



# ***FASTEN YOUR SEAT BELTS***



We are standing at the beginning of a new century. Every big manufacturer is trying to overstep the bounds of possible. Aeroplanes manufactures are trying new materials, new designs, new structures in order to reach higher altitudes, to reduce fuel consumption and to obtain higher speed. Those two big companies are BOEING and AIRBUS.

Boeing is developing the Dreamliner 7E7 airliner. Though 7E7 is smaller than 747-jumbo jet, the stuff believe that the efficiency in fuel consumption and its flight range would make from the 7E7 a big success in commercial jet competition.

In Europe, Airbus engineers are already in the production stage with the Airbus A380. This one is so large that its wingspan skirts the edge of acceptable size for some airports. Larger than the Boeing 747, the A380 has already attracted orders from European airlines.

The minutest details of the 7E7 Dreamliner are still being worked out, but officials say that a „firm concept” is in hand, allowing engineers to move forward on specific aspects like structural capabilities and flight control.

They are thinking to make three different versions of the aircraft. A baseline version of 186 feet (57.6 meters) in length, with a passenger capacity of 200 passengers in a standard three-class setup and a range of about 7,800 NM (14,445 km). A stretch version of the plane of 202 feet (61.6 meters) should seat up to 250 passengers in three classes and cover a range of 8,300 NM (15,371 km). Finally, a shorter-range 7E7, with a 300-person single class seating arrangement, should be able to ferry passengers and cargo 3,500 NM (6,482 km).

Airbus A380 designers have taken almost the opposite course of their Boeing counterparts, deciding to supersize a jumbo jet to boost range and passenger capacity.

With a wingspan of more than 261 feet (79 meters), the A380 comes close to be too big for most airports. During the plane’s development, Airbus project managers have worked closely with more than 70 major airports around the world to ensure their aircraft can land. The first operational A380 is expected to take off at the beginning of 2005.

The basic version of the A380 will carry 550 passengers seated in a three-class seating arrangement spread out

over two decks and four aisles. A single-class arrangement would seat up to 840 people inside the double decker plane, over 300 more than the 747. By increasing the passenger load of a single airplane, aircraft like the A380 allow airports to control costs by accommodating more travelers without the necessity of building more runways or terminals.

The maximum range of the A380 should be about 8,000 NM (14,800 km), with 13 percent more fuel efficiency than its closest competitor, the 747. Plans for a shorter-range freighter, the A380F, are already underway, with larger or smaller passenger versions to be developed, depending on market demands.

Both Airbus and Boeing hope their new planes would take the long-range flight market to the next level, serving what is anticipated to be a steady growth in commercial air travel over the next decade.

In the same time, on the ground, is developing a process of bringing up-to date the navigation system, improving communication system and modernizing control centers. The evolution of Air Transport in Europe, the reorganisation of EUROCONTROL together with the ECAC Transport Ministers adoption of the EUROCONTROL strategy for the Years 2000+, have created a new framework for the development of the Air Traffic Management (ATM) system within European Civil Aviation Conference (ECAC). This development is handled by the European Air Traffic Management Programme (EATMP), of which EUROCONTROL is the managing agent.

Air Traffic Flow Management (ATFM) represents an important part of the complex ATM network and is covering, with other domains (Airspace Organisation and Management, Airports, ATC Data Processing, Aeronautical Information), the entire range of elements to support the EUROCONTROL ATM 2000+ Strategy. And all this exist for only one reason: SAFER SKY SO ARE YOU READY FOR TAKE OFF?