

CHAPTER 7

THE AIRPORT – TENANT RELATIONSHIP

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1. INTRODUCTION

Airport operators recognize the broad economic impact of air cargo on the service region, and have become receptive – and enthusiastic – about air cargo development. The increased significance of these relationships between airport operators and cargo tenants has been accompanied by layers of complexity in cargo-tenant relationships, including the contractual relationships that define how the parties engage.

This chapter will explore the relationships between the roles and objectives held by local airport management and their tenants, which may include airlines, developers, and various allied service providers. Given that airport management has a tremendous public responsibility that could be different than the profit motive of their tenants, the chapter attempts to provide an even-handed assessment of the issues that frequently lead to a difference of opinions. However, these differences should not overwhelm the prevailing belief that tremendous opportunities for cooperation also exist between the public airport operators and their private sector partners. To encourage cooperation, and assist airports in future negotiations, some of the standard language that frequently appears in contracts between airports and their cargo users/tenants is included. The objective here is not to provide a survey course on contract administration, FAR compliance, or bankruptcy law. However, this chapter is intended to provide airport operators with sufficient insight to at least raise the appropriate questions. More importantly, we hope that this chapter will invest airport managers with greater confidence to proceed with the critical challenge of developing sufficient cargo facilities and infrastructure to meet the industry's complex and often diverse demands.

2. AIR CARGO STAKEHOLDERS

2.1 Airports

In its roles as public land owner, public guardian and local advocate for regional services, the airport has a vested interest in ensuring that assets are put to their optimal use while balancing environmental and noise considerations. Throughout this juggling act, airport operators must respect both the long-term perspective of the Airport Master Plan and the users' more immediate needs and expectations of equitable treatment. Airport operators must determine whether they desire to lease directly to the airlines and other cargo users, or to introduce a developer into the airport's development process. Ultimately, airport operators must consider all options when formulating the planning, construction, marketing and operations of cargo and its related businesses.

2.2 Airlines

Today, airlines come in a broad range of operational configurations. Not even accounting for various surface modes which may also be utilized for one or more transport legs, air transport of cargo typically occurs in one (or more) of four ways: the belly of passenger aircraft, in combi-aircraft, via integrated carriers, or in all-cargo carriers. Each category has distinctive networks, operational styles and landside requirements. In developing its physical infrastructure, airport management must evaluate the needs of each type of cargo operator. The ability to attract and maintain cargo operations is directly related to an airport's ability to address individual airline requirements with planning flexibility and financial responsiveness. Many foreign passenger carriers operate freighters, and most U.S. passenger carriers maintain cargo divisions. All routinely reexamine landside capital investment strategies. In cases where passenger yield management goals have been achieved by changing fleet mix and adjusting route structure, the result for cargo has been reduced belly capacity and an increasing reliance on all-cargo aircraft. These conditions were greatly exacerbated by the events of September 11th, 2001 and its

aftermath in which airlines initially shed capacity in an effort to match reduced demand. Later, as passenger demand returned, airlines restored passenger capacity through the use of regional jets with diminished cargo capacity. This evolution has left many airport managers scrambling to meet changing requirements as more cargo is carried via surface transportation and freighter operations.

2.3 Freight Forwarders & Customs Brokers

Despite extraordinary market share gains by integrated carriers, freight forwarders continue to be essential for effective goods movement by air – especially for international transport. While the relationships between forwarders and airlines can be challenging at times, there is still an obvious interdependence acknowledged by both parties. While freight forwarders historically have been perceived as little more than a travel agent for freight, many of today's more sophisticated forwarding companies operate vast trucking fleets, and a few command scheduled charter flights with cargo airline partners. Although many forwarders may choose to locate on less expensive property off-airport, recent security concerns have elevated the perceived value of an on-airport operation. While some forwarders are wholly niche-oriented, even the largest companies have departments dedicated to specific geographic areas or industries, including dedicated computer, pharmaceutical, chemical and automotive divisions.

While forwarders serve exporters, customs brokers cater to the needs of importers. Many freight forwarders and integrators may include customs brokerage functions; it is also common for these industries to have agency agreements with independent brokers. For both forwarders and brokers, success is increasingly dependent on their ability to integrate their own systems with those of shippers, carriers, forwarders, and federal inspection agencies worldwide. Recognizing that rapid clearance of goods is among their most critical functions, brokers play a crucial role in the cargo delivery chain. While electronic tracking and clearance systems have reduced the need for brokers to physically maintain offices on the airport premises, frequent complications suggest that proximity to the airport and federal customs is desirable.

2.4 Shippers

Having exhausted much of the low-hanging fruit in terms of time and money-saving manufacturing innovations, producers and suppliers are increasingly concentrating on logistics as a critical component in global competition. Providing the maximum in time expediency and delivery reliability, air transport's appeal has been magnified in the era of just-in-time manufacturing, zero inventory distribution, and contracted product life cycles.

Where physically and financially feasible, these major manufacturers and distributors are locating logistics centers on or near those airports that can provide the necessary lift. Increasingly, this strategy has led to the airport's enhanced role in local economic development efforts to lure companies to cities that are perceived to have an air cargo competitive advantage. This recognition has also galvanized industry discussion of all-cargo airports, although in North America few such airports are likely to be successful as long as ample capacity exists at existing commercial airports.

