



**THE IMPACT OF AVIATION ON CLIMATE CHANGE** including aircraft and engine manufacturers, airports, airlines and air traffic control will see growing criticism over emission. Congestion at the hand of airlines and airports are likely to add to the pressure. Yet, air transportation has always been upfront when it comes to innovation by introducing new engine, airframe and wing technologies. Alternative (ethanol) fuels to replace oil-based kerosene and new combustion techniques are gaining momentum. „Will that be enough in the face of rising passenger numbers to grow by 5% annually which might off-set any advances in reducing emissions ?“

**A EUROCONTROL STUDY** identifies seven emitting gases affecting air quality starting with major contributors such as Oxides of Nitrogen (NOx) and Carbon Dioxide (CO<sub>2</sub>). Issues such as air quality at airports, how air quality could affect aviation, quantifying airport atmospheric emissions and managing air quality related emissions at the source are going to fuel the debate between the industry and the public.

13 ways to address emissions below 1,000 feet are singled out. The scope of action is set to avoid aircraft queuing on the ground, low emission aircraft departure procedures, continuous descent approach and low power-drag techniques, and single engine taxiing.

Handling agents can take actions by deploying electric vehicles or those driven by natural gas, avoiding combustion equipment running when not required, and ensuring proper vehicle maintenance. Airports can help reducing emissions by operating low energy terminals and airfield systems such as passenger bridges or aircraft parking in walking distance to terminals and most important increasing the use of public transportation, cycling or pedestrian access. Companies based at airports can encourage car sharing among their staff.

**THE EU-COMMISSION** is seeking advice from a number of panels and study groups which focus on climate change impacted by aviation. All see a high urgency for action: inclusion of emission trading into the emissions trading system, inclusion of all departing aircraft from European airports, and a need to identify all non-CO<sub>2</sub> emissions of aviation as well as other options to combat emissions likely to threaten the environment.

Emission trading schemes (ETS) based on revenue ton-kilometer (RTK) or available seat-kilometer (ASK) are presently under scrutiny. RTK based regulation clearly favors the LCC sector with its high load-factor per flight whilst ASK would help network carriers due to their high fluctuation in seat occupancy throughout the week. The EU plan spurs energy producers to cut emissions by allowing the sale of surplus licenses. In any case, airlines are advised to cut emissions disregarding what the EU might decide.

**AIRCRAFT CONTRAILS** produce about 4% of the annual global CO<sub>2</sub> emissions from fossil fuels near the Earth as well as at higher altitudes starting at 25,000 feet. They also produce condensation trails in the atmosphere about 25,000 ft. above ground absorbing heat from the earth instead of allowing it to escape. Right now the effect is small but growing. The scientific community is uncertain about the impact of contrails on climate change. They believe that persistent contrails, those that last longer than a few minutes, gradually develop into cirrus clouds. If this is in fact true, then this continual increase in cloudiness may lead to climate change because it will change the amount of radiation entering and leaving the earth's atmosphere (source NASA – safeguarding our atmosphere).

**ENVIRONMENTAL CHARTAS** have been adopted by EuroAirport Basel-Mulhouse-Freiburg and Strasbourg stipulating goals and measures to reduce energy consumption, noise, and all emitting sources which affect air quality.

**LOW-COST CARRIERS** may have to weather political blame making air travel too cheap. If this is the case, network airlines will be happy to give a hand to constrain the sector. That is why EasyJet is out for arguments in defense of low-cost travel. „We are on the verge of technological advances that will lead to solid reductions in emissions, which have not yet been factored into the environmental forecasts about our industry“.



**STRATEGIC RESEARCH AGENDAS** pin down essential research and development efforts to address aspects of quality related to air transportation. They include designs of life-cycle values as well as tools and processes in new and existing aircraft with much less lead time.

Responding to the increasing demand of passenger and airfreight services as well as to environmental pressures will require solutions that provide ambitious and balanced characteristics.

Some solutions will need to be novel in concept even if the introduction of these concepts must be preceded by the introduction of intermediate changes in products and operating systems within the air transportation system.



