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# CIVIL AVIATION

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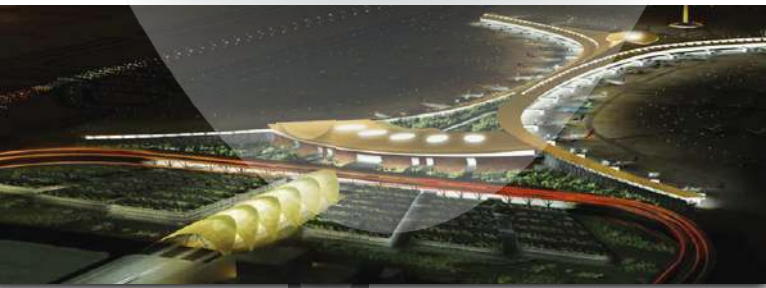
The Civil Aviation Academy  
held 2014 Graduation Ceremony



## NextGen Procedures Takes Flying to a Whole New Altitude



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**Look this way, please**

### The Aviation Industry: An Ever Changing World



**Dr. Faisal H. Al-Sugair**  
VP, General Authority  
of Civil Aviation

On the third of last March, the first non-stop flight of its type landed in the relatively small sized city of Austin, Texas arriving from London Heathrow. To the USA, this precedent is considered a remarkable achievement and a good sign for future similar flights to similarly sized cities, taking into account that the Dreamliner (the most modern aircraft) was the flying jet crossing the Atlantic.

It seems new aviation philosophies and concepts are emerging. Perhaps it is the economies of the light weight / fuel efficient modern aircraft or because of mere supply and demand factors. More non-stop flights are expected to fly soon from San Jose, California, USA, to Tokyo in Japan by Nippon Airlines; from Oakland in the same state to the Norwegian capital, Oslo by Norwegian Shuttle Airlines; from Sanford International Airport near Orlando, Florida to London Gatwick by British Thompson Airways. Before this only domestic and regional flights flew from these relatively small airports to USA neighboring countries such as Mexico and Canada. As for the Pacific and Atlantic Oceans this is considered a new initiative that reflects a historic shift in modern aviation industry.

The first fact proven by this move is that there are no permanent rules in an environment governed by economic standards (with certainly the exception of safety and security). In short, air trans-

port is an ever changing world that is not subject to fixed traditions. For example, the Airport concept has evolved from just a place for meeting and greeting passengers and bidding them farewell, and from a place for aircraft landing and takeoff, to a modern concept that involves marketing and means of recreation, entertainment, shopping, luxury and comfort. It even goes further to the airport-city philosophy that caters for the construction of integrated cities around airports for businessmen to meet at, passengers to stay overnight in, companies to be hosted there, and for the provision of all types of services.

The second fact is that we in the Arab and Middle East Region are very soon going to witness quality shifts in Air Transport Industry. The first signs of this is the construction of state-of-the-art international airports (e.g. New KAIA) and the rapid development of business performance, quality concepts, and methods of evaluation, assessment and control. In the Kingdom, we are continuously witnessing new air routes being launched between our domestic airports and neighboring countries transforming to regional airports attracting more air and passenger traffic, and ultimately more direct flights.

As an outcome of the fruitful agreements concluded by GACA, we saw a few weeks ago our young national air carrier (NAS Air) flying to European Airports such as London Gatwick, to more Arab Airports like Casablanca, and to Airports in Southeast Asia such as Kuala Lumpur, Jakarta and Islam Abad.

No doubt we are going to witness in the near future direct transcontinental flights between our regional airports and Europe, Asia, and North America.

## NEWS

### The Council of Ministers approves a Memorandum of Cooperation between GACA and the US TSA

The Council of Ministers approved in its session held on 3/3/2014 in Yamamah Palace in Riyadh under the chairmanship of HRH Prince Mughrin Bin Abdulaziz, Deputy Crown Prince and Second Deputy Premier, a Memorandum of Cooperation (MoC) in civil aviation security between the General Authority of Civil Aviation and the US Transportation Security Administration (TSA). The Memorandum's most important features are,



- 1- To promote cooperation in the administrative, organizational, operational, and technical aspects of civil aviation security.
- 2- To provide training in civil aviation security to the employees of both parties and to avail needed resources, logistic support, and equipment.
- 3- Any party has the right to borrow equipment or materials from the other subject to the terms of the Memorandum.

### Saudia Ranked 6th Worldwide in Flights Punctuality

Saudi Airlines (Saudia) was ranked 6th worldwide in flight punctuality in 2013 as announced by the FlightStats Company which is specializing in Aviation, Airport Information, and monitoring of Flights Punctuality. Acting Director General of Saudia, Mr. Abdulaziz Al-Hazmi, received an honorary shield from the company during a recent visit to Saudia headquarter in Jeddah paid by the company's senior officials headed by Mr. Jim Hertzal, VP for Business Development. A number of Saudia Assistant DGs attended the occasion.

