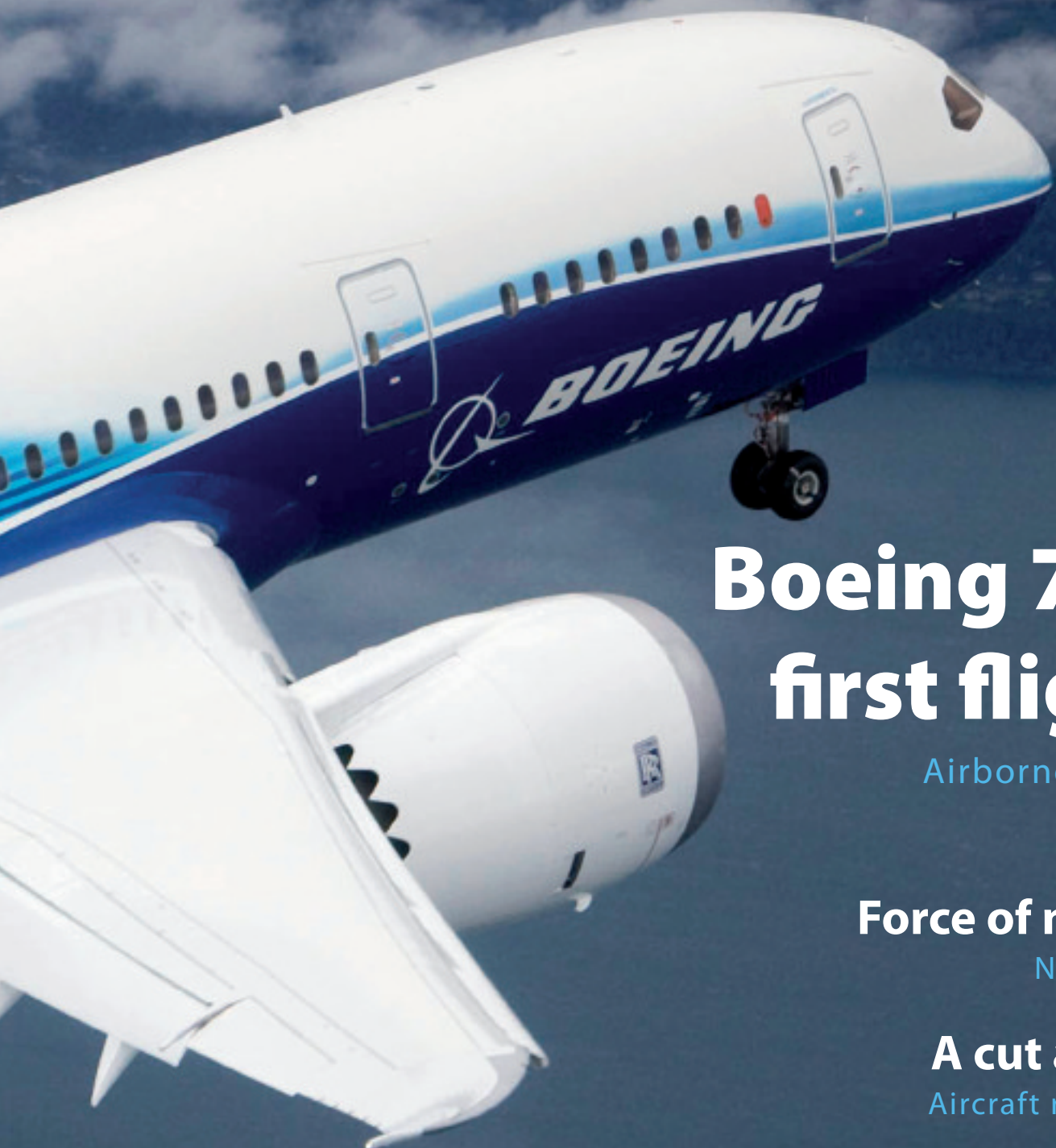


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Boeing 787 first flight

Airborne at last

Force of nature

Nature Air

A cut above

Aircraft recycling



Turkish delight

MyTECHNIC has become the first company to be awarded Green Company status within the Green Airport Project initiated by the Turkish Directorate General of Civil Aviation

Opened in September 2008, myTECHNIC Aircraft MRO Services is based at Istanbul Sabiha Gökçen Airport, which is located on the Asian side of the Bosphorus. The \$65 million hangar stands on 60,000m² of land and is a three-floor building with 15,400m² of hangar space (capable of holding up to 12 narrowbody aircraft). Unusually, 24,800m² of workshops, offices and storage area, and 6,000m² of engine shops, are located on two lower floors. This required some 300,000m³ of earth to be moved during construction to enable the hangar to be built onto the side of the airfield. This method of construction means that the building is heavily insulated, requiring less heating. It also minimised land usage and maximised functional use of the space.

