

looks just like the rail mounted automated people mover systems used at many of the airports in North America such as ATL, SEA, EWR, CVG, DFW and others.

The buses offer the passengers an advantage in that they generally deliver the passengers directly to the baggage claim areas or to the Federal Inspection Services (Public Health, Immigration and Customs) very often eliminating long and wearisome walks through crowded airport concourses. Departing passengers benefit similarly – their COBUS takes them directly to the aircraft from a dedicated bus departure gate. Normally weather protection is offered by the airport terminals when boarding buses – at the aircraft most stairs are fitted with canopies which keep the passengers dry and protected from all forms of inclement weather. (see attached photos)

Just how effective are these COBUS? And how long does it take to set up a hardstand system?

Operators agree that a purpose designed unit such as the COBUS can service a minimum of three flights per hour whereas the typical fixed departure gate will accommodate only one flight per hour. At JFK Airport's Terminal 4 (JFKIAT), they are currently moving in excess of 10,000 passengers per week using an average of 4 COBUS Model 3000 buses for only six hours per day. JFKIAT's airline clients include many operators flying to/from Europe and the Middle East, thus the majority of their flights arrive between 1300 and 1700 and depart during the same period up though 2300 hours. The use of COBUS Airport People Moving Buses has effectively doubled the quantity of flights previously handled at the terminal's fixed gates during their peak hours of operation.

At Hartsfield-Jackson Atlanta International Airport a study conducted by the Department of Aviation of the City of Atlanta indicated that approximately 40 aircraft waited at least 30 minutes for an available gate after landing – this was a daily occurrence. They also determined that the earliest possibility for adding gates would have required at least two years for conversion of an empty hangar into a suitable passenger handling facility. ATL ordered four COBUS' together with mobile stairs and also a

Disabled Passenger Lift as a solution to this problem. Thus aircraft waiting for open gates can proceed to designated hardstand areas where passengers can be speedily transferred to Baggage Claim or connecting flights at other concourses using the COBUS Airport People Moving Bus.

In most cases, the hardstand system can be implemented in less than four months – the airport benefits from additional aircraft and passenger throughputs without lengthy waits for additional gates to be constructed. The airlines benefit from being able to gain greater utilization of their aircraft by minimizing holding times for available gates, and arriving passengers are gratified to be able to get off the aircraft promptly and then be transported directly to the Baggage or F.I.S. area. Similarly, departing passengers are moved directly to their aircraft which, once fully loaded, can usually depart directly from the hardstand without a push-back requirement.

And what about the cost?

Most airport planners agree that hardstand operations using COBUS buses together with appropriate support equipment are extremely cost-effective for at least the first ten to twelve years of utilization when compared to the design and construction costs of fixed infrastructure. Thereafter the fixed gate may have a slight advantage – but this can be outweighed by the extreme flexibility offered by the hardstand-COBUS combination.

Some airports report that they use a two-tier marketing effort in order to attract more airlines into their airport: Fixed gates are available at one price, but for the cost-conscious operator hardstand/bus operations are offered at a discount of between 10 to 20%. But as traffic builds at these locations, airports soon find that they no longer need to offer a discount – in fact at some airports experienced airline operators even prefer the Off Gate experience since they can turn their aircraft faster and gain an extra flight per day as a result.

So back to the original question: Is it time to take another look at Off Gate / Hardstand operations as a way of alleviating fixed gate overcrowding and at the same time offering a way to bring more aircraft and passengers into the airport without incurring

significant construction costs – never mind the time involved?

You bet it is! And we at COBUS Industries LP are ready, willing and able to work with you to implement this very attractive solution to a vexing problem.



### ATLANTA LOOKS TO COBUS TO SOLVE PROBLEM!

At **Hartsfield-Jackson Atlanta International Airport (H-JAIA)** the Planning and Development group was looking for some way of relieving the demand for gate space for the interim period required to develop additional terminals at the airport. Initially it was felt that a Hardstand operation could be planned to start one to two years away – although it was thought that there would be a strong reluctance on the behalf of the air carriers as well as the terminal operators to the thought of using Off-Gate locations as a way of relieving the high demand for additional gates. Initial planning efforts began in the Fall of 2006 with a very tentative implementation target of late 2008 or early 2009.

As the planning process continued, it became very evident to Mr. Dan Molloy, Assistant Aviation General Manager of the Department of Aviation, City of Atlanta, that a much accelerated program was going to be required. This was the result of many requests for additional gate space from the dominant air carriers at ATL – Delta and Air Tran. Both airlines had requirements to add flights on a daily basis at the airport, yet it became rapidly evident that no additional gate space was available

– the terminals' gates were already fully booked! Then another factor surfaced: up to 40, count 'em, 40 arriving flights were waiting for their assigned gates for periods of half an hour or longer – and this was happening on a daily basis! Dan knew it was time for action.