### NAS Air Launches Two Direct Air Routes to London and Manchester from Jeddah

In a unique step within the company's plan for expansion in the European Continent, NAS Air, the second Saudi national air carrier, launched two new air routes to Gatwick Airport south of the British capital, London, and to Manchester Airport in North East England. NAS Air CEO, Raja Azmi, said that the company has added two A330 aircraft to its fleet to serve long haul routes. The new wide body aircraft serves three classes of passengers: Business Class, Premium Economy, and Economy Class.

## NEWS

### The Civil Aviation Academy held 2014 Graduation Ceremony



Under the patronage of His Highness Prince Fahd Bin Abdullah, President of GACA, the Civil Aviation Academy held its graduation ceremony for its latest graduates in the fields of (Air Control, F&R and Airport Safety and Operation). The ceremony took place on Tuesday 24/3/2014 at Jeddah Intercontinental Hotel.

HE Dr. Faisal Al-Sugair, VP of GACA, delivered a speech thanking HH for his patronage of the graduation ceremony. He urged the graduates to try harder to develop their skills and capabilities in order to keep pace with the technological developments taking place worldwide.

The President of the Academy, Eng. Hazim Abu Dawood, followed with a speech in which he mentioned that a new complex composed of 20 buildings will be added at a cost of SR 165 million equipped

with high tech installations. He added that the Academy intends to change the Diploma system to the credit hours system to enable students to complete their university and post graduate studies.

After that HH the President of GACA delivered a speech congratulating the graduates and wishing them the best of luck in their new careers and advised them to save no effort in following up new developments in their lines of specialization in order to raise their standards and ensure continuous progress and success in their working life in order to be able to serve their country in the most appropriate way. After that HH handed the graduates their Diplomas and then commemorative photos were taken.

At the end of the ceremony HH said: "what really makes us proud is the fact that those graduates represent

a number of specializations required by the civil aviation sector especially after the High Diplomas lines of specialization provided by the Academy were increased to cover Air Control, Fire and rescue, Maintenance of Navigational Systems, Airport Operation, Aviation Safety, in addition to the Technical Diploma in Aviation Security". He pointed out that number of Academy graduates is expected to reach (600) graduates by the end of 2015. He added that those who benefited from the In-Kingdom and Out-of-Kingdom training programs in 2013 reached (2532) employees apart from the Academy graduates. Moreover, more than 115 students were sent abroad for obtaining Diplomas in Air Control within the Custodian of the Two Holy Mosques Scholarship Program and 90 students were sent to obtain postgraduate degrees in certain specializations required by GACA.

## Air Arabia 4Q 2013 net profit up 12% to \$ 25.59 million

Air Arabia announced its financial results for the fourth quarter ended December 31, 2013, which stood at USD 25.59 million, up 12% compared to USD 22.86 million reported in 2012.



The airline's turnover for the last quarter 2013 was USD 220.7 million, an increase of 8% compared to USD 205 million reported for the same period in 2012. The airline carried over 1.5 million passengers in fourth quarter of this year, an increase of 15% compared to last quarter of 2013. For the full year 2013, the airline reported a net profit of USD 118.42 million, an increase of 2% compared to the same period of 2012. Turnover for the full year ending December 31, 2013, stood at USD 871.2 million, up 14% compared to

the same period in 2012. More than 6.1 million passengers flew with Air Arabia in 2013, a 15% increase compared to 5.3 million passenger carried in 2012. The airline's seat load factor for the full year ending December 31, 2013, stood at impressive 80%. These results were announced following a meeting of the Board of Directors of Air Arabia who have proposed a dividend distribution of 7.25% of capital. This proposal is subject to ratification by Air Arabia shareholders at the company's upcoming AGM.

Air Arabia added 8 destinations to its network in 2013, including Yerevan in Armenia; Lar and Mashhad in Iran; Baghdad in Iraq; Salkot in Pakistan; Abha, Ha'il and Hofuf in Saudi Arabia. The airline took delivery of seven new A320 aircraft from Airbus in 2013, bringing its total fleet size to 35.

## Ethiad posts third consecutive year of profit, up 48% to \$ 62 Million

Ethiad Airways announced record financial results for 2013, with net profit up 48% to USD 62 million on revenues up 27% to USD 6.1 billion.

The record performance also saw earnings before interest and tax (EBIT) up 22% to USD 208 million and earnings before interest, tax, depreciation, amortization and rentals (EBITDAR) up 30% to USD 979 million, a margin of 16% of total

revenues. This marked the third successive year of net profitability, in the airline's tenth year of operation. Revenue increased by 27% to USD 6.1 billion (2012: USD 4.8 billion), on passenger numbers up 12% to 11.5 million (10.3 million).