2.5 Ground Service Providers

Frequently, the ground service provider (GSP) is the link between the aircraft and the warehouse. The GSP loads and off-loads cargo, moves it to and from the warehouse - and even within the warehouse, itself. Historically, these operators have functioned in a fiercely competitive environment where cost-minimization was the dominant criteria in bidding for business. However, the industry has evolved from the obsession with low cost, to emphasizing value – balancing cost with quality. As a result, many air carriers are outsourcing part of their cargo operations to handling companies who gain economies of scale and cost

efficiencies by utilizing staff and equipment for multiple carriers. While this initially results in consolidation of space requirements and more efficient use of facilities, thereby reducing overall space requirements, the increasing provision of value-added services by GSP's eventually creates demand for additional space. As handling companies assume these larger roles, their need for GSP facilities and operating facilities on the airport (in general) will continue to grow.

2.6 Trucking

Ground transportation plays a critical, yet occasionally overlooked role in air cargo delivery. Not only do trucking companies serve airlines and forwarders but the major integrators rank among America's largest trucking companies in fleet size. This activity utilizes considerably more space than many airport operators realize, placing a substantial, yet often neglected impact on facilities and road maintenance, planning and development. On some airports, estimates of the cargo volume that moves entirely truck-to-truck can run as high as 30%. Whether freight is moved plane-to-truck or truck-to-truck, air cargo is inherently intermodal. Consequently, airport planning and design must include considerations of air cargo trucking in roadway geometry, building frontages and building design. Moreover, facilities for truck maintenance or truck to truck operations may also merit consideration. While most trucking companies do not have to be on-airport, the movement of logistics and manufacturing centers closer to airports may spur a change.

3. WHO SHOULD BUILD? THE SELECTION PROCESS

Airports have several options when considering the planning, development, construction and marketing of air cargo facilities. These include airport-owned and operated facilities, if funds are available and airport management has sufficient development expertise in-house. Many airports prefer to accept greater risk by developing their own facilities. This enables them to generate more revenue and retain greater control over airside operations and the ability to use federal or state grants that may reduce the overall cost of the project. Airports may, in some instances, pass any savings along to the end users in the form of reduced rents.

Alternatively, airport management may choose to allow site development by either the end user (airline or GSP) or a developer. If a third-party developer is used, the airport will typically make less money. However, the burden of development, financing, marketing, leasing and management, along with the risks inherent in the consolidation of carriers and carrier use of outside handlers, releasing, refinancing and bankruptcy is passed to the developer. A matrix of considerations for the pros/cons of using developers is presented below. If the facility is to be developed by the end user for its own operations, the negotiations proceed rather quickly.

Pros & Cons of Private Facility Development

PROS

Financing:

- Developers' financing has no recourse to airport nor effect on its credit rating. Risk related to occupancy, bankruptcy of tenants and associated debt-service considerations is borne by the developer.
- Typical air cargo facilities financing – including those using tax-exempt, special facilities airport bonds, do not affect airports' borrowing limits and caps
- Net result is to allow airport operators to invest their own funds in other priorities, including improvements with greater return-on-investment or operational priorities.
- Accelerated ground-lease income on property not currently utilized.
- Improvements revert to airport at no expense after initial land-lease term.
- Private development costs may be 15%-20% less than public.

Marketing:

- Developers provide marketing resources which may even relieve airport of need for cargo-specific staff.
- Developers have vested interest in leveraging their existing tenant relationships at other airports in their networks in pursuit of greater occupancy.
- Intangibles:
 - a. Most developers bring cargo facilities expertise lacking at many airports.
 - b. Often, developers supply improvements, such as utilities, aircraft parking ramp and other infrastructure for which airport may not have available funds.

CONS

Financial Considerations:

- Public airports often have unique access to less expensive funds, and thus privately-funded buildings may carry relatively higher rental rates depending on the financing model.
- Should developers go bankrupt, airport operators may be reconciled to partnering with financial institutions that have neither the industry sector skills nor motivation to aggressively pursue cargo development.
- Many cargo carriers still perceive that private developers inject an extra layer of costs into cargo facilities that otherwise would not be necessary.

Control:

- Airport operators must ensure through leasehold provisions that privately-operated buildings and infrastructure are maintained (appearance, safety and security) consistent with airport standards and federal regulations.
- Ability of airport operator to undertake speculative facilities development in pursuit of local economic development objectives may be incompatible with motivations of private developers. Similarly, application of public incentives to attract new service may be complicated by participation of private developers.

There are more complex situations that arise in which facilities will be required for either multiple tenants or where the demand for the facilities is unclear; a third-party developer/operator may be willing to construct facilities. In this case, airport management should initiate a clear, coordinated, and transparent selection process to determine who will develop the site. First, the governing authority must devise an orderly review process, identify a qualified selection committee and clearly define the evaluation criteria that will provide the basis for selection of the developer.