Enter Mr. Matt Davis, Planning Manager, Airfield & Airspace, for the Department of Aviation together with Mr. Peter Ferguson, Aviation Maintenance Director and Mr. Paul S. Meyer, Director of Operations. In early 2007 all three made a quick trip to JFK Airport in New York to view the existing hardstand operations conducted at JFKIAT's Terminal 4 where an average of 10,000 passengers are accommodated every week by four COBUS operating between 1300 and 2100 daily. Arrivals and departures number approximately the same; aircraft types vary from B747s to Dash 8s. The relative simplicity and smooth operation of Off-Gate operations were very impressive, so much so that when an opportunity to evaluate a COBUS on their own airport was offered, they readily accepted. After a very positive demonstration, the word was delivered: leave the demo bus here and bring us three more!

In addition to the four COBUS Airport People Moving Buses, four sets of canopy-covered mobile stairs and an A.D.A. approved self-propelled Disabled Passenger Lift were also ordered. ATL had taken steps to relieve gate congestion, provide a method of satisfying airlines' requirements and providing great passenger service – all at the same time.

The result? Instead of a minimum of two or more years required to take any action about either conversion of an old hangar into another passenger facility or begin the process of designing and constructing a brand new terminal (which would take five years or more), **H-JAIA** was able to inaugurate a plan to implement more aircraft gates in just five months! The airlines are pleased that the gate congestion problem was being resolved in a positive way – using a method that has been proven effective at more than 300 airports around the world. Their passengers look upon the COBUS as a People Mover – similar to the rail mounted units which connect all the existing terminals at the same airport.

Truly an economical and highly satisfactory outcome to a difficult problem!

## AND ON TO DENVER INTERNATIONAL AIRPORT!

As this issue is being printed, an order was received from the City of Denver for two COBUS 3000 Airport People Moving Buses together with several mobile stairs units and a self-propelled Disabled Passenger Lift. Because of gate congestion and airlines' demands for additional (non-existent!) gate space, DIA has determined that the best way to meet these requirements is to commence Hardstand / Off-Gate operations.

Implementation of the new aircraft parking system will commence within just a few months after all equipment has been delivered – very early Spring of 2008 is contemplated. We are pleased to be able to add the City of Denver and its airport to our rapidly growing list of satisfied clients!

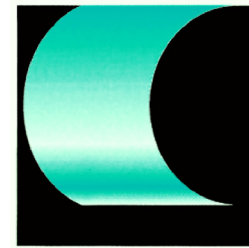
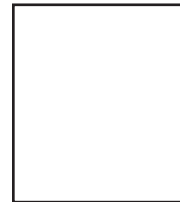


**Cobus Chatter** is published infrequently for the operators, owners and friends of the COBUS fleet in North America. Please send your comments and questions to Don Frassetto, President at 203 380 9575, or Erwin Zimmermann, Vice President at 631 757 4557, or by e-mail: don@cobus.us; erwin@cobus.us; or just direct an inquiry to info@cobus.us.



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## THEY'RE BACK !

**And there are more of  
them than ever before!**

### **Is it time to take another look at Off- Gate / Hardstand operations?**

By almost every measure, passenger traffic has rebounded to well beyond 9/11 counts. Airlines have been reporting load factors in excess of 85% which most experts agree equals full flights on practically every commercial aircraft in the skies today. Airports report that their terminal capacities are being stretched to the limit – planning for additional gates, concourses and even new terminals is underway at most midsize and major airports.

Yet the reality of this planning is that additional gates won't be available for years at most airports. Why? Because of the myriad steps that must be taken to finally arrive at that time when new gates can be put into use. These steps include:

- A study to determine immediate, near and long term additional gate requirements
- Determination of land availability
- Defining the optimum plan for increase in gate availability
- Development of bid documents for the construction of new gates (concourses, terminals, etc.)
- Construction of the finger/concourse/terminal addition/new terminal

Finally after at least three to five years, the new gates can be placed into service.

Meanwhile the increases in passenger traffic have resulted in evermore crowded aircraft; utilization of available gates beyond planned turnaround times often resulting in gate delays, and delayed aircraft – in other words, a rapidly deteriorating situation for most airports resulting in extreme passenger dissatisfaction and increased defection to other modes of transportation and/or other airports.

Airline complaints have risen to new highs – it almost seems that airports are powerless to provide anything more than modest promises to the effect that they are “working on the problem”!

So just how can an airport and an airline schedule more flights into an airport that is already experiencing a shortage of available gates?

Just ask ATL, BOS, DIA, IAH, JFK, LAX, YYZ and others: the answer is relatively simple – and even inexpensive! All of these airports are using Off Gate / Hardstand operations to solve the problem. Parking aircraft on the remoter areas of the airport ramps



and then providing a method of transporting the passengers between the aircraft and the terminal has proven to be effective both in terms of satisfying the airlines' and the airports' needs as well as offering passenger satisfaction.

A set of stairs mounted on a mobile platform (either self-propelled or towable) provides the ability for passengers to disembark from the aircraft. They then board a COBUS Airport People Moving Bus which has been specially designed to operate on airport ramps. These buses feature single step entries, extra wide doors to accommodate two passengers at a time, multiple doors on each side of the bus for really rapid passenger loading/unloading, truly flat low floors, built-in wheelchair tie-down points, and many more passenger-friendly features. With capacities of up to 110 passengers, the COBUS