Revenue Passenger Kilometres (RPKs) – measuring passenger journeys – increased by 16% to 55.5 billion (47.7 billion), while Available Seat Kilometres (ASKs)

– representing capacity – grew by 17% to 71.1 billion (61 billion). These figures reflected strong growth in passenger traffic volumes, in a year when Ethiad Airways added six new destinations – Washington DC, Amsterdam, Sao Paulo, Belgrade, Ho Chi Minh City and Sana'a – and increased capacity on 18 existing routes. At year's end, the average network-wide seat load factor was 78%, unchanged from 2012.

## ACHIEVEMENTS

ARE NOT GIVEN... THEY ARE EARNED



SAUDI AIRLINES CATERING الخطوط السعودية للتموين

### Cover Story

## NextGen Procedures Takes Flying to a Whole New Altitude

Using new technology, oceanic flights will be able to take special tracks across the ocean based on the aircraft model and the weather, for optimum fuel efficiency.

Khadija Tariq\*

The FAA has long been working on the development of technology and implementation of policies and procedures to improve fuel usage for both the purpose of saving airlines' money, as well as - more importantly - reducing the amount of fuel emissions to the atmosphere to make flying more environmentally-friendly. Though the majority of flights around the world tend to be over land, the most economically important flights are often oceanic flights, whether passenger or cargo. In addition to being eminent to the airline industry, these types of flights also burn the most fuel of any type of air travel. Conceptualized in 2005 by the FAA, NextGen will be able to vastly improve oceanic flights by steering them to the most fuel-efficient lanes for their journeys as possible. FAA's current Ocean21 automation system, upgraded with NextGen technology, should have all the anticipated improvements up and running by 2015.



Depending on the weather over the route, as well as the make and model of each individual aircraft, with the aid of NextGen, flights will be given options of three possible types of routes to follow for their path across the ocean. They will have the choice of flying fixed paths, flexible paths reliant upon wind forecasts reported twice daily, or user-preferred routes (UPRs). UPRs require particular avionics that will take into account each individual aircraft's characteristics based on make, model, and equipment. Due to the very specific quality of the user-preferred routes, they tend to be the most efficient method for determining the best oceanic routes for these flights. Airplane operators and pilots of the airlines aiding in testing the new

system have already begun taking advantage of the improvements, acquiring permission mid-flight, to change the route the flight is taking entirely, or adjust the altitude at which they are flying. User Preferred Routes is also a very favorable method for airlines as it follows the ICAO goal of improving efficiency of aircraft in order to reduce the environmental impact that modern aviation has on the environment.

NextGen technology will also be able to improve tracking aircrafts passing through the same area simultaneously, and each aircraft's exact location, in order to minimize the space between which aircraft can be separated. Previous to NextGen, aircraft have been required to be spaced at least 80 - 100 nautical miles apart, whereas once all the upgrades are complete to the system, aircraft will be able to travel over the ocean within just 30 nautical miles from each other, so long as they are equipped similarly. This is especially good news, as previously it was difficult for aircraft to alter the altitude



at which they were flying because the distance between them and another aircraft in the same area would only be estimated, but with FAA's new system, the distance between airplanes flying within the same area will be more accurate, resulting in airplane operators having an easier time adjusting an airplane's altitude for optimum fuel consumption.

The benefit of changing the altitude of an aircraft when flying an especially long flight is that at colder temperatures present at higher altitudes, jet engines are known to burn less fuel, and once more fuel is burned off, the load is lightened and with the new advancements the pilot will be able to climb even higher to maximize efficiency. According to research done by aviation scientists at MIT,

deviating from the optimum altitude by even just 1000 ft. can burn 1% more fuel the entirety of the time an airplane is flying at the deviated altitude. This translates to a devastating 288 lbs. more fuel burned per hour. Prior to the introduction of NextGen, if a pilot wished to climb in altitude for better fuel consumption, and discovered that another aircraft was within 80-100 nautical miles of his, he would be stuck at the less optimum altitude for the remainder of the flight as a consequence of the issue with accuracy in determining how far apart two aircraft were. This particular aspect of the technology makes flying over the ocean safer as well, as air traffic controllers and operators will have exact knowledge of how far apart aircraft are and be able to maintain safe distances be-

tween aircraft, another added benefit of the NextGen upgrade.

The advances in the navigation and surveillance, and all the additional technological and procedural advances that NextGen brings are proving and will continue to prove themselves invaluable to the aviation industry. The exciting prospect of the future of oceanic flying that was once only imagined has already been realized and is within our grasp, and will be fully available in less than a year.

#### References

Hamdal, Heather. "Sea Changes: Air Traffic Technology International 2014." Pages 7-12.  
"Ocean Flying Becoming a Breeze with NextGen." Federal Aviation Administration. Feb. 27, 2014.

