

AIRPORTS OF THE FUTURE: WHAT LIES AHEAD?

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INTRODUCTION

Thank you, Paul. It's a pleasure to be here with you today for both sentimental and professional reasons.

When I was in grammar school here in the U.S., I spent many of my holidays at home with my family and my father's professional colleagues from several African countries. Dad was an agriculture professor and the colleagues were his PhD graduate students and their families. So being here today brings back many fond memories and I thank you for that gift.

From a professional standpoint, I enjoy being here because this is a great industry to work in! It's complex, it's intriguing and, yes, at times it can be frustrating. To me it has similarities to a living body. Aviation has many interrelated and dependent parts, yet each airport facility has its own unique characteristics, features and challenges. It's in this context that I come to you to talk about airports of the future and what lies ahead.

What I'd like to focus on are: the principle factors that I believe will most influence airports during the next 20 to 30 years, and how the private sector, including consultants, vendors and other related businesses fits into this picture.

PRINCIPLE FACTORS AFFECTING AIRPORTS OF THE FUTURE

It's rather obvious that airports vary dramatically. We're all aware that some African airports are among the most complex and modern in the world, while others are comprised of a simple landing strip, a wind sock and a one-lane road leading to a small parking lot for a few vehicles. Therefore, when it comes to what will most affect airports of the future, I acknowledge up front that the factors I'm about to identify don't apply equally to all facilities. I do, however, think that they, to a greater or lesser extent, will influence all airports.

So, let's begin. In no particular order the first factor is the **Global Economy**. This obviously impacts aviation demand and the availability of funds to invest in airport infrastructure. While the economic circumstances of nations vary, recent past has shown how the economies of our respective nations are inextricably linked and how stressed economies in one part of the world can impact air transportation globally. Whether we're talking about African or North American countries, the well-being of the Global Economy will continue to have an enormous impact on what's possible in terms of airport infrastructure development.

Closely related to this is the second factor, **Airline Business Models**. The advent of frequent flyer programs, on-line bookings and low cost carrier is old news. Although not new, these innovations will continue to have significant impacts. The more recent business model changes are reduced numbers of aircraft and, therefore, fewer passenger seats in the system. Related to

this, during 2008 scheduled service was discontinued in nearly 100 small communities in the U.S. Airports are currently dealing with these changes. While I don't anticipate these reductions to be long-term, we need to keep in mind that the business models of airlines dramatically impact the future of airports.

The third on my list is **Regulations**. In particular, airports of the future will increasingly be influenced by environmental and sustainability practices that are initially introduced as guidelines and ultimately become regulations. International discussions about air emissions and carbon footprints in the context of climate change have been ongoing for some time. I believe these concerns are here to stay.

In comparison, I've not heard as much about sustainability until recently. A broad, generally-accepted definition of the word is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Although this definition was developed in 1983 by the World Commission on Environment and Development, during the last two or three years, state and local governments in the U.S. have increasingly required airports to develop and operate in what they refer to as a 'sustainable manner.'

The good news is that airports are discovering it's the right thing to do *and* makes good business sense. While it has environmental and social benefits, sustainability is also leading to life cycle and operational cost savings.

A great document and database on sustainability released just two weeks ago was compiled collaboratively by three airport associations, including the Airport Consultants Council, with input from the FAA and airlines. This guide includes a compilation of existing sustainability practices that are being implemented at airports around the world. In fact, the database includes over 970 individual sustainability practices, each categorized according to specific criteria and sustainability goals. The resource guide also provides airports with a step-by-step process to develop, implement and maintain a sustainability program. This is the first central repository of sustainability practices available to the industry. I encourage you to visit the website www.airportsustainability.org to check out this amazing resource. I also have a copy of the resource guide and a list of the 970 practices in an excel spreadsheet with me if you'd like to take a quick look at it.