Typically, but not always, airport management conducts a Request for Proposal (RFP) as an open competition to select the best lessee for a particular site. Numerous positive and negative examples exist to inform prospective airport landlords of techniques for devising a productive RFP. ***It is important to note that RFP processes for development represent tremendous time and cost to prospective developers. Airports should be committed to the process and to the resultant deal and partnership prior to initiating the process.***

Where airports are not bound by public statute to conduct RFP's, many have opted for a less formal selection process involving the marketing of selected land tracts to qualified lessees and end users on a conditional first-come, first serve basis. This approach is ideal for airports with abundant land (Greenfield sites) and easily-established values, particularly if cargo development is described and anticipated in the Airport Master Plan and subsequent development can be directed to comply with the intentions of that planning document.

4. TYPES OF AGREEMENTS & CONTRACTS

4.1 Developers

While carrier and third-party development have been utilized at some airports extensively, these forms of development have become even more attractive in recent years when airport operators' own resources have been strained and carriers have opted to invest in aircraft rather than real estate. Several key phenomena have been responsible for the change.

1. Fluctuating fuel prices and a general economic slowdown have resulted in operating losses on many airlines, forcing carriers to reconsider route structure, frequencies, and fleet mix. To maximize revenues, carriers have sought to optimize passenger load factors by reducing capacity; this has become a double-edged sword. On the one hand, cargo's traditional function was to consume the belly capacity remaining after baggage was loaded. However, new fleet mixes for many carriers included significantly less belly capacity. E-commerce, the changing fleet mix, coupled with security requirements, has made shipment of cargo in bellies on certain routes more difficult, thereby less desirable, increasing the industry's reliance on all-cargo freighters. Many airports are not physically equipped to handle these aircraft. Moreover, airports confront this challenge with their own available capital for expansion already strained by the preceding losses in operating revenues combined with increased security-related operating costs, and expectations of future cargo-related security outlays. On the other hand, the growth of new international passenger service using wide-body aircraft has caused many carriers to abandon freighter acquisition strategies and pursue greater utilization of belly capacity. This bifurcation of industry strategies make it important to consider who the carriers are and their specific needs before major infrastructure investment.
2. The amount of Airport Improvement Program (AIP) grant money dedicated to cargo (cargo entitlements) is very small and considered by many, inadequate. Therefore, as air cargo tonnage

has increased, federal funding as a percentage of total cargo capital needs has declined considerably. The combination of insufficient federal funding and the need for substantial infrastructure investment has led airports and airlines (who prefer to invest their capital in aircraft) to increasingly consider private developers.

3. There is an growing trend to consider development of logistics parks to stimulate cargo activity and at the same time generate incremental revenue for airports, and new jobs for the region. Since much of this development may be considered ineligible for federal grant money, a private partnership is a logical consideration.

However, it would be presumptuous to assume that private development presents a universal solution. Absent several key ingredients, the inherent difficulties can be substantial.

1. The developer must recognize that the airport has obligations and objectives that are more than financial, and encompass other areas such as safety, security, and operational requirements.
2. The airport must consider whether they will assume a share of development risk, depending on their analysis of the overall market potential and the policy the airport has established toward cargo development.
3. Inherent in the Airport-Developer relationship is a difference in perspectives on revenue generation. While long-term leases are typical and all facilities/improvements ultimately revert to the airport, a developer's short-term needs and finite window for capitalization and profitability may conflict with the airport's longer-term perspective.

Basically, what must emerge is a working partnership based on mutual flexibility and risk. While developers bring investment, expertise, and often new tenants, airport management controls a unique, restricted resource – airport land. Both ideally and realistically, the partnership should benefit the airport, developer, tenants, and local economy. While airport operators bear public accountability, developers must conform to the expectations of their potential lenders and tenants. Failure to do so may compromise the ability to finance and/or lease the development. As private development at airports becomes more common, the process is becoming more streamlined and certain guidelines and practical realities are gaining in acceptance.

A critical element in the mix is the cost allocation for related infrastructure that may not be easily recoverable by the developer. The key to a successful development may ultimately require that airports consider investing their limited federal funds to stimulate private sector development activity by sharing costs.

5. BANKRUPTCY PROVISIONS & OTHER TERMINATION SCENARIOS

While introducing many operational improvements, airline deregulation also brought a high number of airline bankruptcies. That era produced much of the prevailing methodology for protecting airports from the injuries of such proceedings. For many airport contract managers, the first round of airline bankruptcies amounted to uncharted territory but provided invaluable insight for more recent (and ongoing) airline bankruptcies. Navigating federal bankruptcy codes, airport operators can find themselves in protracted efforts to seize collateral assets, at best, or merely to regain occupancy of facilities leased to airlines in bankruptcy. In the worst cases, airport operators have endured lengthy periods in which precious resources were untouchable and providing no revenues while courts and creditors deliberated. There have been

other situations that do not reduce the airport's revenues but do damage the airport's image and could potentially increase its future cost of borrowing.