\* English Instructor/Aviation Researcher, USA



# “Sky Whale”, The Future Triple-Decker Aircraft: When Artist’s Imaginations Exceeds Engineering Limits

Oscar Viñals, who is a designer and an aircraft enthusiast from Spain, released details of what he sees as the future aircraft of air travel. AWWA “Sky Whale” as the name suggests is a massive concept with three decks and a host of new envisaged technologies. This concept has set very ambitious targets to meet as it is expected to be environmentally friendly through the reduction of drag, weight, fuel consumption, emissions, noise and maintenance costs. Theoretically, this aircraft is perceived to be one of the safest and most efficient planes in the sky. The designer has clearly taken on board the current research in aircraft technologies such as the use of advanced materials like super alloys, smart composite materials, high strength carbon nanotubes and fiber optic cabling.

Compared to the typical aircraft wing used today, the “Sky Whale” is designed to have self-repairing wings that will be longer from tip to tip. An active airDow control system made of an eccentric turbine inside the wing near to the fuselage is expected to redirect the laminar



Dr Mostefa Bourchak \*

airDow and turbulences and at the same time produce electric energy for the hybrid turbo-electric engines. The “Sky Whale” would be outfitted with four main engines, two of which are located at its tail. These engines are supposed to use both fuel to burn in the engine’s core, and electricity to turn the turbofan when the core is powered down. This electric energy should be made possible with the aid of projected advances in battery technology and the roof mounted solar cells that would also power the in-flight electronics. Take-offs and landings are supposed to happen with a shorter run than any existing aircraft through the rotation of the front engines to 45 degrees. All of these advanced systems would be controlled via a fly by

wire and a host of avionics that are assisted with active sensors located through the entire plane’s surface.

The “Sky Whale” could have a seating capacity of up to 755 passengers. The seats are allocated in three levels. First class on top with sky views and all conceivable luxuries for a trip in an airplane like this, business class in the middle floor with ample seats and sky views in front and finally a lower tourist class with all the comfort and space to have a pleasant flight. As a security measure, the aircraft main components such as wings and engines are designed to break automatically during an emergency landing to reduce damage to the fuselage where the passengers are.

Although Viñals made exquisite considerations of the existing aircraft technologies as well as emerging ones, the concept is just impossible to put into practice from an economic and engineering point of view. Many other simpler designs than the “Sky Whale” never made it passed the drawing board because of the impracticality of



those designs. Aircraft engineers would always argue that a good aircraft design has to be a safe design for passengers to start with. And even when the aircraft manufacturing giant Boeing tried to use few untested technologies on its latest design (the Dreamliner), it run into many issues that are currently costing the company a lot of time and money. Similarly, Airbus got so worried that they abandoned the idea of using unproven new technologies such as lithium-ion batteries on their latest aircraft the A350. This design would struggle because for example such a huge aircraft would take more jet fuel than would be cost effective for airlines. The proposed propulsion system can only work if scientist can figure

out a non-physical based fuel. Additionally, the envisaged solar cells mounted on the aircraft’s roof would not be able to power the in-flight electronics and provide extra energy to the hybrid engines with the best existing solar cells specifications. In fact, an equivalent amount of solar energy produced by a certain weight of solar panels can be easily produced by a much lighter amount of jet fuel.

In addition, the design is simply too big and would not find the necessary large airports to accommodate it. Anything bigger than the Airbus A380, which is built to fly in to airports that can accommodate Boeing 747s would not be able to use even the biggest of today’s airports. Aerodynamically, there are great

challenges. A wind tunnel test on a scaled-down model would easily reveal design deficiencies due to fuselage-wing interference due to increase drag and noise. Additionally, engines inside the wings increase the risk of losing ailerons or the whole wing in case of engine explosion. Even worse, having two engines very close to the aircraft elevators that are the primary control of the pitch is of a very high risk. Moreover, many people perceive large jets as environmentally very polluting due to noise, fuel consumptions and exhausts. Nevertheless, for now, the “Sky Whale” is an exquisite piece of aviation art ■

\* Aeronautical Engineering Department King Abdulaziz University mbourchak@kau.edu.sa



# Look this way, please

Eng. Ahmed Nada \*

As part of an effort to speed up the process of boarding an aircraft, from the moment of entering an airport, different yet similar solutions have been introduced around the world. London Gatwick Airport has committed to new technology in an attempt to enhance passenger end-to-end airport experience.

