

Prepared by the Air Cargo Committee

AIR CARGO MANAGER 2014

The Air Cargo Manager

Understanding the Key Elements of the Job

As Chairman of ACI-NA's Air Cargo Committee, I am pleased to present this overview of the Air Cargo Manager's job. We anticipate that this will be an important tool for cargo managers as well as other airport staff as they learn about this key segment of the air transportation industry. It reflects the inputs of air cargo professionals from the private and public sectors and includes their observations on the challenges and opportunities in a modern context.

The document contains five sections that in combination cover most of the important cargo issues confronting cargo managers today. In several instances you may note that some identical issues are touched on in different chapters. This "duplication" enables the document to look at important areas from different perspectives, which was consistent with the original intent of the document – to provide airport cargo managers with a way to focus on different elements of the job with which they might not have previous experience. It is not intended to provide all the answers: rather it has been written to help users anticipate issues and ask the right questions.

We believe the "Air Cargo Manager" conveys very useful information, which provides a greater knowledge of air cargo and how it works from an airport perspective. With this knowledge, airports can benefit, at the same time enhancing local and regional economies. However, air cargo is constantly evolving, creating new issues for airports to confront. To that end, we trust that you will continue to participate in the exchange of ideas, which has been initiated with this Air Cargo Manager Job Description and the updated edition of the Air Cargo Guide.

I welcome your thoughts on the Document and on ways ACI-NA can better serve your cargo needs. *I* look forward to working with you as we build the airport/cargo industry relationship throughout the coming years.

John Parrott

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Chair - 2014 ACI-NA Air Cargo Committee

Acknowledgements

"This **Air Cargo Manager** is a description of the key elements of the job as seen by a cross section of air cargo professionals. It represents a collaborative effort by member airports and world business partners/associate members that produced a high quality product offering a solid balance of viewpoints from different industry elements. Our sincerest thanks go to the talented individuals who worked on this project. It is a valuable companion document to the Air Cargo Guide and an important tool to airport cargo staff in anticipating and addressing the challenges with which airports are faced. The finished product demonstrates the quality and hard work that our member-volunteers dedicated to this effort."

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The Air Cargo Manager

Understanding the Key Elements of the Job

Introduction

One of the least understood areas of an airport's operations is air cargo. It is also one of the most complex requiring broad knowledge of the industry and a diversified skill set to deal with a variety of internal and external issues and stakeholders. Naturally, like most airport staff functions, roles and responsibilities can vary dramatically from facility to facility. ACI-NA has developed this overview of the air cargo manager position to assist airport management in understanding the range of duties that can typically fall within its purview.

This overview is divided into five sections which are intended to reflect the general duties with which the air cargo manager may be involved. It is understood that the levels of involvement may vary based on the nature of the specific operations, as well as the way the overall airport staffing assignments have been designated. Nevertheless, the Airport Manager should reasonably expect the air cargo manager to have at least some understanding of these areas:

- > **P**lanning
- Leasing and Property Development
- > **O**perations
- > Marketing
- Stakeholder Outreach

SECTION 1 PLANNING

It is an old cliché that "failing to plan is planning to fail". Like many old clichés there is certainly an element of truth in this one. The airport air cargo manager must have a least a rudimentary knowledge of the planning factors that will enable him to guide airport development whether done by the airport, direct tenants or third party developers. While there will be subject matter expertise available through the operators and consultants, the cargo manager will serve his airport well if he can guide development so that cargo activities are facilitated (or at least not precluded).

Understand the Big Picture

The first issue the air cargo manager needs to understand is the role his airport does, will or hopes to play in the air cargo supply chain. Is the airport a point of origin or destination? Is it both? Does it or can it serve a particular segment of the chain such as perishables, pharma, or a particular industry such as petroleum? Will it serve as an intermodal transfer hub? The answers to these questions are critical to conceptualizing and guiding development to meet the particular needs of the airport. A critical element of planning first occurs at the strategic level. It is essential that a realistic assessment of the general market, the regional market and its opportunities, and how the airport fits in, be in place.

Building Considerations

The air cargo manager should have a working knowledge of basic office requirements as well as warehousing. Depending on the type of cargo, whether or not it needs to be sorted, broken down, built up or otherwise processed, the square footage to handle the planned volume of cargo will determine the area needed for cargo facilities. A critical element is to understand how efficiently the cargo can be processed: this throughput is an important element in determining potential facility size. Even if the actual developer of the property is not the airport, ensuring that lot sizes can accommodate the cargo activity is critical.

One of the most frustrating things that can happen at a cargo facility is to suddenly discover some aspect of the footprint is too small. It is important to consider the landside elements and understand that trucks may get larger, additional security measures (fencing or screening/inspections) may be required, or expansion of surrounding roads could cause significant challenges. While it is impossible to anticipate all the potential changes, it is safe to say that the facility that is planned and built to just barely meet the requirements will suffer challenges in the future. Try to ensure that your facilities are located in portions of the airport relative to other types of facilities and of adequate size to handle some change. You may not know what the change will be, but rest assured there will be change.