In recent years, a number of airlines have financed the construction of special purpose airport facilities with tax-exempt special facility bonds. Unlike general airport revenue bonds, which are typically used to finance most airport infrastructure and are repaid from general airport revenues, special facility bonds are unique in that they are repaid solely by the user or from the revenues of the special purpose facility. In addition, up to this point, it has not been uncommon for special facility bond deals for major airlines to be structured as unsecured loans, which essentially means that if the airline defaults on the special facility debt, the bondholders do not get paid and have no collateral in the financed facility. Ultimately, it is critical to ensure that any bond deals are structured to provide adequate collateral for both the bondholders and the airport. This can be accomplished by giving the bondholders a security interest in the leasehold and/or revenues of the special facility being financed. (For greater detail, see Chapter 5)

On a parallel track, airlines continue to explore and go through mergers and acquisitions. In the case of healthy airlines acquiring the assets of bankrupt airlines, airports have sought to attach existing liabilities to the acquisition partner – as Kansas City and St. Louis attempted with American Airlines' assumption of former TWA assets. Conversely, airports have sought to sever existing contractual obligations when tenants have been acquired by operators who were perceived less favorably. Airport managers must be vigilant and anticipatory in preparing contracts that provide sufficient flexibility to bind or unbind – depending on the circumstances – tenants in critical future junctures.

Depending on prevailing ownership standards, airport management's cargo leases may include contracts with cargo carriers, ground handlers and/or developers. While the contract language may vary, some concerns will be consistent regardless of whether the airport operator is leasing directly to air cargo carriers and ground handlers or to a developer.

For example, airport management must ensure that insurance standards - by developers and/or carriers – will cover environmental cleanup should a bankrupt operator leave contamination. Similarly, airport operators must be properly indemnified for injury and any other liability concerns that could potentially be left by a bankrupt operator. In all likelihood, airport management will require proof of sufficient coverage from both the developer (if there is one), as well as the carriers and other cargo tenants.

5.1 Contractual Covenants

Assignment and Subletting by Tenant

In leasing directly to cargo carriers or other operators, airport management must control the circumstances under which space or rights are assigned or sublet to another operator. Most obvious, management should include reporting requirements that inform tenants – in writing – that space will be utilized by another party. In the event of an assignment, the airport operator will seek to ensure a) that the sub-tenancy is for an appropriate use, and b) that all existing obligations of the tenant are maintained. Again, this condition is particularly critical when the lessee of record files bankruptcy. On the other hand, airport management will similarly want to ensure that the authority's acceptance of an assignment of lease does not reduce the obligations (rentals, fees, and other charges) of the lessee of record – in the event that the secondary assignee should file bankruptcy. Under either scenario, it is incumbent on the airport operator to ensure that the full obligation of the tenant is maintained. In extreme cases, airport management may require procurement of a surety bond to establish assurance of the reliability for rental payments, potential damages and any other costs.

Relinquishment of Space

Frequently, an operator (carrier or ground handler) in financial distress will seek to relinquish all or part of its exclusive use or joint-use space. As long as the user has not exhausted the term of its contractual obligation for the space, standard contracting procedure is to require the tenant to notify management in writing of its desire to relinquish. Typically, airport management will use its best effort to offer relief by marketing/reassigning the space. However, the tenant seeking to relinquish space will frequently retain its obligation until the space has been successfully reassigned – regardless of actual usage.

Default and Termination

Contrasting with situations in which tenants may move to relinquish space prior to or during bankruptcy, airport operators may have to take action to regain control of space from unwilling carriers or ground handlers. In these instances, it is critical that lease contracts contain cure provisions and clear, enforceable remedies. When existing cargo facility space is approaching or already at full occupancy, no airport operator or developer wants to have space occupied by an idle tenant while potential carriers or ground handlers are forced to wait for availability. In these instances, it is essential that airport management have a clear contractual basis to initiate default and termination proceedings. Typically, these covenants will specify a standard or schedule for rental and/or other payments. However, airports may also include activity-based standards to mitigate the potential for limited cargo space to be reserved by idle cargo operators. Although the idle carrier may desire to continue paying rent for a period of time, the airport could be better served by allowing another operator to occupy the space in question – especially, for example, if the idle operator has ramp accessible warehouse space but is no longer operating aircraft.

Bonds

According to the U.S. General Accounting Office's 1998 report Airport Financing: Funding Sources for Airport Development, the single largest source of airport funding is bonds. This remains the case. Tax-exempt bonds may be issued by airport authorities, as well as state and local governments. Since 1982, 95% of all airport debt has been in the form of General Airport Revenue Bonds (GARBs), which are secured by an airport's future revenues. However, airports may also issue Special Facility Bonds (SFB's) that retain the tax-exempt status but are generally secured solely by the revenue from the indebted facility (terminal, cargo warehouse and apron), rather than the airport's general revenue. Large hub airports have issued the vast majority of special facility bonds.

Given that bonds have a term of 15-30 years; airport operators may potentially be faced with a bankrupt tenant that was perfectly healthy when the bonds were issued. If GARB financing was used to issue the bonds, the airport operator would have to divert other airport revenues to cover scheduled bond payments while attempting to secure another productive tenant. The airport operator might attempt to refinance, although having a replacement tenant in line would likely be essential to the success of any new bond sale. If SFB financing was used, the creditor (bondholder) or developer would usually end up with the facility which would then remain in an unproductive status until a viable tenant could be found. In all cases, the sponsors must be attentive to their bond covenants to ensure that a possible change in operating conditions would not jeopardize the bonds' tax-exempt status.