This is just the most obvious of the environmental measures and principles that have been adopted by the company, says Remzi Saltoğlu, Commercial Director, and, while it might be

thought that a brand new enterprise would be more focused on business development, the owners of myTECHNIC have consciously kept the environment at the centre of their thoughts as well. Of course, this was an immediate advantage when the Ministry of Transportation, through the Directorate General of Civil Aviation (DGCA), launched the Green Airport Project in July 2009, which is aimed at systematically mitigating and eliminating environmental damage caused by the companies operating at airports. In addition, its internal management systems required as part of its ISO 8001/9001/14001 approvals aligned about 90% with the DGCA requirements.

As a result, after the evaluation and assessment procedures were completed in September, myTECHNIC became the very first recipient of the Green Company title. At the time, Dr Ali Ariduru, Director General of Civil Aviation, said: "For the last four years, we have been making efforts to

increase service quality in airports, to ensure compliance with international standards and to offer convenience for passengers. Today, we see the output of such efforts. Now that we have initiated the Green Airport project, our airports will become environmentally friendly."

The company has approvals for the Airbus A300B2/B4/F4; A300-600; A310-200/300; A319/320/321; Boeing 737-300/400/500; 737-600/700/800; 757-200; and McDonnell Douglas MD-80 Series. Engine work, for the moment, involves just the General Electric CF6-50, although approval is imminent for the Pratt & Whitney JT8D-200 Series, and will be followed by the CF6-80. A Boeing 767-200/300 airframe capability will be added in the near future. Component support includes wheels, tyres and brakes; electrics and electronics; and life vests, slides and rafts. However, under the terms of an agreement, some component repair work will be outsourced to Turkish Technic where

The most striking feature of the hangar is the translucent polycarbonate walls. The light levels are more than adequate even on cloudy days, while the top panels provide a splash of colour
(photo: Ian Harbison)



myTECHNIC does not currently have a particular capability, and there will also be economies of scale to be gained from the larger partner's purchasing power. Despite the industry's current problems, Saltoğlu says business has been brisk, as the Turkish airline industry has been doing well. Other key customers include Saudi low-cost carrier Sama Air for five Base Checks on its 737-300s.

The main feature of the hangar is the use of translucent polycarbonate for its external walls. Even on dull days, there is sufficient light inside the hangar to meet EASA requirements, and no artificial light is required. One section of the hangar is used for painting and the company has now installed plastic curtains to provide a completely enclosed area, with portable suction devices to filter the air and remove paint residue. He says the amount of paint being used has dropped as a result of these improvements. Almost all the vehicles used in the hangar are electric, except for specialised ramp equipment, such as aircraft tugs. All conventionally powered vehicles used in the facility do not need to be registered for road use, but the company carries out regular checks to ensure that exhaust

emissions meet the legal requirements and results are stored for analysis. Underfloor heating in the hangar and in the rest of building is provided by natural gas, which minimises the carbon footprint of the power supply. With the system producing heat exactly where it is needed and relying on natural convection, the level of heating required is much lower.

The company placed great emphasis on Lean management and best practices in the design phase of the new facility, as well as in day to day operation. This meant that many potentially harmful processes were avoided completely, while many environmental and sustainability features were introduced from the start. For example, engines from aircraft in the hangar can be delivered by an 8-tonne lift straight into the shop on the lowest floor. The cleaning line for the engine shop has double-skinned containers for the various chemicals, which reduces the energy needed to heat them and maintain the correct temperature. The chemicals only need to be changed every three years, when they will be removed and treated by a specialist company. There is also a sophisticated air extraction and filtration system.

The cleaning line for the engine shop has double-skinned containers that maintain temperature with less energy, as well as a sophisticated air extraction and filtration system
(photo: Ian Harbison)

The office space was not excluded from Lean and environmental practices. By using glass panels throughout, and retaining the natural colour of the concrete for aesthetic purposes, there was less initial material usage and additional waste through maintenance. With an open office design, there is less equipment duplication and no dividers are necessary. This enhances the company's concept for a flat organisation and transparency.

As well as use of the logo, Green Airport status also brings a 20% discount on the renewal fees of certificates of enterprise authorisation, licences and certificates to be paid to the airport. Saltoğlu says DGCA has been very clever with the scheme, as a 50% discount is available if every company in the airport, including the airport operator, can meet the requirements. That means myTECHNIC is now in discussion with the passenger terminal operator and Turkish Technic, which is involved with two other maintenance facilities at Sabiha Gökçen. ■