Landside Considerations

Trucks are the primary method of getting cargo to and from the airport. The air cargo manager needs to ensure that there is adequate infrastructure to support them both on and, where possible, off airport. It does you no good to have excellent facilities on the airport if the trucks have to detour around or navigate through residential streets to get to and from the airport. Over the years trucks have gotten larger and it is common to see double trailers. Facilities need to be sized with this in mind. Some of the space allocated for the initial truck turning radius may be taken away in the future to accommodate additional security or other requirements. An important element of landside planning should provide for truck queuing to avoid congestion at the truck bays. Provide more than the minimum or you may be rebuilding or finding less than satisfactory alternatives all too soon. Estimate auto parking requirements to include both employees and customers. For security and operational efficiency, if space allows, separate auto and trucking operations and keep auto parking away from the building.

Depending on the stability of your area soils, you may find that many roads have weight restrictions during the spring. Are any of those roads needed by the trucks handling your cargo? If so, you may need to rethink where your facilities are or work with surrounding highway departments to see if the roads can be built to avoid the weight restrictions.

Airside Considerations

Once cargo arrives at the cargo facility, it must make the transition from the public side to the air side. This may be done at a gate or somewhere in the warehouse. It is important to ensure that any development plans are properly vetted by the Airport Security Manager. Security requirements have changed significantly since 9/11 and modern cargo facilities must be compliant. Just because it "used to be that way" do not assume that the environment is unchanged.

Not that long ago the MD-11 was a significant part of the international cargo fleet; likewise, the 727 was a workhorse for FedEx. Both these airframes are rapidly approaching extinction. The 767, 777, 747-8 and other aircraft have superseded them. These newer aircraft have wider wingspans, are longer and may have more stringent electrical support requirements. Unless you can handle the modern aircraft that are relevant to your airport's operation, you will not be a significant part of the global air cargo supply chain. Be familiar with aircraft sizes and requirements both for landing, taxiing and parking. Get to know your engineering staff as well as your property management staff and work with them to ensure your airport can handle the aircraft it needs to with a prudent and fiscally responsible capital program. There is a fine line between being too late to modernize and building it hoping they will come. Either of these will be disruptive.

For some airports, the majority of air cargo is transported in the belly of passenger aircraft. If this is the case, you will not only need to ensure access from the public areas to the airside, but you will also need to ensure that there is adequate access from the cargo areas to the passenger ramp.

Cargo may be on pallets, in ULD's or, if oversize, just strapped down. In any case it takes equipment to move the cargo to and from the aircraft. Tugs, dollies, main deck loaders and potentially deicing trucks and other equipment will need to be stored somewhere. This equipment will need to be readily accessible and will be yet another demand on limited ramp space.

Summary

It is important to understand the airport's place in the supply chain. Many of today's cargo items require special handling. It is important to anticipate and integrate special facility requirements. While pharmaceuticals and cool chain are increasingly important, if you are in an oil-producing you may see more oversize, main deck cargo. In some instances, high value goods, animals, or, upon occasion, hazardous materials need to be considered. Know what markets you serve or could serve and then develop accordingly. More than one airport has large refrigerated warehouses that are empty. In addition to your cargo requirements, be sure to include space for Ground Support Equipment (GSE).

Finally, remember each airport is unique. Look around and ask questions but make sure the answers apply to your situation. You will find that as a group the air cargo community is willing to explore issues and opportunities for your airport.

SECTION 2 LEASING AND PROPERTY DEVELOPMENT

Air Cargo Portfolio Development

There is no playbook or standard way to develop an airport's air cargo properties. Portfolio development, whether it is air cargo, concessions or rental properties, requires an understanding of what you have and making decisions (strategy) to meet goals, objectives and balancing risk against the performance of your airport's real estate assets. The first step is to have a clear understanding of your airport's goals and objectives. In addition, you should be able to answer some basic questions such as: Are you a residual or compensatory airport? How much cargo goes through your airport annually? How much of the airport's real estate portfolio contribute to the airport's annual revenue? How much of that revenue is from Air Cargo Facilities and Land? Other key questions are: What is your airport's vacancy rate at cargo facilities? What is the cargo property mix? (Who owns what? tenants on long-term ground leases, airport owned facilities, triple net leases). Specific knowledge of existing facilities on your airport will help, such as total warehouse square footage, age of facilities, ramp access, adjacent aircraft parking and types of aircraft parking requirements (747-8F vs. 767-200F). Having answered these basic questions may lead you to other questions but will put you on the right track to framing out an air cargo portfolio strategy.

Airport Leasing Policy

It is a fundamental component to understand your airport's Leasing Policy. Most airports have a leasing policy and practice designed to meet its goals and objectives and provide a framework governing leasing and rental decisions as they relate to the development of new agreements and, as appropriate, modifications to existing agreements. An airport's Leasing Policy should primarily focus on: appropriate use, optimal utilization, and competitive allocation of and access to the aeronautical and non-aeronautical, and real property assets under the jurisdiction of the airport authority.

Most leasing policies are derived from federal regulations and grant assurances. These require that airports must be available for public use based on reasonable conditions and without unjust discrimination. (Exclusive franchise rights are generally prohibited). The fees for use of the airport must be fair, reasonable, and uniformly applied to classes of users. Situated aeronautical users must be treated equitably, and fee and rental structures must be established to help ensure an airport is financially self-sustaining as possible. Long-term leases should provide for periodic adjustment to market rates and non-aeronautical uses may require prior federal approval.