6. PRICING OF AIRPORT FACILITIES AND SERVICES:

The most important element underlying pricing strategy is flexibility. Fees that airports charge for services must be adequate to recover costs for both long and short-term agreements. Historic long-term lease

agreements (typically 30 to 50 years) for new development, have not provided airports with the flexibility required to address the challenges of deregulation, dwindling federal support, and changing times and practices. The current trend is to view the airport-as-a-market with a movement toward short-term use agreements for existing space. The shorter terms provide airport operators with greater flexibility to adjust pricing, investment policies, and space allocation. While often for five years or less, many contracts may even take the form of yearly or month-to-month operating agreements. As older contracts expire, many airports are routinely shortening the term on renewals and/or inserting more adjustments of rates and charges into existing agreements.

In contrast, long-term leases are more critical at airports allowing carriers or third party developers to build cargo facilities. In these situations, carriers or developers typically pay the airports only a land lease for the ground with the property and improvements reverting to the airport authority at the end of the lease. To amortize their investment, developers require a minimum of 25-30 year leases – occasionally with 5-10 year renewal options.

In the cargo community, the debate continues over which pricing method best addresses current realities. The cost allocation method, joint-product model and derived demand models all have merit. However, airport rate structures typically are more influenced by the comparative rates and charges of other airports or regional real estate costs, than by an airport's cost recovery system.

In determining rental rates, airports must be mindful of their competitiveness. In addition to the obvious gauge of comparative rental rates against other locations on and off-airport, competitiveness is determined by facility condition, apron access and proximity to tenants' clientele, and such items as stem-time from the customers to the airport freight location, as well as the mitigation of double-handling costs. The airport should also compare its total marginal cost of having or operating facilities (infrastructure carrying cost, operating costs such as security and fire protection, utilities, maintenance, personnel, administrative and accounting expenses) with its rental and other fee revenues, such as landing and parking fees, and with the intrinsic benefits to the community when setting rental rates to avoid incurring losses where they are avoidable/illogical.

The following is a partial summary list of terms commonly negotiated in air cargo facility development contracts:

- Rental rates - usually expressed in dollars/square foot/year, on any tract of land. If the airport wishes to share in risks and greater rewards, this fixed rate may be combined or replaced with a rate based on a percentage of gross or net revenues.
- Appraisal process- as the ground rent may be tied to the value of the property, this issue is important to all parties concerned. One inherent difficulty is the identification of comparable properties.
- Rental rate increases- through the term of the ground lease, airports will often require scheduled rate increases, often based on consumer price index (CPI) or some other method agreeable to both parties.
- Lease term- ranging from 25-50 years. It has become common to offer a series of five or ten year extension options to the site lessee beyond the original lease term.
- Rent start date - usually at substantial completion or occupancy of the property by the lessee.
- Site Definition - typically determined by a survey, but it is important to make sure in general that ground is being offered and leased, including requirements for impervious cover, drainage, etc.

7. AIRPORT FEE STRUCTURE

Airports and their tenants must balance their individual objectives with the ultimate pragmatic goal of cultivating a mutually beneficial win-win relationship. While operating within a competitive environment, U.S. airports are subject to a myriad of federal regulations that govern how airport services may be priced. For airport operators that accept AIP monies, CFR 14, Part 152 known as airport grant assurances require airports to set rates and charges at levels sufficient to make the airport as self-sustaining as possible. Other federal regulations require airport operators to collect sufficient revenues to cover operating and other costs (net of federal grants and PFC's) on the airfield and terminal, but require fair market value pricing on all non-aviation assets. As airports are assuming more of a bottom line orientation, an emerging common ground should prevail. Airline negotiations frequently raise debates over the reasonable expenses comprising all of the fees and expenses which airport management charges to airlines and other users. Many of the airlines' operating costs fall beyond the control of airport management. These typically include the availability and cost of fuel, labor, cost of living, quality of life, and federal, state and local taxes.

7.1 Fee Methodology

At most commercial service airports, the financial and operational relationships between the airport operator and the airlines are defined in legally binding agreements that specify how all risks and responsibilities will be borne. These contracts - commonly termed airport use and lease agreements - establish the terms and conditions governing the airlines' use of the airport. They also specify the methodology for calculating the rates and charges that airlines must pay for use of airport facilities and services. Along with the airlines' responsibilities, these contracts identify the airlines' rights and privileges, frequently including the right to approve or disapprove proposed airport capital development projects. While financial management practices differ greatly among commercial service airports, the airport-airline relationship typically takes one of two very different forms, with important implications for airport pricing and investment:

1. In the residual-cost approach, the airlines collectively assume significant financial risk by agreeing to pay any costs of running the airport that are not allocated to other users or left uncovered by non-aeronautical sources of revenue.
2. In the compensatory approach, the airport sponsor assumes the major financial risk of running the airport by charging the airlines fees and rental rates established at a level anticipated to recover the actual costs of the facilities and services, and perhaps, a margin of profit for future capital needs, or for distributions to its stockholders in the case of privately owned commercial airports.

For airports using the compensatory approach, the pricing of airport facilities and services may be set (subject to all federal laws and regulations) in excess of break-even levels.

7.2 Aircraft Landing Fees

Traditionally, the single most important source of revenue for most airports has been the landing fee charged to operators of aircraft. Since the initiation of air service, landing fees have been based on the weight of the aircraft, usually either the maximum gross landing weight (MGLW) or the maximum gross takeoff weight (MGTW).