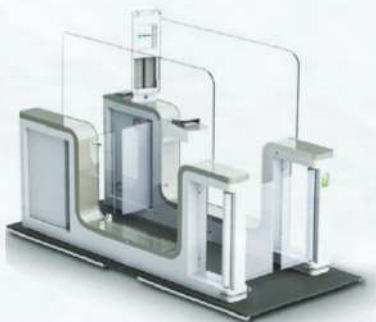
In June 2011, Gatwick Airport owners, Global Infrastructure Partners, invested £45 million in upgrades. A new security system was installed. It consisted of 19 automated gates that process 5,000 passengers per hour. The “MFlow Track” system scanned the passenger’s iris as well as the boarding card at the entrance and exit to the departure lounge to ensure that the same person entered or left. An “Mflow Journey” system was also installed to track passengers throughout the terminal (through facial recognition), in order to measure the amount of time spent in different areas of the terminal by each passenger.

The first generation system was upstaged in 2013, when a new generation of

15 ePassport gates was officially opened at Gatwick Airport. E-passport holders who arrive at the South Terminal may use the newly installed gates to breeze through the immigration process. To verify the identity of users passing through the gates, ‘vb i-match 5’ (which is the name of the eGate made by Vision-Box) uses biometrics, including iris, fingerprint and facial recognition. They can be used by anyone, 18 or older, with a UK or European ‘chipped’ passport. The gates use facial recognition to compare the passenger’s face against that which is digitally recorded in their passport. The data is then automatically checked against Border

Force systems and watchlists. The gates open once everything is verified to let the passenger through. If there is any reason to not let the passenger through, the system informs immigration officers who then decide whether a full manual process is needed. This ensures that security is maintained at the highest level as requested by the UK Border. Michael Ibbittson, CIO of Gatwick Airport, mentioned that there was a trial of automated baggage drop and check-in that also makes use of iris scanning and that self-boarding would also be possible in the near future, using this technology.

Vision-Box had also set up



24 ‘vb i-match 5’ eGates at the Lisbon International Airport and has been recently awarded a contract to deploy 64 eGates at all terminals of the Hamad International Airport in Qatar. This would be the largest deployment of eGates in the region at a single site. Vision-Box took part in the Passenger Terminal Expo this year in Barcelona and discussed its solutions and deployments, including a state-of-the-art air and land system in Finland. According to the company, ‘vb i-match is operationally sound and successfully deployed at Schiphol (NL) airport, the 6th busiest Airport in the World for international passenger traffic, and also in land, air and sea borders in the UK, Finland, Norway, Sweden, the Netherlands, Portugal, Brazil, Venezuela and Rwanda.”

Another type of solution was implemented by SmartGate. The next-generation biometric-based customs eGate, SmartGate Plus, is being piloted by New Zealand Customs Service at Auckland International Airport. The SmartGate system uses biometric facial recognition technology to automatically process eligible passengers at customs checkpoints, minimizing manual process. SmartGate is currently available to Australian, New Zealand and UK citizens, as well as US and Swiss e-passport holders on a trial basis, but



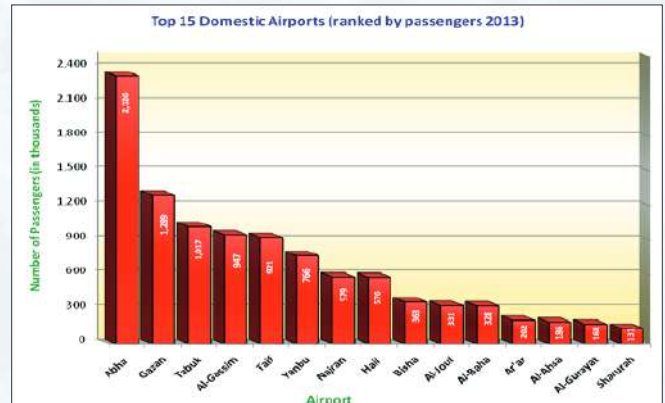
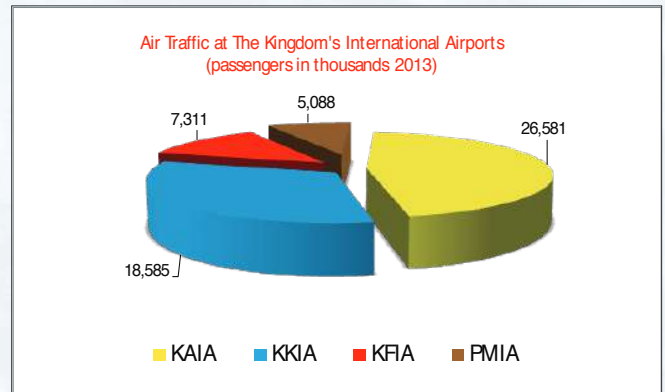
the latest expansion includes Singaporean travelers as well. Australian Customs and Border Protection’s SmartGate kiosks will be tried for outbound passengers for the first time. The trial will start in the first half of 2014 at Brisbane Airport. Australian and New Zealand e-passport holders can already make use of the eGates when they arrive at select airports, but this trial will enable the manual passport check for departing passengers to be replaced with an automated service that makes use of facial recognition technology.