Off-Airport Competitive Properties

A working knowledge of the types of properties, vacancy rates and market rates of supporting and potentially competitive off-airport properties will better assist you in establishing rates for your cargo facilities. However, you must take into consideration that having airfield access or adjacent aircraft parking are considered premium commodities and should be priced accordingly. Typically, a warehouse with airfield access will lease for about two and one-half times as much as a comparable off airport facility.

Some helpful Websites to assess off-airport properties are: www.loopnet.com www.costar.com

Planning New Facility and Infrastructure Requirements

Things change. Many airports have a land use plan. It is essential to understand the parameters of your airport's land use guidelines. This is typically a comprehensive planning and zoning document for a defined geographic region. The plan will spell out in simple terms what you can and cannot do and assist you in your airport's air cargo development evolution and how Air Cargo fits into the bigger picture.

Coupled with the knowledge of potential zoning constraints, it is paramount to work with your inter-agencies in planning, environmental and operations. Exchanging information and ideas regarding the latest industry standards, building and land requirements, as well as current and future throughput efficiencies is another key element

Property Valuation and Rates

A working knowledge of rates and charges can be very important should management call on you for input. Knowing how rates are determined is based in large measure on how land is valuated.

Valuation

Valuation of airport property can vary widely from one airport to the next and is often influenced by both the valuations that are placed on property at other airports and by the influence of the aviation community on local real estate. The value of airport property is usually dictated by location, size, uses, and income-generating potential. Regardless of the valuation method, you should always remember that allowable uses (or restriction of uses) within the boundary of the leasehold being considered can have an effect on property value. Restricting the use of airside property to aviation purposes is appropriate for the airport. However, from a real estate valuation perspective, restricting allowable uses could arguably lower the value of the airport property because the use restrictions reduce the market demand. Similarly, security requirements and the ease or lack of access to a property can impact value. Security or lack thereof, along with attendant requirements, can have a substantial impact on property value, depending on the needs of the tenant and the market that exists for a given piece of property with the required characteristics. The difference is perhaps more pronounced in small to mid-sized communities than at large-hub airports, but the airport should focus on a comparison of comparable properties at comparable airports rather than attempt to establish values based on real estate parcels within the community. The probability is that there are no appropriate parallels that are off airport. There are a number of differing valuation methodologies:

Appraisal

The appraisal process for airport property should consider comparable land and facilities at airports of similar size throughout the region. The airports being compared should have similar levels of amenities and traffic. There are several real estate appraisal certifications; perhaps the most widely recognized in the commercial real estate arena is the MAI or Member of the Appraisal Institute designation. MAI appraisers are qualified to perform both residential and commercial property appraisals, and they routinely stay current in their discipline through trade association involvement. Challenges of appraising airport property include an understanding of the unique attributes of an airport, the federal obligations that the airport sponsor must follow, and the allowable uses of the property when establishing market value.

Comparable Sales Approach

The most common form of valuation is the identification of relatively similar land and the assessment of the established value. Similar land can serve as a benchmark to determine valuation based on a measurement metric such as cost per square foot. This approach involves determining the lease rates at comparably sized airports offering similar levels of services and using the findings to establish lease rates. In order to account for varying regional real estate values, lease rate data should be acquired from competing airports within the same market area.

Cost Approach

When comparable sales are lacking, another valuation method may be implemented. This second valuation approach identifies the cost of replacing all existing facilities and improvements. The cost of such replacements, less depreciation, can serve as a basis for setting a value on developed land only.

Income Approach

This approach identifies the possibilities for development of the land to produce and generate revenues or other values when the land is used to its

highest and best use. This method proves more difficult to quantify due to the fact that the income or value must be estimated for a point in the future. Also, determining the "best use" may change as the land or surroundings change. It is best not to attempt to formally valuate property unless you are aware of and educated in the various valuation processes. If valuation is needed, an experienced individual should be used to apply the most appropriate valuation method, ensuring that lease rates are realistic.

Rates

Once rates are determined from a valuation methodology, the rate structure needs to be understood as well. The primary standard leases are based on:

- A) Full Service Gross Lease: This is an all-inclusive rate charged to a tenant to pay for all maintenance, upkeep, repairs, janitorial service, waste removal, utilities, insurance, taxes and other operating expenses.
- B) Triple Net Lease: Under this scenario, the tenant leases property and pays a periodic rate as well a fee for all maintenance, upkeep, repairs, janitorial service, waste removal, utilities, insurance, taxes and other operating expenses. Generally speaking, Triple Net leases are \$3 to \$6 less than Full Service Gross leases.

Third Party Development

Third party developers usually enter into a long term ground lease of preferably 30 to 40 years with an airport. In return, the third party develops a facility that will benefit the continued growth of the airport. This type of development is helpful because most airports are financially constrained. In addition, an airport's Capital Improvement Program (CIP) is funded by the FAA and/or Airport Bonds and those funds allocated to specific airport improvements. This limited financial capacity, more times than not, may delay major cargo development and re-development investment. Third party developers provide a private partnership alternative.

Historically, airlines developed their own facilities; today however, airlines are less inclined to owning or leasing long-term property, preferring instead to invest in aircraft. Today, third party developers now form a partnership with the airport and/or its tenants to develop and lease property. As an example, cargo handling companies have become part of the airport's real estate portfolio by financing the development of a new facility or leasing existing properties for a longer term with a large capital investment in the facility.

