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Aircraft's Long- term Market



Aviation can be fairly characterized as а



constantly adapting to various market forces, such as fuel prices, economic growth and development, environmental regulations, infrastructure, market liberalization, airplane capabilities, other modes of transport, business

models, and emerging markets. Despite the fact that the current economic environment is demanding statistics suggests that airlines are copying well. It is indicative that Boeing in their annual report forecast a demand for 35,280 new airplanes, valued at \$4.8 trillion until 2032. Boeing, projects that 14,350 of these new airplanes will replace older and less efficient airplanes whereas approximately 20,930 airplanes will be for fleet growth, stimulating expansion in emerging markets and innovative airline business models. Additionally, approximately 24,670 airplanes will be single-aisle airplanes and 8,590 will be wide-body. In order to further assess the development it would be useful to state that currently there are 900 airlines in operation with more than 20,000 aircrafts in service.

As it is already mentioned commercial fleet will grow from 20,310 airplanes today to 41,240 by 2032 growing by 3.6% per year. Single aisle will continue to dominate the world's market in the future as it does now. It is indicative that today, the single-aisle category comprised 64% of the world's fleet and by 2032, estimation is that share will rise to 70%. The forecasted demand for the next 20 years is 24,670 new single-aisle airplanes, valued at \$2.3 trillion, 37% of which will replace older airplanes, while 63% will expand the current fleet.



Additionally, Boeing forecasts that traffic on long-haul routes will grow by 5.1% annually over the next 20 years creating demand for 8,590 new wide-body airplanes. The largest markets for such airplanes for the next 20 years will be Asia Pacific, Europe, North America, and the Middle East, receiving nearly 92% of all new deliveries.

One key indicator which affects the market outlook is definitely the fuel costs, the constantly expanding cost of which are driving airlines to operate most efficient airplanes. Airlines are replacing small regional jets with larger regional jets. This trend continues in the single-aisle category. It is indicative that airlines that have ordered 737-700s are ordering 737-800s, and airlines that ordered 737-800s are ordering 737-900ERs. In the wide-body fleet, small- and medium-size airplanes are in greatest demand, representing 91% of the projected wide-body market.

Kyriazis Vasileios, Epicos Newsletter Head Editor

Asia Pacific and the Long- term Prospective for the Aircraft Market



The region expected to receive the biggest amount of airplanes during the next 20 years according to Boeing's estimation is that of Asia-Pacific. Also expected is the need of 12,820 new airplanes, valued at \$1.9 trillion. This actually means the total number of airplanes in the Asia Pacific fleet will nearly triple, from 5,090 airplanes in 2012 to 14,750 in 2032. Main

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reason for this development will be the new low-cost carriers and the increased demand for intra-Asia travel. The aforementioned is also reaffirmed by the fact that the International Air Transport Association (IATA) announced global traffic results for April and the carriers of the Asia-Pacific region recorded a year-on-year increase of 2.4%. Capacity rose 3.7% while load factor slipped to 76.9%.

The main reason resulted in the increase of the need for airplanes for the region is definitely the fact that Asia Pacific economies continue to exhibit strong growth. Mainly led by China and India, the region's economies is expected to grow on an average of 4.5% per year over the next 20 years, outpacing the world's average growth rate, while the region's share of world GDP will expand from 28% today to 36% by 2032.



As a result of this air traffic from and to Asia-Pacific will increase within the next 20 years. It is indicative that half of the world's air traffic will be produced from travels to, from, or within the region. Additionally, air cargo will play a significant role as it is expected to grow by 5.8% per year during the next 20 years. Carriers within the region are expected to take 370 new freighters, with an additional 490 conversions.

An additional positive development for the region is that changing regulations will liberalize the market and help carriers to expand beyond national boundaries. Additionally, new crossborder franchise agreements and direct investment in foreign carriers will allow established airlines access to new markets and promote expanded air service to smaller markets. Finally, the improved affordability and accessibility of air travel will stimulate demand in established markets and meet emerging travel needs of the rising middle class.