A number of variations exist to these two options, including the following types of landing fees instituted by airports around the world:

1. A fixed rate per 1,000 pounds (or some other unit of measurement) irrespective of the total weight. The total charge is calculated by multiplying the unit charge by the number of 1,000 pound increments.
2. A rate per 1,000 pounds, with weight break-points, so that the rate increases in plateaus as the total weight increases. An aircraft is charged by multiplying its weight times the appropriate rate per 1,000 pounds - for that weight category.
3. Similar to 2, a rate per 1,000 pounds, with weight break-points, so that the rate increases in steps as total weight increases. However unlike 2, the charge is cumulative. This means that – for example - the first 30,000 pounds of an aircraft's weight may be charged at the rate for that weight range, but the next 30,000 pounds (weights 31 to 60,000 pounds) will be charged at another rate - and so on. At a few airports, the rate per ton actually decreases incrementally as the aircraft weight rises.
4. A rate per 1,000 pounds whether fixed (1) or with weight break-points (2, 3) – dependent upon the nature of the flight. Traditionally, there have been two categories of charges - one for domestic and one for international flights. In some countries, the stage length has been used to differentiate the unit charge. Regardless of the basis of differentiation, the aim has been to ensure that aircraft on longer flights pay a higher unit rate.
5. A few airports replaced the weight-based landing fee with a single fixed charge, regardless of aircraft size dated in the early 1990's; however such method is used less frequently.

In the U.S., the most common landing fee is a fixed rate per 1,000 pounds of an aircraft's maximum gross landing weight. Variations of this basic landing fee are used infrequently in the U.S. As these formulae penalize long-haul operations, landing fees that are based on stage length or the maximum gross takeoff weight (heavier than an aircraft's maximum gross landing weight) are utilized mostly by airports that lack the need to compete for heavy transport aircraft. In most instances, penalizing long-haul operations is not in an airport's best interests. Similarly, a single fixed landing fee that does not discriminate between aircraft sizes, but which may vary at different hours of the day, is used to discourage traffic during peak periods. Again, relatively few airports have such leverage or lack a compelling need.

To encourage activity, some airports grant fee exemptions for a carrier's introductory period (based either on time or volume) of operations and most airports maintain lower rates for signatory or scheduled carriers compared with non-signatory carriers and itinerant charter aircraft. While not an industry standard, some airports have introduced a cargo-only signatory agreement as an enticement to nurture cargo operations while recognizing that cargo operators are unlikely to reap the full benefit of the passenger terminal improvements that often drive airport investments and subsequent costs.

Landing fees can vary dramatically among airports. Based on an airport's financial status and capital improvement programs, substantial adjustments to the landing fees may be required to attract new business. These kinds of modifications may be implementable - provided such adjustments are non-discriminatory.

7.3 Aircraft Parking Fees

Aircraft parking fees are a common means for airports to charge airlines for aircraft stays beyond the free-parking period, generally two to six hours, covered by the landing fee. Airlines may be required to pay a charge for preferential non-exclusive parking on the airport's apron or ramp. This charge does not apply to aircraft parked on apron space leased to the airline.

The parking fee, or ramp fee, is typically a charge per hour or unit of hours. Frequently, twenty-four hours is used as the billable time unit once the free period has been exhausted. However, this methodology provides no incentive for airlines to vacate parking stands once they have entered a twenty-four hour period. To improve utilization of parking stands, airport operators should institutionalize a very short preferential, non-exclusive free-parking period followed by a parking charge for each hour that an aircraft stays on the stand. This methodology would reduce the number and cost of required stands while introducing another source of revenue. With a preferential non-exclusive agreement, an air carrier's preference at a particular site does not supersede the requirement to move idle aircraft if another carrier requires that parking position.

The parking charge is typically calculated on the basis of the aircraft's weight or, less often, on its area (wingspan X length). If based on weight, the parking charge will typically be a fixed amount per 1,000 pounds. The parking fee may vary between different areas of the airport, and fees for preferential use of prime parking areas may be applied. Ramp fees may also be allocated according to each airline's prorated use of common ramp area.

7.4 Other Aeronautical Charges

Additional charges are levied selectively by individual airports but are not universal. In the U.S., the most common example is the fuel flowage fee, typically a flat charge per gallon of fuel.

Airports have also begun to impose separate charges for specific facilities and services that may be used in the process of enplaning or deplaning cargo. These charges may include fees for deck loaders and security charges. Incremental security charges are being explored as a means of defraying the costs of heightened security measures being considered for cargo carriers. Similar to the means by which passenger airlines collectively defray the cost of passenger security screening, cargo charges could be implemented to pass increased surveillance and monitoring costs to the airlines.

Many airports also charge a fee or commission to ground handlers who perform services for cargo carriers operating at the airport. The fee is generally calculated against the gross value that the ground handler has billed to the airlines. At airports where multiple airlines are served by a ground handling company, the commission can be substantial.

Again, some or all of these fees may be waived as enticements to new operators for an established, fixed period of time. Similarly, the applicability of these fees may vary between signatory and non-signatory airlines, as well as for airlines which self-handle their operations.