Risk

All development projects have risk; environmental, time constraints and financing are a few examples. The key for an airport is to understand the degree of risk and, specifically, balance the risk with how the project is being financed. Some third party developers use all cash (low airport risk), while others will finance through multiple investors, banks and bonds. Regardless of the types of financing, the

airport needs to ensure that in the event of default or bankruptcy, it will immediately retain control of property and improvements. Finally, whenever entering into third party deals, a risk assessment should be made evaluating that if the deal is executed, the level to which the airport will be giving up revenue, land, control, and certain rights in exchange for the private development of the facility.

SECTION 3 OPERATIONS

Introduction

The airport air cargo manager does not need to be an expert in operational issues but certainly must be knowledgeable. There are a few key areas of focus that a good air cargo manager should become familiar with in order to best serve in the role.

Inside the Fence:

Airfield Capability and Considerations

Fundamental to your business is being knowledgeable of what aircraft types can operate, and when, at your airfield. Familiarity with runway and taxiway capabilities as defined by ICAO, the F.A.A. or Transport Canada will enable you to speak confidently to current and prospective customers and understand their concerns.

Runway length and taxiway access suitable for large freighter aircraft is critical, especially if your facility may handle wide-body freighters including the Code F 747-8F which is becoming increasingly common in freighter fleets. Code F aircraft have a separate category of airport infrastructure requirements that must be in place well in advance of the commencement of operations. It is important to know ramp and parking areas, whether they are exclusive use, or common, and the dimensions of aircraft that can be accommodated. It is also important for carriers to know whether parking areas are served by hydrant, or tanker fueling. Pavement markings for such things as lead-in lines, nose blocks, aircraft safety buffers and vehicle corridors are generally provided and maintained by the airfield operator.

Along with physical airfield capabilities, knowledge of items such as advanced navigation aids and procedures for low visibility operations, airport firefighting capabilities and air traffic control service hours are also critical for the support/ allowance of flight operations. A basic knowledge of infrastructure such as engineered gates or hardstands for parking with sufficient maneuvering space to accommodate palletized off-load/on-load of cargo plus support equipment (covered below) is helpful. Some special circumstances such as nose-tethering capabilities or the use of tail stands may also be required.

Suitable signage and lighting are necessary for safe arrivals and departures because many all-cargo flights occur at night. Likewise, it is critical to know if there are local noise restrictions or curfews, typically late at night, which may impede arrivals and/or departures of cargo aircraft. Specific knowledge of any noise limits, alternate procedures and absolute airport curfews is important to communicating the availability of your airport facilities.

One other item to consider (if possible, in advanced cooperation with carriers) is a back-up parking plan, in the event that your facility is used as a primary or secondary diversion airport. Land and hold, or land and park situations may arise during inclement weather or curfew-related conditions at other airports in the region. This could be exacerbated if existing operators are already in a ground stop or departure hold for weather. In such instances, for the airport operations staff, it is critical that a back-up overflow parking and servicing plan is established in order to be able to accommodate these aircraft, and the absolute limitations of such area. Knowledge of this plan may also benefit an air cargo manager depending on his/ her level of involvement.

Climate change and increasingly stringent environmental regulations, plus very strict aircraft and runway deice/anti-icing regulations, can impact the operational capability of an airport. Even airports outside "northern" climates must pay attention to deicing capability, glycol recovery, snow plowing and storm water management. An air cargo manager should be familiar with established airfield clearing times, equipment capabilities, alternate operating procedures, annual closure hours, etc., so that they may communicate what to expect during these conditions to stakeholders. You must consider storage and inventory of fuel and glycol among other disposable fluids and be aware if you have enough on hand and if not, how it can be replenished quickly.

Finally, you should be knowledgeable of the landing fee rate and structure of your airport. Included in this knowledge should be the base landing fee and any associated charges levied by the airport such as ramp and parking, fuel flowage, etc. Rates for ground servicing and cargo handling may be provided by other operators at the airport.

Aircraft Ground Support and Cargo Handling Provider Capabilities

These two support services may be provided by one entity but are often split into two groups. The first is aircraft ground support for parking, fueling, deicing, etc., which may be provided by the air carrier itself, or through a third party relationship such as a ground service provider or fixed-base operator. The second is cargo handling which consists of off-load, on-load and delivery of cargo to the appropriate air cargo warehouse or container freight station facility. This may also be conducted either directly by the carrier or by associated third party entities.

In order to develop and support new business, you should be knowledgeable regarding both the nature and availability of the general support services that are important to cargo operations. Most importantly, you should be familiar with the hours of operations and staffing capabilities for government agencies and businesses required to handle flight arrivals and departures such as ground handlers, fuel providers, certified maintenance personnel and cargo handling outfits. Included in this knowledge should be emergency or on-call 24-hour phone numbers and general contact information that you can pass on to customers. General knowledge of the types of equipment available, and possibly of the tonnage ratings for such items as K-loaders and forklifts, is often helpful. Be aware of special air carrier requirements such as nose tethering or tail-stand usage that are

specific to each operator's handbook. Often third party handlers will be able to quote rates for ancillary services such as pallet break-down and build-up. If there is a sole provider on the airport for such services, it would be beneficial to an air cargo manager to have those rates readily available in order to quickly answer inquiries.

