

Indian airline meets market challenges with Honeywell APU

Honeywell 131-9A APU helps GoAir increase its competitiveness in fast expanding market with faster turnarounds, fuel savings and on time departures



Overview:

Domestic air travel in India is highly competitive and GoAir, founded in 2005, is relying on Honeywell's 131-9A APU to help it stay ahead in the market by providing on time departures, faster turnarounds, fuel savings and the ability to operate at airports with limited ground infrastructure. GoAir is pleased with the proven results of the APU and has now selected it for the next batch of A320s it has on order.



AT A GLANCE

Customer

Name: Go Airlines (GoAir)
Location: Mumbai, India
Industry: Aviation
Website: www.goair.in

Honeywell solutions

131-9A APU

Why Go Air chose Honeywell

- ▶ 131-9A APU offers superior performance, enabling faster turnaround times and lower operating and maintenance costs
- ▶ System provides faster MES and ECS performance, superior high altitude start and shaft power capability
- ▶ The APU saves nearly 25 per cent on maintenance costs due to its higher reliability

Customer results

- ▶ Saving of 3.3 per cent on fuel
- ▶ Quicker turnarounds to maximise aircraft utilisation
- ▶ Ability to operate at high altitude airports and those with limited ground infrastructure



Background

GoAir is an Indian low-cost airline based in Mumbai. In service since 2005, it currently operates a fleet of 14 Airbus A320s across 21 destinations within India, making approximately 700 weekly flights. GoAir also has six A320s and 72 A320NEOs on order.

Indian domestic air traffic has been booming since 2004 and was up 19 per cent to 52 million passengers in 2010. According to industry estimates, demand is expected to rise to 120 million passengers by 2020 and the market is now served by a number of low-cost and full service carriers, each of them keen to win market share and competing aggressively.

To succeed, airlines are faced with several demands: low fares, on time performance and good passenger service, while building brand loyalty and a wider route network. Airlines need to make efficient use of their aircraft and that means they must cover as many sectors as possible. Faster turnarounds, irrespective of ground infrastructure limitations, are vital to achieving this efficiency.

The auxiliary power unit (APU) is one of key onboard systems that allows for faster turnarounds. Typically located in the tail of the aeroplane, APUs can provide power to an aircraft when the main engines are not available and are used for:

- powering main engines start (MES)
- providing pneumatic power for environmental control systems (ECS)
- driving power for other pneumatic and hydraulic systems
- backup power during in-flight operations
- powering ground operations

With 20 basic models and 41 variants, Honeywell APUs are found on the majority of aircraft worldwide. Since 1952, Honeywell has delivered more than 64,800 APUs, used in more than 150 applications.

Business Need

In order to maximise revenues, GoAir's aircraft operate 8-9 short-haul flights per day and destinations include cities where airport ground power infrastructure is limited or even non-existent. The scale of the Indian geography also requires GoAir's A320 fleet to cope with operations at high altitude airports as well as dramatic changes in temperature, humidity and pollution levels.

Such operational requirements put a high dependence on the APU to ensure faster cabin cooling and timely engine starts to enable quicker turnarounds and on time departures. GoAir can also reduce operational costs by avoiding the need to use ground power systems. While ensuring high APU availability, the carrier needs to contain APU operational and maintenance costs and, with spiralling fuel prices, identify ways to reduce fuel consumption.

In summary, GoAir wanted its APUs to maximise the effectiveness of its A320 fleet, ensuring passenger comfort while saving on operational and maintenance costs, regardless of the location.

Solution

Honeywell's 131-9A APU, which is a selectable option on Airbus A320 family aircraft, provides the best value to GoAir as it offers superior performance, enabling faster turnaround times and lower operating and maintenance costs as it:

- provides faster MES performance
- provides best-in-class ECS performance with cabin cooling in the least time
- provides superior high altitude start and shaft power capability as demonstrated to 41,000ft
- reduces on-wing maintenance time by faster LRU or APU replacements due to modular design
- saves nearly 25 per cent on maintenance costs due to higher reliability
- reduces delays and cancellations resulting from APU no starts by 40 per cent
- saves 2.5 per cent fuel with de-rate vs standard settings
- saves 3.3 per cent fuel with de-rate vs competition

De-rate modification is quite simple as it involves changing electronic control box (ECB) settings via the data memory module (DMM). MES performance is not affected by this change, while ECS performance exceeds the envelope. Operators are considering seasonal and environmental conditions in switching between standard and de-rate settings to save fuel.

Honeywell's 131-9A APU has been a preferred choice by airlines across the world since its introduction in 1998 for Airbus A320 series aircraft. Nearly 70 per cent of new A320 family aircraft delivered in 2011 were equipped with the 131-9A, testimony to the airline industry's strong confidence and recognition of the cost of ownership benefit

Benefits

GoAir has used Honeywell's 131-9A to meet its requirements on the A320 fleet since launch. Recently, it de-rated APUs across its fleet and is now making substantial savings on APU fuel consumption. Operations at high altitude airports, particularly Leh, are also meeting expectations.

The airline has consistently recorded the highest load factors in the industry, with an average load factor of 86 per cent achieved through a mix of on-time performance, consistent quality of customer service and competitive fares.

Proven operational results gave GoAir the confidence to extend the Honeywell 131-9A APU selection to its next ten A320s that it will take delivery of.



“GoAir is very satisfied with Honeywell’s 131-9A and sees this as a long-term solution as it provides market leading performance on crucial criteria and improving our competitiveness”

Mr Babu Peter
EVP engineering
GoAir

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