The introduction of automated biometric eGates for passengers arriving or departing from airport terminals has proven to decrease passenger waiting times,

minimize intervention from authorities, maintain high levels of security, and increase the overall positive airport experience. The pilot programs and official installations of the different systems show that they are becoming more and more popular and practical for authorities and travelers. Several countries all over the world have installed or at least tried such systems in order to prepare for the increase of passenger traffic. The systems are also being updated and upgraded each year to further improve traveler experience as well as border security. Will biometric gates be superseded by even more advanced and better technologies in the future? One can only wait and ‘see’ ■

\* Engineer at Ericsson - Canada

Rank	Airport	'000( PAX)	Flights	Cargo in Tons	Change %		
					PAX	Flights	Cargo
1	KAIA )JED(	26,581	187,446	467,181	2.0▼	10.0▼	14.8▲
2	KKIA )RUH(	18,585	161,314	448,832	8.9▲	5.1▲	7.8▼
3	KFIA )DMM(	7,311	72,897	121,655	13.8▲	8.2▲	17.6▲
4	PMIA )MED(	5,088	41,116	7,822	7.4▲	10.0▲	25.1▲
5	Abha )AHB(	2,325.6	20,112	3,839.6	9.5▲	10.5▲	9.4▼
6	Gazan )GIZ(	1,288.9	9,485	2,456.5	10.8▲	8.7▲	5.7▼
7	Tabuk )TUU(	1,016.5	8,567	2,032.9	3.7▲	5.7▲	5.7▼
8	Al-Gassim )ELO(	946.9	9,185	909.2	22.7▲	24.6▲	13.8▼
9	Taif )TIF(	920.9	7,771	409.8	34.7▲	31.6▲	17.0▼
10	Yanbu )YNB(	766.3	7,707	274.9	20.4▲	12.2▲	23.1▼
11	Najran )EAM(	578.9	5,905	527.6	5.4▲	4.0▲	12.9▼
12	Hail )HAS(	575.8	5,027	1,092.0	18.0▲	15.4▲	7.1▼
13	Bisha )BHH(	363.4	3,573	123.9	7.5▲	7.2▲	3.0▲
14	Al-Jouf )AJF(	331.2	3,684	641.0	1.3▲	4.0▼	2.3▲
15	Al-Baha )ABT(	328.3	2,857	130.1	0.4▼	4.4▼	14.9▲
16	Ar-rar )RAE(	202.0	2,118	359.6	4.7▲	5.4▲	7.6▼
17	Al-Ahsa )HOF(	185.7	5,494	168.4	8.7▼	10.6▲	30.3▼
18	Al-Gurayat )URY(	168.2	1,664	314.1	1.4▲	1.0▼	1.8▼
19	Sharurah )SHW(	130.9	1,941	81.7	28.9▲	25.7▲	9.9▲
20	Al-Qaisumah )AQI(	129.5	2,166	118.3	15.7▲	15.6▲	18.1▲
21	Wadi Al-Dawaser )WAE(	110.3	1,982	10.0	14.7▲	21.7▲	20.3▲
22	Turaif )TUI(	52.8	983	24.4	3.0▲	3.9▲	19.6▲
23	Rafha )RAH(	52.7	922	29.1	21.1▲	25.1▲	17.1▼
24	Wedjh )EJH(	50.3	1,030	25.4	7.9▲	20.9▲	46.1▲
25	Dawadami )DWD(	21.4	434	8.1	10.9▲	0.7▲	75.0▲
26	Al-ula )ULH(	9.1	217	1.1	4.2▲	0.5▲	-
27	Rabigh )RGB(	-	-	-	-	-	-
<b>Total</b>		<b>68,120</b>	<b>565,631</b>	<b>1,059,068</b>	<b>5.2▲</b>	<b>1.2▲</b>	<b>4.0▲</b>



Source: Information Center & Statistical Studies (GACA)

### Conferences

### Conferences

## Forthcoming Aviation Conferences, Exhibitions & Seminars

15 May – 15 July 2014

**18 - 21 May**  
86th Annual AAE Conference & Exposition  
San Antonio, TX, USA  
events.aaae.org/sites/140501/index.cfm

**20 - 21 May**  
8th Annual Conference on Airport Development, Design & Engineering  
London, UK  
nceairports.co.uk/

**20 - 22 May**  
Loss of Control Inqight (LOCI) Symposium  
Montreal, Canada  
icao.int/meetings/LOCI/Pages/default.aspx

European Business Aviation Convention & Exhibition (14th EBACE)  
Geneva, Switzerland  
ebace.aero/2014/