Outside the Fence:

Facility Capability

Cargo warehousing operations, including container freight stations (CFS), Customs and Border Protection, animal, plant and veterinary inspection facilities, and specialized facilities such as cold-chain and temperature controlled, and livestock / equine transportation are all common to the industry. Knowledge of what is available and if there are any specific limitations (e.g. inspection facility hours) is crucial to both new business development and to helping carriers enhance their operating efficiency. If an air cargo manager has a close working relationship with service providers and regulatory entities such as those for Customs and Security, it may help in the facilitation of smooth operations. Knowing not to get between a regulator and a regulated entity is just as important, but often a good air cargo manager can be constructive in relationship development and collaboration. Knowledge of available leasable space or on-call handling facilities is also important.

Much of the cargo may be carried in the belly holds of passenger aircraft. Their requirements are very similar to freighter aircraft, though the airport operation needs to recognize and accommodate the need for efficient vehicle access to and from the airlines' cargo facilities. Distance from aircraft parking to warehouse / inspection facilities, equipment staging, ramp and roadway congestion and security procedures all play a factor in efficiency.

Properly configured groundside turning and queuing areas for trucks accessing airside warehouse facilities, door seals and levelers, loading docks at the proper grade and adequate lighting are all factors for safe, efficient transfer of goods at your airport. Often these items are the responsibility of the tenants who hold your property leases, so having a good working relationship with these partners is another key to helping you retain existing customers and grow by attracting new ones.

Air cargo customers seek quick turnarounds so shippers can get their goods to market faster and air carriers can maximize the utilization of their aircraft rather than have an expensive asset sitting on the ground unnecessarily. Time is money, so the quicker the revenue payload can be tendered for an outbound flight or retrieved from an arriving aircraft the happier your customers will be. Many things go into this time equation and a good air cargo manager will always look for ways to work collaboratively with stakeholders in order to increase the efficiency of transfer between plane and warehouse, and vice versa.

Safety and Security

Current and prospective cargo customers will want to know that your airport operation is compliant with the requirements for safety and security, and such items as ground vehicle access airside, vehicle operators and enforcement. This goes beyond simple regulatory concerns and into cargo theft prevention, which is an ongoing topic in the industry.

In certain climates, winter safety operations require a snow and ice control plan, conducting runway friction surveys and establishing snow removal and control procedures that are acceptable to the FAA, or Transport Canada. Other programs you should be knowledgeable about are foreign object damage/debris (FOD) and wildlife activity on or near your airport. Both FOD and wildlife-aircraft strikes can cause potentially catastrophic damage so active prevention programs are topics with which you should be conversant. Your airport may also have a Safety Management Systems program that is regulatory or recommended.

Another relatively new operational concern is cargo screening. Some airports have taken the responsibility on themselves while others require that the carriers or third party facilities provide compliance. Either way, as the air cargo manager you must be aware of current security and screening regulations and requirements, which are different for freighter and belly cargo. The ideal operational tactic is to push this screening closer to the product's point of origin to allow on-airport cargo facilities to focus on handling rather than security and accelerate throughput.

Many carriers will request copies of safety and security documents and plan updates on an annual basis as part of their own compliance programs. It is important for the air cargo manager to knowing where to get these documents or to whom inquiries should be directed.

Connections to Surrounding Infrastructure

Just about all air cargo gets to and from an airport on a truck! The business is becoming increasingly multi-modal, with goods potentially switched from road to air and back to road again, or some similar combination, so perimeter infrastructure and efficiency of surrounding roadways and surface routes is of high concern for your customers. 3rd party logistics providers (3PL's), freight forwarders, couriers and road transport operators may or may not be located on the perimeter of your airport. For some products, warehousing and distribution facilities may be hundreds of miles away. Efficient service infrastructure is needed to allow for the seamless movement of goods from airport to nearby warehouses or highways. Someone with the airport operations group should be aware of any construction projects which may impact access to the airport, whether it is airport gates and grounds, local roadways or multi-lane highways in the area. Input on the phasing of potentially disruptive projects should be provided by both the Airport Management and stakeholders so that maximum facility access is maintained. Several airports have set up electronic alert systems to ensure that business partners are kept in the loop.

Operational Knowledge and Relationships

Finally, as the air cargo manager you need to establish good communications and rapport with your colleagues, both within your airport operating group and with external operators. It bears repeating that you do not necessarily need to be an expert in all the operational areas mentioned above. If you know the right person to ask, however, you can provide excellent service and maintain good relationships with your customers. The quickest way for a new air cargo manager to gain operational knowledge is to cultivate close relationships with Airport Operations and ground handling service staff, as well as third party handlers and Facilities Managers. In building relationships, take the opportunity to tour facilities, or to observe snow removal operations, follow the path of cargo from aircraft to destination, etc. In order to be able to speak with authority on the operating environment at your airport, there is no substitute for seeing it yourself and seeing it often. Even a seasoned business development manager would be well served by making a point of getting out of the office to observe operations on a regular basis particularly for unusual movements such as heavy lift operations of irregular freighter cargo. Through observation and relationships an air cargo manager will become familiar with the strengths and assets of their particular airport which will benefit the airport in a variety of ways.

SECTION 4 MARKETING

Marketing

Marketing initiatives are often necessary to promote cargo growth and development at North American airports. With several air cargo carriers ceasing service in the past 10-15 years, cargo activity at most airports is dominated by integrated carriers and the belly capacity of passenger airlines. This situation, along with many other factors, has contributed to a period of low/flat growth in the North American air cargo industry which, in turn, creates a highly competitive environment between airports for air cargo volumes and service providers. Marketing activities can be used to differentiate airports, thereby increasing the chances of achieving success with their respective air cargo businesses.

