains and operates facilities and improvements; negotiates, prepares, and administers tenant facility leases and conducts overall property management functions; and must make its' return on investment within the term of the airport land lease.

Many airports solicit for a private developer as the need for facilities arises. An airport may have a varied mix of air cargo properties (e.g., properties developed and operated by the airport or a carrier, properties developed and operated by private developers, and still others originally developed by private developers but now operated by the airport following the expiration of the developer's lease).

Typically, the rights granted to a developer are non-exclusive in that a single developer has not been granted exclusive control over all air cargo development on the airport. The developer will seek to assemble a sufficient number of leases from tenants, perhaps in combination with a pledge of its own credit or equity, to gain the financing for the facility. This returns us to the paradox of marketing for air cargo tenants and yet being possibly frustrated with the inability to gain financing to erect facilities. What are some possible approaches to modify the airport/developer risk balance to enable financing to be arranged and facilities erected in a timelier manner? Some candidate approaches are as follows:

16.1 Approaches to Modify the Airport/Developer Risk Balance

Developer Loan Approach

The airport may make the first phase infrastructure investment from its discretionary revenues in the form of a loan to the developer if those revenues can be made available for this purpose. The effect of this approach is to lower the developer's debt service requirement and therefore the amount of the building space that must be under lease to secure the financing.

Subordination of the Fee

The airport and developer could both subordinate their fee interest in the venture to the financing. Essentially, the debt is serviced first and the airport and developer proceed with development of the facility once sufficient leases are assembled to secure the financing, perhaps in combination with the infrastructure loan approach above and an equity contribution by the developer. Both the airport and the developer will not collect their fees until additional leases are signed to provide the sufficient revenues. Again, the effect is to proceed with the facility once the debt is secured and in advance of the amounts due the airport and developer.

Extended Term Lease

The airport can grant the developer a longer-term lease coupled with the developer’s ability to obtain private sector financing that can be internally amortized over the longer lease term. The effect again is to lower the annual debt service requirement that enables the developer to secure the financing with a correspondingly lesser amount of space initially under lease. As this approach delays the transfer of the developer's property improvements to the airport, some change to the financial terms of the lease will need to occur to reflect the longer lease term granted the developer. While airports tend to resist the longer-term lease provided by the developer, a substantial side benefit of a longer amortization period is the possibility of lower rents for tenants.

Debt Guarantee

The airport can guarantee a portion of the debt from its discretionary revenues. As an example, assume the developer has made an equity pledge to the venture and has secured some leases but still requires a $200,000 per year guarantee in order to secure the financing. The airport can make this pledge until sufficient additional leases are secured to cover this guarantee. The actual amount paid out by the airport under the guarantee would be considered a loan as above. Again, the effect is to enable the facility to be developed with a lesser amount of space initially under lease and to have the remaining un-leased space available to support the airport's marketing program.

Pledge of Credit or Equity

The airport can assemble any combination of the above approaches but must always have an understanding of its overall risk exposure. It is highly recommended that the airport first receive a pledge of credit or equity from the developer before it employs any of the above approaches to help the developer secure its financing.

One approach is to have a pledge of equity or credit be part of the evaluation criteria the airport uses to select its developer.

In other words, in addition to the customary evaluation criterion such as experience of the developer, proposed facility design, and financial terms, an additional criterion could be included that has proponents make a pledge of credit or equity to help guarantee the financing.

Finally, regarding any of the loan approaches discussed above, the airport may wish to secure that loan by ultimately being able to reduce the term of the developer's lease in proportion to the loan amount outstanding to the developer's amortized investment. As an example, assume the developer will not repay $500,000 of an airport loan. The loan will be carried at 7 percent over 25 years resulting in approximately $1.0 million due the airport at the end of the 25-year lease term. The proportion of the $1.0 million loan amount outstanding to the total amortized air cargo facility investment of $16.6 million is approximately 6 percent.

Applying this percentage to the 25-year lease term reduces it by 1.5 years. In other words, the developer's lease would expire in 23 and one-half years instead of 25 years and the airport would gain the additional air cargo facility revenues by taking control of the facility earlier. Finally, the airport should also require that any refinancing by the developer or assignment of the developer's lease first be conditioned on the immediate and full repayment of any outstanding loan due the airport. A loan should not convey to any successor of the developer.

17. JOINT VENTURE DEVELOPMENT STRATEGY

This is perhaps the newest approach in an airport/private developer collaborative venture. It differs from the private developer strategy discussed above by its potentially much larger scale and diversity. It is the antithesis of the airport discretionary revenue strategy discussed first. While the first strategy has the airport developing and operating its own air cargo facilities, this strategy can go as far as contracting out or privatizing the entire air cargo function. This strategy is better suited for airports under residual ratemaking structures or that have requirements of such scale and complexity that the airport is unable to marshal the necessary resources to accomplish it by any other means.

Joint ventures are better suited for airports under residual ratemaking structures or that have requirements of such scale or complexity that the development cannot be accomplished by any other means.

In private industry, a pure joint venture is a form of partnership in which two or more organizations agree to pool designated assets to form an independent third organization to pursue a specific limited goal or development. This new organization typically has a corporate structure; staffing; assets; operating rules and procedures; and of most importance, ready access to private capital for investment. The joint venture parties agree to share in the "cash flow" of the venture based on the value of assets committed.

Public institutions (i.e., airports) by their very public purpose and structure are limited in their ability to freely engage in this type of unrestricted entrepreneurial activity. There are however some examples of public institutions engaging in a public/private version of a joint venture.

The Washington Metropolitan Area Transit Authority (WMATA) practices a joint development strategy with the development of commercial and residential properties in the vicinity of its stations. Here it is important to have a balanced and diverse scale of development mostly completed and operating when the stations open for public use. WMATA grants long-term leases, up to 99 years, for a wide variety of commercial development. As with the joint venture, both parties contribute assets and receive "cash flow" from the venture. WMATA does not view itself as an eventual operator of these properties and is willing to therefore grant significant long-term rights to develop its property in return for the receipt of a continuous stream of revenues from its venture partners. The venture partner is given rather liberal development rights as compared to what can be done today at an airport. However, within certain bounds this approach may have appeal, especially for large-scale developments at airports that are unable or unwilling to commit airport resources to the project. Here the ready access to private capital overcomes the timing problem of having facilities ready for tenants. The real question is what will be the overall price for engaging this strategy. An airport will need to carefully consider what rights it must relinquish and what guarantees it must make for this strategy to work for both parties.

18. CONCLUSION

The air cargo industry has matured from a disaggregated aviation support activity into a more integrated and sophisticated logistics operation with a clear customer service focus. As long as the dynamic growth in global markets continues, airports will need to understand the changes that have taken place, and will take place, in this industry and focus their resources to take advantage of the future growth that is at each of their door steps. Marketing programs will not lead to many successes if conducted in isolation. Efforts to develop air cargo facilities without a marketing focus may lack direction and miss opportunities or result in the development of facilities that do not meet the air cargo customer's needs. Both programs need a single focus to provide the best possibility for success. If an airport has identified the need to pursue air cargo growth goals, it will need to pursue its customers, understand their needs, provide a vision of what opportunities are available to them, and develop the facilities that satisfy those customer needs. Finally, the marketing and facility development strategies discussed above represent a snapshot of a moving target. These strategies will continue to evolve to match the dynamic changes that will occur in this industry in the coming years.