**20 - 23 May**  
Cabin Safety Conference  
Madrid, Spain  
iaa.org/events/Pages/cabin-safety.aspx

**20 - 25 May**  
ILA Berlin Air Show  
Berlin, Germany  
ila-berlin.de/ila2014/home/index\_e.cfm

**21 - 22 May**  
Aviation IT Show China  
Shanghai, China  
cdmc.org.cn/2014/aic/index.asp

**22 - 23 May**  
34th Annual New York AirChance Conference  
New York, NY, USA  
euromoneyseminars.com/EventDetails/0/6330/34th-Annual-New-York-AirChance-Conference.html

**26 - 28 May**  
ACI Asia-Pacific World Annual General Assembly, Conference & Exhibition  
Seoul, South Korea  
aci-waga2014.com/

**27 - 28 May**  
AFI Aviation Safety Symposium  
Dakar, Senegal  
icao.int/meetings/aKyosposium2014/Pages/default.aspx

**30 May**  
Aircraft Disaster Response  
San Francisco, CA, USA  
aeropodium.com/adr.html

**30 May - 1 June**  
AeroExpo UK  
Sywell Aerodrome, Northampton, UK  
aeroexpo.co.uk/

**1 - 4 June**  
70th IATA Annual General Meeting (AGM) and World Air Transport Summit  
Doha, Qatar  
iata.org/pressroom/pr/pages/2013-06-04-01.aspx

**2 - 3 June**  
Airline Engineering & Maintenance  
Muscat, Oman  
airlineengineering-middleeast.com/

**3 - 5 June**  
AIRMED World Congress  
Rome, Italy  
airmed.eu/

**3 - 6 June**  
Connect: The International Aviation Forum  
Marrakech, Morocco  
connect-aviation.com/index.php?lang=0&page=home

**4 June**  
Kennedy Aviation Seminar  
Dublin, Ireland  
aeropodium.com/kennedy.html

**5 June**  
The Aviation Auction  
Bicester, UK  
miuevents.com/taa14

**5 - 8 June**  
AirPlus  
Istanbul, Turkey  
fiuarplus.com/-AIRPLUS-2014-/en-detail/fuar/52611/7

**9 - 11 June**  
African Aviation Summit: 23rd Air Finance for Africa Conference & Exhibition  
Addis Ababa, Ethiopia  
africanaviation.com/Home.html

**10 - 11 June**  
MRO BEER- Baltics, Eastern Europe & Russia  
Warsaw, Poland  
mrobeersaviationweek.com/beers14/public/enter.aspx

**10 - 12 June**  
134th Slot Conference  
Abu Dhabi, UAE  
iata.org/events/sc134/Pages/index.aspx

**10 - 13 June**  
ACI-NA Summer Board of Directors Meeting  
Kelowna, BC, Canada  
aci-na.org/event/4854

**11 - 12 June**  
AAA Airport Operations Forum  
Adelaide, Australia  
airports.asn.au/events/ops-swap-aaa-airport-operations-forum/

**11 - 13 June**  
12th Annual China AirChance Conference  
Shanghai, China  
euromoneyseminars.com/EventDetails/0/7133/12th-Annual-China-AirChance-Conference.html

**12 June**  
Aircraft Economic Life Summit  
Frankfurt, Germany  
everstevents.co.uk/events.asp?eventID=85

**12 - 13 June**  
2nd China Airport Development Summit  
Shanghai, China  
cdmc.org.cn/2014/cads/

**12 - 14 June**  
Cannes Airshow- 8th International Exhibition of General Aviation  
Cannes, France  
cannesairshow.com/index.php?lang=en

**15 - 17 June**  
ULTRAMAIN 2014 Software Forum & User Conference  
Albuquerque, NM, USA  
ultramain.com/

**16 - 18 June**  
ACI EUROPE 24th Annual Assembly, Congress & Exhibition  
Frankfurt, Germany  
aci-europe-events.com/annual-general-assembly/

**17 - 18 June**  
1st African Ground Handling International Conference  
Johannesburg, South Africa  
groundhandling.com/ghafrica/index.html

**17 - 19 June**  
AAAE Airport Emergency Management Conference  
Los Angeles, CA, USA  
events.aaae.org/sites/140405/

**18 June**  
British Aviation Group Summer Seminar  
London, UK  
adsgrp.org.uk/articles/40912

The Airports Forum  
Miramar, FL, USA  
nzairports.co.nz/w/airports-forum-june-wednesday-18th-june/

**19 - 21 June**  
Flight Attendants/Flight Technicians Conference  
West Palm Beach, FL, USA  
web.nbaa.org/events/fa-ft/2014/

Aviation Expo Europe  
Hradec Králové, Czech Republic  
aviationexpo.eu/

**22 - 24 June**  
The Route Development Forum for Africa  
Victoria Falls, Zimbabwe  
routesonline.com/events/168/routes-africa-2014/