The Marketing initiatives undertaken by air cargo managers can be both formal and informal in nature. These initiatives should begin with an understanding of the relevant air cargo market and the various interested stakeholders. Below, some of the core elements of an air cargo marketing program are described along with the regular and periodic tasks that may be considered by air cargo managers.

Understanding of Existing Conditions

Prior to marketing an airport's air cargo capabilities to external audiences, the air cargo manager should have a good understanding of the existing conditions related to air cargo at his/her airport as well as the viability of any existing strategies in the evolving global market. This involves an assessment of where the airport stands in terms of historical air cargo tonnage, air cargo service providers and physical infrastructure.

Through the conduct of basic research and analysis, the airport's air cargo growth trends can be evaluated in a variety of ways including:

- By individual carrier and carrier type (integrated carrier, non-integrated carrier, passenger belly);
- Freight versus Mail;
- International versus Domestic;
- By commodity type; and
- By month (seasonality)

These types of evaluations can quickly help the air cargo manager identify areas of positive and negative growth and may signal initial areas of opportunity for the airport. This information can often be obtained from the airport's operational reports as well as directly from the individual carriers serving the airport. Databases produced by the U.S. Department of Transportation, the U.S. Census Bureau, and Statistics Canada are also excellent sources of air cargo related data.

The air cargo manager should also be aware of all on-airport and off-airport air cargo service providers and government agencies, including:

- Air carriers
- Ground handlers
- Cargo facilities operators
- Freight forwarders
- Customs brokers
- Major trucking companies
- U.S. Customs and Border Protection
- U.S. Department of Agriculture
- Transportation and Security Administration and, of course, the
- Federal Aviation Administration

Canadian Airports should consider the following:

- Canada Border Services Agency
- Transport Canada
- Nav Canada
- Canadian Food Inspection Agency (incl. Veterinary)
- Canadian Transportation Agency

When present, these service providers and government agencies can facilitate the flow of air cargo at an airport. Therefore, understanding how these various groups work together regarding air cargo is an important part of assessing the airport's current conditions.

The air cargo manager should conduct an inventory of the on-airport cargo-related facilities and infrastructure. The inventory (or Property Portfolio) will identify current/past tenants, vacancy rates, typical lease rates, facility operators/owners, condition, and use of the facilities/infrastructure. If possible, a similar inventory should also be conducted of the off-airport cargo-related facilities. The inventory may include:

- Air cargo buildings
- Air cargo ramp
- Runways and taxiways
- Aircraft and truck parking usage and capacity
- Cargo-specific ground handling equipment

Finally, the airport marketing effort focuses on international carriers will be critical to have an understanding of bilateral agreements which impact the viability of potential targets.

Identification of Industry Trends

The air cargo industry operates in a dynamic, often volatile, environment. In preparing for marketing initiatives, it is helpful for the air cargo manager to consider the structure of the industry and the factors that drive demand for air cargo services. By acknowledging these factors, the air cargo manager can

effectively determine the likely cargo-related roles of the airport from a macrocontext. Some of the trends that may be investigated regarding their particular relevance to the airport from a cargo development perspective include:

- Role of air cargo in commodity movements;
- Specialized niches;
- Air cargo industry structure and roles of various service providers; and
- Global and North American market drivers

Definition and Analysis of Relevant Air Cargo Market

After reviewing the current situation at the airport itself and identifying macrotrends, the air cargo manager is well-positioned to assess the regional air cargo market and understand the important and regional drivers of air cargo demand. This assessment is aided by primary and secondary research of the market. The primary research (interviews, surveys etc.) is especially important for air cargo marketing initiatives because there is a general lack of publicly available air cargo data and information – particularly at a level most relevant to an individual airport.

Importantly, this stage of the marketing initiative works closely with air cargo outreach efforts by the airport. Inputs from stakeholders such as shippers, freight forwarders, trucking companies and air carriers help to provide accurate and timely information on the airport's cargo market. The current and forward-looking activities of these groups can highly influence the opportunities available to the airport regarding air cargo growth and potential new air cargo services. This is particularly true for small- and medium-sized cargo airports that may not typically attract cargo from outside of their immediate communities.

It will be important to identify the major and growing external markets for the airport's regional cargo flows, in terms of origin/destination geographies and inbound/outbound commodities. Further, because air cargo often travels great distances via surface modes before and/or after its transportation by air, the air cargo manager should consider potential competing airports – both near and far. Again, stakeholder input and outreach efforts can yield fruitful information with respect to competitive factors and the reasons why certain shipments may not move via the subject airport. The air cargo manager can then consider possible counter measures designed to re-capture freight lost to other airports.

A highly useful exercise involves the development of a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis for the airport regarding air cargo.