> Kyriazis Vasileios, Epicos Newsletter Head Editor

Epicos "Industrial Cooperation and Offset Projects"

epicos.com Epicos "Industrial Cooperation and Offset Projects" provides a unique set of online tools enabling the structure, identification and implementation of comprehensive Offsets programs, through a searchable database. By introducing different offset projects and ideas proposed by local A&D industry it ensures the optimum cost for Prime Contractors and reassures that the priorities of local industry are fully met...

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Helicopter landing training simulator / Ingress - Egress training



A company proposes the development and installation of a helicopter landing simulator which will provide complete training of soldiers/personnel on Ingress - Egress from/to helicopter under emergency and battle situations. Training will include emergency evacuation, search and rescue (SaR) missions, insertion/ extraction of special operation forces in/from "hot" battle zones, helicopter crashes with post-crash fires, and other relevant operational scenarios.

For Further Information Contact our ICO Department Mail at: g-menexis@epicos.com

Smart wearables for Future Soldier and Homeland Security applications



In today's rapidly transforming armed forces, the infantryman continues to play a central role in new operational scenarios. The infantryman has to operate in urban areas and under extreme climatic conditions supporting peace keeping operations in several countries all over the world. He has to confront new asymmetric threats, and frequently faces attacks from irregular forces. In this frame, a company with extensive experience in providing customized cutting edge solutions in the field of information technology, telecommunications and image processing is proposing the development of smart wearable to be used in several Future Soldier and homeland security applications.

The proposed wearables will pinpoint the exact location of Future Soldier, monitor biostatistics and atmospheric readings with precision, and relay this information by automatically switching between GSM/GPRS, UMTS, Wi-fi/Wimax, Tactical IP networks and satellite communications.

For Further Information Contact our ICO Department Mail at: g-menexis@epicos.com

Epicos- Amazon



Theoretical Aerodynamics, by Ethirajan Rathakrishnan



Aerodynamics

Theoretical Aerodynamics is a user-friendly text for a full course on theoretical aerodynamics. The author systematically introduces aerofoil theory, its design features and performance aspects, beginning with the basics required, and then gradually proceeding to higher level. The mathematics involved is presented so that it can be followed comfortably, even by those who are not strong in mathematics. The examples are designed to fix the theory studied in an effective manner. Throughout the book, the physics behind the processes are clearly explained. Each chapter begins with an introduction and ends with a summary and exercises.

Aircraft Noise: Assessment, Prediction and Control, by Oleksandr Zaporozhets



Aircraft noise has adverse impacts on passengers, airport staff and people living near airports, it thus limits the capacity of regional and international airports throughout the world. Reducing perceived noise of aircraft involves reduction of noise at source, along the propagation path and at the receiver. Effective noise control demands highly skilled and knowledgeable engineers. This book is for them. It shows you how accurate and reliable information about aircraft noise levels can be gained by calculations using appropriate generation and propagation models, or by measurements with effective monitoring systems. It also explains how to allow for atmospheric conditions, natural and artificial topography as well as detailing necessary measurement techniques. **Epicos Events**



F-AIR COLOMBIA 2013, 11-14 July, Rionegro (Antioquia), Colombia

With a participation of about 25 countries, over 200 corporate taxpayers in the industrial and commercial technology exchange in areas of civil aviation, commercial aviation, defense, technical maintenance, airport equipment and aerospace technology, with social contribution to the region and contribution the recognition of the country internationally, will be held the VI International Air Show from 11 to 14 July 2013 in Rionegro Antioquia.

For Further Information Click Here

ANDICOM 2013, 28-30 August, Las Americas International Convention and Exhibition Center, Cartagena de Indias, Colombia

ANDICOM creates the ideal environment and space to generate business, the exchange of ideas and strengthening of professional and business contacts.

For Further Information Click Here

Analitica Latin America 2013, 24-26 September, Transamerica Expo Center, Sao Paulo - SP / Brazil

The main target of Analitica is to be a platform to generate business opportunities for exhibitors and visitors, exhibiting novelties and the latest trends of the industry.

For Further Information Click Here