7.5 Related Fees

Individual airports have introduced a diverse array of surcharges and rebates augmenting the basic landing fee. These are usually related to the distance of the flight, aircraft noise levels, and night landings

8. SAFETY, OVERSIGHT and CONTROL

Safety, oversight, and control often invite conflict comparable to the previously-discussed compensation/profit motives of airports and developers. While tenants prefer that the airport operators exercise as little oversight as possible, airport management is held responsible for activities on its property. Among entities exacting that accountability are the FAA, the airport's other tenants, and the surrounding community. In contrast with some of the site and pricing issues previously explored, both parties must be aware that many control concerns have no flexibility – in essence, non-negotiable. This section outlines

some of the safety, oversight and control issues that frequently appear in facility negotiations. Several related issues were explored in the bankruptcy section earlier in this chapter.

- Use of facilities - typically, airport management will opt to restrict air cargo related activities to air cargo facilities or an air cargo complex
- Ingress and egress - control of access, both on the landside and airside is critical to the security of the airport, the value and utility of the property, and its operational effectiveness
- Assignments and subletting – for security reasons, as well as, bankruptcy liabilities, airport management should control to whom the tenant subleases or assigns its lease
- Financing restrictions - will include subordination of the rent payments, encumbrances and lender re-entry rights
- Control of transport of hazardous materials on site to comply with local, state, and federal requirements
- Environmental controls, including establishment of an environmental baseline for the site, handling of contaminants, and liabilities for pollution created after the baseline
- Facility entry and inspection rights - airport personnel should have the right to enter the property at reasonable times if inspections are required
- Insurance requirements - a list of categories of insurance, mandatory amounts, and description of shared liability
- Indemnification of officials - most airports want to be held harmless, to the extent possible, for anything other than negligence or mismanagement
- Architectural, construction, landscaping and signage restrictions, including approval procedures, bidding restrictions, as well as, future tenant modifications, etc.
- A statement of the obligations of the lessee for care and maintenance of the property
- Condemnation procedures - should the lessor need to take over the property through condemnation
- Availability and responsibility for utilities
- Regulations related to construction and operations of the facility within the non-discrimination guidelines of the airport and community
- General Airport Operating Area (AOA) and airport security requirements
- Conformance to FAA Guidelines
- Institution of performance measures
- Events of default and cure, including notice and cure periods
- Recourse for non-performance of lease terms

9. LOCATION

Among the most negotiable – yet critical issues is determination of the prospective facility/development site. It is essential to comprehend the dynamics of site selection, including the pros and cons of the various site alternatives. The single most important planning criterion for any airport is the effective utilization of its land resources in accordance with the airport master plan. The temptation for quick development and new revenue must be carefully weighed against the optimal long-term land use strategy. Both present and future development needs must be considered.

Airport users have at least two basic categories of property that may be used for air cargo facility development: (1) ON-AIRPORT sites may have or provide (via service road) direct airside access or may be non-airside; (2) OFF-AIRPORT sites are not typically owned or controlled by airport management but must be considered as real competition that could impose pricing pressure on lease rates for potential tenants that do not require aircraft parking. Historically off airport properties lease at fifty percent or less per square foot of an on-airport facility with ramp.

Among carriers, forwarders and other ancillary services related to air cargo and logistics, debate continues on the relative merits of operating on or off-airport. Depending on the operational characteristics and requirements of the user, both locations have their merits. As this Guide is intended for the airport user, this analysis will be limited to an evaluation of on-airport sites.

On-airport properties consist of three types: airside, non-airside with airside access, and non-airside. Airside properties provide direct access to aircraft parking ramp while non-airside with airside access connect to the AOA via restricted service road.. While still on airport grounds, non-airside properties provide no airside access. Airside facilities are ideal for integrated express carriers – and other operators – that fly aircraft into the airport and require fast, direct handling of cargo next to their aircraft parking positions. While this space is typically more expensive than non-airside property, carriers save operating costs and time by transferring their cargo in the most direct manner, from aircraft to warehouse, rather than using additional ground transportation. Integrators are not the only operators utilizing this operating method. By sorting at their airside facilities, operators are able to eliminate one handling step, dramatically improving their efficiency, control and profitability.

For operators whose limited needs can be met by tug access to the ramps, non- airside with airside access, facilities are an alternative. These facilities are usually located very close to airside facilities and the passenger terminal. Forwarders, ground handlers, and other logistics companies who only need limited access to aircraft, typically do not have their own aircraft or lack a compelling need to be on the ramp and can be located more remotely. Typically, their facilities are less expensive than airside property. There is no set design for these facilities. Some may be somewhat wider and larger than airside facilities, taking on more of a warehouse appearance. Lacking ramp access for aircraft, these facilities may take on cross-dock characteristics with trucks entering and docking on both sides of the building. These facilities will often contain more offices and other specialized features, due to their greater affordability that encourages the user to consolidate more activities on site. Airport operators must often consider the advisability or legality of operating tugs on or across public roads when considering this alternative.

Salient features of on-airport facilities include:

- Since the land is usually ground-leased from the airport, tenants generally do not own their premises. Depending on the strategy of the tenant, this may influence a tenant's choice of location – particularly at airports where airside facilities are limited and rental rates carry a premium.
- The tenant must balance location considerations against operational efficiencies, particularly if aircraft will be involved.
- Depending on the age of the landside features of any on-airport facility. Many older facilities have congested truck aprons and limited private vehicle parking conditions.
- An on-airport facility comes with very specific operating, security and safety guidelines that are typically more constraining than those at an off-airport facility.