- Identification/Understanding of INTERNAL core Strengths and major Weaknesses of the airport and relevant air cargo market
- Identification/Understanding of EXTERNAL Opportunities for and Threats to air cargo at the airport and in the relevant air cargo market

Development of Air Cargo Marketing Plan

Armed with the background on the airport's regional air cargo market and the identification of opportunities, the air cargo manager is able to develop an Air Cargo Marketing Plan. This Marketing Plan will serve as the guiding document regarding the airport's cargo goals and how they may be achieved from a marketing perspective. The elements of the Marketing Plan may include:

- Identification of air cargo opportunities, goals and timelines
- Identification of key industries and supply chains
- Prioritization of target air cargo markets and air cargo services
- Development of a value proposition for air cargo growth at the airport
- Strategies to take advantage of airport strengths and limit airport weaknesses
- A plan for addressing competition from other airports
- Determination of the optimal channels for disseminating the airport's air cargo marketing message (e.g. personal meetings with target companies, media coverage, advertising etc.)
- Involvement of local cargo air associations, local air cargo stakeholders, interest groups, government resources and economic development groups

It is absolutely essential, however, to bear in mind that belly cargo is becoming increasingly important and that the revenue generated by cargo could be the difference in attracting a passenger flight. As a result, it is often important to coordinate cargo marketing with air service development efforts for passenger carriers.

Develop collateral materials and market externally to relevant targets within an established budget

In order to execute the Marketing Plan, the airport will require collateral materials aimed at specific audiences and targets. These materials may include brochures, presentations, electronic media, photographs/images, planning documents, and press kits. The collateral should give particular attention to freight forwarders, air carriers and shippers who together represent three critical components of successful air cargo marketing initiatives. The air cargo manager should ensure that key airport staff and other local advocates are well-versed in the most important marketing messages – including basic statements on the economic development and economic impact aspects of air cargo.

Finally, the air cargo industry has a number of conferences that occur on a regular cycle – many of which are based in North America. Further, there are many local and regional air cargo associations and clubs that meet regularly basis throughout the year to discuss more specific items pertaining to their local operations. Each conference and meeting event provides an excellent opportunity to network with industry professionals, while keeping in touch with important current issues. Some of the notable national/international conferences include:

- ACI-NA Air Cargo Conference (annual)
- Air Cargo Americas (bi-annual)
- The International Air Cargo Association (TIACA) (bi-annual)

- IATA World Cargo Symposium (annual)
- Cargo Network Services (CNS) (annual)

Given finite resources for marketing, conference attendance and participation should be assessed carefully by the air cargo manager. Each conference should be evaluated on its relevance to the airport's potential market and how the conferences address that area.

Community Outreach

Air cargo development frequently involves the support of and interaction with regional businesses. Active involvement and input from the cargo community and relevant stakeholders can be critical to the success of air cargo marketing program. This helps the air cargo manager to know the market, understand needs, and address the issues of regional business partners. In many instances, this is critical in prioritizing objectives and gaining buy-in and support from the community on marketing initiatives. Regular interaction with stakeholders leads to information-sharing and real-time awareness of cargo-related issues.

SECTION 5 STAKEHOLDER OUTREACH

Stakeholder outreach serves several needs, perhaps the most valuable of which is maintaining a line of communication with the community, which in turn supports other business requirements. Even in the presence of digital media and instant contact, stakeholders and your efforts alike will benefit from having a "face to put with the name". Anecdotal information provides valuable real-time insight on trends and issues and, when trust is established, you can often gain valuable information that is not published or available elsewhere. Of course it is imperative to respect your stakeholders' sensitive information, but you can serve as a resource in helping them and your other stakeholders grow their operations. Many cargo professionals feel that they are the forgotten part of the aviation industry and welcome the opportunity to participate. Fortunately this can be done fairly easily and cost efficient. Identify the efforts and organizations that provide you with the best value and you can actually enjoy the task, while you grow your personal knowledge base and skill set.

In addition to the obvious stakeholders, there are many specific behind the scenes roles and service providers within the air cargo industry, so naturally there are several ways to reach your audience. In many cases you can interact with more than one of them at a time, which lends itself to saving time and other valuable resources. These different entities include: Freight Forwarders (also known as Indirect Air Carriers), Customs Brokers (USCBP or Canadian Border Services Agency), local and intercity trucking companies, ground handling companies, Federal agencies such as the Transportation Security Administration (TSA) in the U.S. and Canadian Air Transport Authority (CATSA), air carriers, and the shippers themselves.

As in any other business, outreach in air cargo is a means of building and cultivating relationships. It also serves to strengthen existing relationships and avoid the appearance of taking your customers for granted. It is critical in any industry to maintain the customer base you already have, and outreach serves a primary role in that effort. The numerous Federal, Provincial, State and local agencies that are involved with air commerce also must be engaged. This can be done through industry groups, traffic organizations, chambers of commerce and, of course, industry events.

Air carriers are perhaps the most obvious group at the airport to consider regarding air cargo operations. As mentioned, there are many different types of operators but the companies that operate aircraft in and out of your airport are among the most important stakeholders. This group includes all-cargo carriers, passenger carriers that accept air cargo, or integrators such as DHL, FedEx, or UPS. Any of these entities may also involve a charter broker who provides equipment and/or crews.

The air freight forwarder, renamed as Indirect Air Carriers by the TSA, is a decades old profession that serves as a means of using multiple service providers to

consolidate shipments from a single shipper, or group of shippers, and move them efficiently from point to point. This service has grown from a loosely organized handful of innovative companies that made their living on economies of scale to a highly regulated profession that acts as an intermediary on multiple levels to help provide security, communication, retail and in-house services, as well as the movement of cargo.

The Customs Broker is involved with the import and export of goods and is responsible for collecting duties for the federal government, as well as assuring that quotas, embargoes and other directives are adhered to. This service has also changed drastically as electronic transmission of funds and documents are now mandated, and their role in national security has been heightened.