**23 - 26 June**  
Marketing & Communications & JumpStart® Air Service Development Program  
Edmonton, Canada  
aci-na.org/event/3865

**24 - 25 June**  
Airline Ancillaries and New Revenue Management  
London, UK  
flightglobalevents.com/ancillaries2014

**24 - 26 June**  
Small Airports Conference in conjunction with the JumpStart® Air Service Development Program  
Edmonton, Canada  
aci-na.org/event/3866

**25 - 27 June**  
Regional Seminar on MRTDs and Traveller Identification Management  
Madrid, Spain  
icao.int/Meetings/mrtd-madrid-2014/Pages/default.aspx

**26 June**  
Business Aviation Regional Forum  
Van Nuys, CA, USA  
web.nbaa.org/events/forums/20140626/

**28 June - 1 July**  
CANSO Global ATM Summit & 18th AGM  
Dublin, Ireland  
canso.org/cansoagm2014

**30 June - 2 July**  
AAAE Global Airport & Airline Relations Conference  
Munich, Germany  
events.aaae.org/sites/140606/index.cfm

**1 - 2 July**  
Aviation Outlook Africa  
Johannesburg, South Africa  
terrappin.com/2014/

**3 - 4 July**  
ECAC/EU Dialogue: European air transport competitiveness  
Vienna, Austria  
ecac-eeac.org/1/index.php/conference/en\_dialogue+vienna\_2014/welcome

**6 - 8 July**  
Routes Silk Road  
Tbilisi, Georgia  
routesonline.com/events/171/routes-silk-road-2014/

**7 - 8 July**  
ERA Airline Presidents' Summit  
Brussels, Belgium  
eraa.org/events/era-airline-presidents-summit

**7 - 15 July**  
ICAO Meteorology Divisional Meeting  
Montreal, Canada  
icao.int/meetings/METDIV14/Pages/default.aspx

**8 - 9 July**  
Airline Engineering & Maintenance Safety  
London, UK  
flightglobalevents.com/aems14

**9 - 10 July**  
Fuel Handling & Quality Control Seminar  
Atlanta, GA, USA  
aviationpros.com/event/11347412/fuel-handling-and-quality-control-seminar

**13 - 15 July**  
AAAE General Aviation Issues & Security Conference  
Pittsburgh, PA, USA  
events.aaae.org/sites/140706/index.cfm

**14 - 20 July**  
Farnborough Air Show  
Farnborough, UK  
farnborough.com/

For over 20 years Arabasco has been the market leader in the Middle East for corporate aviation support service. Innovation and customer service have been key in Arabasco maintaining this position and Arabasco continues to grow its service portfolio.

- Arabasco provides premier FBO facilities at both King Abdulaziz International Airport – Jeddah King Khalid International Airport – Riyadh and our new facility at Yanbu Airport
- Arabasco maintenance services include Repair Station approvals for the Saudi Arabian Presidency of Civil Aviation, the US Federal Aviation Authority and the Aruban Registry.
  - Our highly qualified Engineering team have 2 or more industry qualifications: PCA Mechanics certificate, FAA A & P certificate or ICAO Type II License.
  - Recent addition to Arabasco services is our rapidly expanding aircraft management program where owners can relax in the knowledge that their high value asset is being well cared for.
- A new venture between Arabasco and Emirates National Oil Company (ENOC) in providing aviation fuel at Jeddah airport. The new company, United Gulf Aviation Fuel Company (UGAFCO), provides an efficient and competitive service to the aviation market.

Owners, passengers, pilots, engineers and cabin crew are all assured of a warm "Marhaba" from a team of dedicated professionals experience in delivering consistently high levels of customer service with facilities dedicated to the well being of our clients.

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# The new force in AVIATION



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A joint venture between Emirates National Oil Company (ENOC) and Arabian Aircraft Services Company (ARABASCO) was established to supply fuel to all type of private, commercial and military Aircrafts at King Abdul Aziz International Airport (KAIA) the second busiest Airport in the Gulf.

UGAFCO has been operational at KAIA since August, 2004 and extending fueling services to many International and General aviation customers through its state of the arts equipments with latest the Quality/safety features such as digital pressure control module, electronic meters and electronic tickets printers. The Company thrust in operation is to ensure the compliance of best practices in the Industry are followed at KAIA, conforming to the best International safety/Quality standards.

UGAFCO is the technology trend setter at KAIA and the only Company having AVR 2000 fuel data management system installed on all its equipments. Both ENOC and ARABASCO, the joint venture partners of UGAFCO believe in the development of latest technology and best trained personnel to maintain the highest Customers Services Standards. UGAFCO is committed for operational excellence.



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