### TRAFFIC REPORT – EUROAIRPORT

#### January 2007

Scheduled Passengers	249,547	+ 14%
Charter Passengers	17,977	- 8%
<b>Total Passengers</b>	<b>268,257</b>	<b>+ 12%</b>
General Airfreight in to.	1,067	+152%
Express Airfreight in to.	2,276	+ 14%
<b>Ttl. Airfreight handled</b>	<b>7,842</b>	<b>+ 14%</b>

Scheduled Movements	3,759	+ 2%
Charter Movements	203	- 19%
Freighter Movements	303	+ 4%
<b>Ttl. Aircraft Movements</b>	<b>5,880</b>	<b>+ 0%</b>

#### February 2007

Scheduled Passengers	269,864	+ 25%
Charter Passengers	17,267	- 9%
<b>Total Passengers</b>	<b>287,824</b>	<b>+ 22%</b>
General Airfreight in to.	1,331	+141%
Express Airfreight in to.	2,200	+ 23%
<b>Ttl. Airfreight handled</b>	<b>8,031</b>	<b>+ 23%</b>

Scheduled Movements	3,778	+ 10%
Charter Movements	187	- 22%
Freighter Movements	276	+ 3%
<b>Ttl. Aircraft Movements</b>	<b>5,790</b>	<b>+ 7%</b>

<b>PASSENGERS to/from</b>	January	February
London-City	6,279	6,279
London-Heathrow	9,180	10,120
London-Luton	11,801	12,612
London-Stansted	7,337	7,591
Liverpool	5,571	6,295
Manchester	661	1,408

**CAA FIGURES** offer valuable information about passenger volumes from UK airports to continental Europe. Regarding Basel-Liverpool and Geneva-Liverpool traffic proves identical when taking summer counts as baseline. Market research ex Geneva to Bristol, Edinburgh, East Midlands, Newcastle may also support conclusions that services from the EAP to those cities will find a market. The number of frequencies however will depend on the size of aircraft in service. It is well known that EuroAirport is seeking new services to the UK other than those currently offered to London, Liverpool and Manchester.

The airport is in reach for six million people living 90 minutes away from the EAP of whom 3.2 million reside within a 60-minute car ride from EuroAirport. It is understood that each destination attracts different clientele.

The Basel Chamber of Commerce is presently evaluating a survey conducted among 2,000 companies in regard to their travel preferences (destination, frequency, day(s) of travel, number of trips etc.). Results are expected in April.

Flights from Geneva to Bristol and East Midlands saw most bookings of all destinations under review between May and November 2006 (Bristol (54,672, East Midlands 54,115). Figures released by Geneva also delivered data on booking patterns by age. About 6% of passengers are 19 or under, followed by 20% between 20-30. People belonging to age groups of 30-39, 40-49 and 50-59 travel the most reaching 25% per segment. Those 60 and older account for 20% of all passengers. Most of them travel alone (50%) or pairing up (30%). 3.3 million of them booked an EasyJet flight. Trips of one-two day duration scored highest (36%), followed by 5-7 day trips (30%). Passengers travel preferably point-to-point.

### March Freighter Movements

#### SUMMER CHARTER NEWS

seat capacity on charter flights operated by Tunis Air	to	from	# seats	Tour Operator
Djerba	EAP		15,560	FTI
Djerba	Geneva		8,570	Hotelplan
Djerba	Zurich		8,060	Hotelplan
Monastir	EAP		13,100	FTI
Monastir	Geneva		4,540	Hotelplan
Monastir	Zurich		2,010	Hotelplan
Monastir	Zurich		7,560	TUI Suisse

#### Airlines flying to North Africa from the EAP # seats

Aigle Azur**	Algiers	1x week	5,000
	Constantine	3x week	15,100
Air Algerie**	Constantine	1x week	5,000
Atlas Blue	Marrakech	3x week	15,100
Hello	Agadir*	1x week	2,600
	Djerba	1x week	4,600
	Tunis	1x week	3,500
Khartago	Djerba	1x week	4,300
Nouvelair	Djerba	3x week	15,000
	Monastir	2x week	9,000
SWISS	Djerba/Monastir	1x week	4,300
	Tunis*	1x week	2,800

\*during high season July-October \*\* additional flights planned



747-200F of MK Airlines – Picture by Joel Vogt



A POLET ANTONOV AN124 - Picture Marc Seidel