Ground transportation is necessary in the air cargo industry because goods need to be taken to and from airports, between airports, or handled in an intermodal function when rail, ocean or pipeline are used in conjunction with air and road. Road feeder services take cargo between airports, and handle local pick-up and delivery: "last and first mile" carriers typically deliver from a forwarder to a consignee or from a shipper. This portion of the supply chain service is also drastically different than it was a decade ago with cargo security guidelines that mandate screening and control of shipments at every part of their journey. Many local trucking companies now serve as cargo screeners as authorized by the TSA via the "Certified Cargo Screening Program" or CCSP.

One part of the industry that is nearly unseen by the general public or the shipper is the ground handling provider that physically loads cargo in and out of aircraft. This function may be supplied by the carrier but is very often outsourced to third party providers that serve multiple customers. In some cases the ground handling companies operate entire facilities on-airport and act as landlords to office tenants and other vendors. In some instances airports provide this service for their airline tenants.

To review, the most obvious and therefore highest profile players in the air cargo industry are the airlines themselves. Air carriers may be all-cargo carriers, passenger carriers that accept air cargo, or integrators such as DHL, FedEx, or UPS. These carriers operate any and all size aircraft and may perform all of the tasks mentioned above, or none of them. The integrators offer door-to-door services (and in some instances, beyond the door now since they now operate service and production facilities) and provide seamless transportation needs to the end users. Indirect Air Carriers market the same customer service and internalize the various functions, although most do not operate their own aircraft. Customs Brokers and federal agencies along with many behind the scenes professionals work to make the transportation of goods flow uninterrupted.

Staying in touch with all of these different participants, and reaching out to new entrants, seems daunting but can be accomplished via a few well organized efforts. These include on-airport meetings, business community involvement, trade specific organizations, and government sponsored events. Depending on the size and structure of the airport, air cargo managers may find themselves collaborating with

passenger or business development colleagues. It is important to take advantage of the fact that most people and communities love to learn more about their airports and welcome airport executives to their events.

A regional chamber of commerce is a good place to reach out to local corporations that use the airport for shipping. Regular attendance and participation can put the air cargo manager in touch with executives who determine how their company's inbound and outbound goods and resources move. Many may assume that the logistics chain runs through the local airport and may not be aware that their products are trucked to gateways, hubs, or other airports. These chambers are usually eager to welcome speakers and many have annual trade exhibitions. An onsite tour of any part of the air cargo operation is usually very popular with these and other groups.

There are typically several business development efforts underway at one time from different sources at most locations. Identify which of your state or province agencies are tasked with international trade development. Site selection and business recruitment offices are also very good sources and may offer opportunities to collaborate at trade shows- be sure to reciprocate.

One cost effective way to reach all of the groups is to hold an event and invite them to attend. There are often sponsors available from various governmental agencies, local utility companies, or perhaps one of your existing tenant/ stakeholders. If you hold an event to promote your efforts, keep in mind that there is also the need to demonstrate value to your audience and their employers so that they realize their resources are well spent. Very few have the time and staffing to take part in a two hour event regularly, but may appreciate an annual or semi-annual inter-active presentation with pertinent information exchange at a working lunch or breakfast. Do not hesitate to ask your stakeholders in advance what type of event works for them.

From that effort you may be able to identify candidates to join monthly or quarterly get-togethers for the cargo community. If you are a small or medium-sized airport in proximity to a major gateway, attend functions at the larger airports to let the major carriers and vendors know you are interested in new business opportunities. If your airport has tenant meetings, introduce yourself and your role at that meeting. You may know everyone and take for granted that they know you and your role, but staffing changes and time often require new introductions and renewed relationships.

Digital or hard copy newsletters, blogs, or other publications are also valuable tools for outreach. A printed document of this type makes a very good piece of collateral to use at meetings, appointments, or as a means of introduction. Blogs are a useful mechanism to reach your target audience in an easy and accessible way. Make sure to periodically submit a small editorial piece for the local newspapers as well as for your own publication. When permissible, it is also a large "plus" to forward valuable information to your stakeholders. The air cargo manager should coordinate with the Public Relations group to generate press releases with news about new business or positive statistics. Another option is to hold a separate event and invite "press only" to learn about air cargo at the airport. This is usually well-received because of the popularity of airports and aviation to most of the public.

Whether in print or conversation, it is important to always maintain the boundaries of clients' proprietary information; be sure not to share or divulge any competitively sensitive information. The same holds true of course for sensitive security correspondence and directives. If you find a business lead that may benefit multiple stakeholders, and it comes from a neutral source, make sure you send it to all of them.

The companies, organizations and agencies mentioned above represent most, but not all, of the potential stakeholders an air cargo manager may interact with in the course of outreach activities. As you progress through your outreach efforts, you will uncover new interested participants as well as some who may decline involvement in your initiatives for a variety of personal or professional reasons. Bear in mind that most of your contacts report to a manager, who may or may not see the value in having their staff take part in airport events and initiatives. Increased pressure on margins, staffing, and schedules frequently generate a reply of "I am too busy" or possibly no reply at all. Do not be discouraged, respect their replies, and stay in touch periodically to determine if the situation has changed and if their receptivity has improved. Once a stakeholder sees some value in what you and the airport are offering, they will become participants at whatever level they are comfortable with.



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