The fourth factor to affect future airports is **New Technologies**. Yes, as an industry, we have been talking about this for a long time and have already seen some impressive changes. The primary catalyst for this change has been and will continue to be: on- and off-site self-serve check-in options; increased common-use facilities; physical object tagging and coding; and personal, local and wide area networks.

In terms of airfield capacity, the expanded use of Automatic Dependent Surveillance - Broadcast, more commonly referred to as ADS-B, and NextGen-related technologies promise to have a major impact. Also keep in mind that as costs come down, the use of these and other technologies on the horizon will become more commonplace.

The last principle factor on my list that will affect airports of the future is **Security and Safety**. The related enhancements being implemented worldwide seems endless – baggage and passenger screening systems, expanded credentialing and access control of employees, computerized passenger risk assessment systems and airfield alterations to reduce runway incursions, to mention a few. There is a collective realization that measures to be implemented

to enhance security and safety will continue to be given the highest priority at airports of the future.

Taking these factors into account, what lies ahead in terms of the most apparent, talked about changes at airports will be in the **terminal area** - *physically, functionally and operationally*.

Landside efficiency will increase dramatically as improvements in technology bring us additional conveniences such as automated vehicle card readers. At the larger airports, lower revenue generators will increasingly be displaced by higher revenue-generating businesses due to a shortage of off-airport land for such uses.

And, the greatest agent of **airfield** change globally will, as I already mentioned, be the increased use ADS-B because of its ability to increase airfield capacity.

HOW THE PRIVATE SECTOR FITS INTO THIS PICTURE

The reason I took the time to review these factors is to establish that what we're collectively trying to achieve is to be participants in the development of future airports and aviation. Each of us is here because we see existing and potential roles for ourselves.

The brochure for this event states that one of its goals is to 'strengthen strategic and commercial relationships between industries of Sub-Saharan Africa and the U.S.'

There are many players in our business. Airports have become more complicated and more specialists are needed. The need for teaming and for increased collaboration is real. I'm grateful to the U.S. Trade and Development Agency for recognizing this need and for organizing this event. Conversations that occur and relationships formed this week will undoubtedly result in the pairing up of skill sets and infrastructure improvement projects at airports in Sub-Saharan Africa.

As indicated when I was introduced, I serve as President of the Airport Consultants Council. ACC is an international trade association that represents more than 240 private consulting firms and related businesses that provide development and operations expertise to airports. Our members are hired by airports to plan, design and implement their capital development projects and to provide operational support. Members are also hired by government agencies to help develop industry guidelines and regulations.

ACC committees have tremendous influence when it comes to updating government agency design standards and members routinely team with firms that they've gotten to know through the association's technical networking opportunities.

A recent trend that I've noticed that is an increasing number of engineering and architectural firms are linking up with financial companies to provide airports with both technical and financial resources. This may be of particular interest to those of you from Africa.

Members of ACC who are participating in this event include AECOM; Faith Group; HOK; Infrastructure Management Group; InterVISTAS Consulting; Jacobs Consultancy; Lockheed Martin; The Louis Berger Group; The LPA Group; Milliken Carpets; Montgomery Consulting Group; Parsons Brinkerhoff, Robinson Aviation; TransSolutions; and T.Y. Lin International. More

than half of our member firms are actively participating in airport projects globally. If you need a particular type of expertise, feel free to contact me.

I'm also pleased to mention that a consulting firm in Nigeria, Belujane Konzult, recently joined ACC. I spoke in Johannesburg at the Airlines & Air Transport Summit in 2006 and met with executives from several African countries represented here today. These developing relationships are very exciting to see.

If you're interested in reviewing a full list of ACC members, directories are available at an exhibit table across from the conference registration desks. Also feel free to visit the ACC website, www.ACConline.org.

CONCLUSIONS

So, what lies ahead for airports and for us in eight words or less? Many challenges and a lot of hard work. However, keep in mind the famous quote 'That which we obtain too easily we esteem too lightly.'

In conclusion, I, once again, extend my thanks to the U.S. Trade and Development Agency for organizing this event and I thank each of you for your attention.