Because each airport has its own environment and operating conditions, there is no single standard by which to evaluate the different types of facilities. However, one can identify certain market features that consistently influence rental rates – most obviously the classic supply/demand equation, as well as geographic and local economic conditions. In addition to existing supply/demand evaluations, rates are also affected by the financial and land capacities - both on-airport and off-airport – which could dictate future supply.

While logic dictates that more and consequently cheaper land space exists off-airport than on-airport, older airports and gateways are particularly susceptible; air cargo land space tends to be smaller and more built-out. Hence, on-airport facilities command a higher rental. Rule of thumb standards estimate that airside facilities rent for approximately 25 percent more than non-airside, and on-airport facilities for twice as much as off-airport facilities. This standard fluctuates widely depending on the availability of such facilities.

To support the effective movement of goods, an airport should have a healthy mix of well-connected and accessible on and off-airport facilities. Moreover, these facilities must be priced competitively to attract new users and keep current users. Airports should encourage competitive air cargo environments and lessees. By and large, developers will concede that competition breeds innovative and effective development of facilities. A good mix of both on and off-airport facilities is an essential economic catalyst for communities seeking global connectivity.

10. LANDSIDE REQUIREMENTS

While configurations vary greatly, most airside facilities offer aircraft parking immediately in front of the facilities accessed by at-grade warehouse doors. Cargo handling areas - between the buildings and the aircraft – typically run about 50 ft wide.

Modern cargo buildings vary greatly - as deep as 250 feet for sortation and as shallow as 60 feet for expedited throughput. The range largely depends on the extent to which operators will sort cargo on the premises. Landside facilities typically offer truck access, dock-high loading for tractor trailers, and some at-grade docks for smaller trucks. Modern airside facilities offer sufficient space for truck and trailer maneuvering/parking, as well as ample private vehicle parking for staff. All modern airside facilities must be truly intermodal, providing the main conduit between air and surface transportation. Rather than warehouses, these are pass-through facilities.

10.1 Trucks

As already noted, trucks are an essential component in most air cargo operations and the integrated carriers rank among North America's largest trucking companies. Consequently, airport planners should design facilities that are readily accessible for today's long tractor-trailers, and provide space within the leasehold for trucks to operate safely and effectively.

To allow trucks sufficient room to maneuver and park safely, a facility typically requires at least a 130-150-foot setback from the road. Space permitting, planners should allow for both queuing and, on a limited basis, parking. If the building operation does not involve aircraft, it can be tailored to the needs of the trucker. In a pure cross-dock facility, the building is much narrower and can be fit very well onto a site that otherwise may not be functional. However, as previously noted, much of the trucking activity on airports is not tracked, presenting stiff challenges for planners lacking the information and insight into actual roadway volumes, cargo volumes, and realistic space requirements. These same items also raise potential access issues.

10.2 Access

Given the inherent time concerns in air cargo operations, numerous access issues enter into the site selection process.

1. *Airport Access vs. Market Access* - does it make sense for the tenant to locate his cargo operation at the airport based on access to primary markets?
2. *Cargo Facility Access* - do roadway geometry and airport traffic patterns lend themselves to locating a cargo facility, with its inherent truck traffic, at a particular site?
3. *Airside Access* – is it necessary and possible for a tenant to bring an aircraft to the building site? What is the cost and allocation methodology for airside infrastructure (i.e., taxiway, ramp, etc.)?
4. *Tug Access* - does a restricted service road reach the site or can one be built and again, how will costs be allocated?

11. CONCLUSION

This chapter attempts to define the relevant parties involved in air cargo facilities development and has introduced potential areas of conflict and cooperation. The relevant partners are comprised of airport management, airlines, ground handlers, third party developers, trucking companies, shippers, freight forwarders, and customs brokers.

Before constructing cargo facilities, airport management must decide whether to develop the facilities by themselves, to allow end users to develop their own facilities or to solicit third party developers to build, typically, multi-tenant facilities. Among many determining factors will be the availability of financing and land for development, other capital priorities, and the willingness to accept risk.

The decision to partner with a developer must be supported by a clear process of selection, followed by an operating lease that offers both sides an acceptable opportunity to meet their goals. Both sides must recognize the demands placed on the other. Airports are responsible to their local public, other tenants and numerous regulatory agencies. Developers must be able to satisfy investors and ultimately their tenants.

Among the negotiable items are lease term, the rates and charges and the review periods for possible escalation of the ground lease. Non-negotiable items include a broad range of control issues, including insurance, environmental protection and security measures. Given the need to protect the airport from potentially damaging tenant bankruptcy proceedings, airport management will also attempt to control the usage, sub-letting and lease assignment of the facilities or area. As with any relationship, airport operators and their tenants must be flexible in their negotiations – when prudent and permissible – and respect (not necessarily yield to) the objectives held by the other party. Beyond that, both sides must ensure that their concerns are clearly addressed in their contracts. An ambiguous contract is an invitation to confusion and breakdown.

One mechanism that a number of airports have put in place, is an Air Cargo Committee, that includes carriers and all other relevant stakeholders – both on and off airport. Through monthly meetings, cost effective and efficient direct communications can help ensure timely and accurate two-way information flows and a much improved work environment.