

Strategic Consulting

Safety Management - Safety Leadership



POA Certification – NPO Saturn



Baines Simmons was asked to assist Russian Engine Manufacturer, NPO Saturn, with the EASA POA and Maintenance organisational approval processes. Through close working with NPO Saturn's management and implementation teams, Baines Simmons was able to fully contextualise the intent of the regulations, helping NPO Saturn understand the organisational factors required for successful implementation of the EASA regulation.

Client Profile

NPO Saturn is one of Russia's largest independent aero-engine and gas turbine manufacturers, being part of the United Engine Corporation (UEC). Formed from the merger of the design and manufacturing elements of Lyul'ka-Saturn and KBM Design Bureau in the early 1990's, the organisation is renowned for engines such as the AL-41 as used on the Sukhoi SU-34 and as joint partner in the Powerjet Engine venture creating the SaM146 for the Sukhoi Superjet100 regional airliner. With over 18,000 employees, and a further 70,000 in the wider UEC, the organisation serves a diverse base of clients from both the civil and military aviation sectors and the energy industry.

The Challenge

The client outlined a scope of requirements, requesting assistance including:

- ▶ Interpretation and application of EASA Part 21 Subpart G Production Organisation Approval.
- ▶ Interpretation and application of EASA Part 145 Maintenance Approval.
- ▶ Identification of risks and benefits of single company approvals.
- ▶ To understand how Human Factors is core to the successful implementation of the regulation.

The Solution

Over a period of 14 months Baines Simmons provided an expert senior consultant to the project who agreed scope, timetable, project activity and deliverables. Support was provided both on-site in the city of Rybinsk and remotely.

As a result, Baines Simmons provided a number of facilitated on-site training days to NPO Saturn's Management and implementation teams. These sessions were delivered through a Russian translator to such great effect that open discussion on the intent of the regulation was widespread.

“The award of the POA by EASA is an historic event, not just for NPO Saturn but also for the whole Russian nation. It places us on the same business basis as the world's leading gas-turbine machinery manufacturers and opens up the opportunity for us to do business with the aviation industry across the whole of Europe.

‘We recognise Baines Simmons’ indispensable contribution to the attainment of the world-class quality assurance system that enables NPO Saturn to demonstrate compliance with all the international and domestic airworthiness requirements.’

Sergey Antropov, Quality Director, NPO Saturn

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The Outcome

In April 2012, NPO Saturn was issued an EASA Part 21 POA to support the manufacture of the SaM146 engine.

The certification by EASA means the manufacturer is now free to independently produce the SaM146 engine for the European market. It can also place orders with other Russian and foreign businesses and autonomously select suppliers for the company's SaM146 engine programme. This directly led to the rapid boost in production of the engine from 48 units in 2012 to 96 in 2013.

On a separate positive note, April 12th is Cosmonautics Day in Russia, marking the anniversary of man's first flight into space by Soviet Yuri Gagarin. NPO Saturn similarly achieved its own historic milestone on the same day by becoming the first Russian aircraft engine manufacturer to be able to competitively tender in the European market for these state-of-the-art products.

Baines Simmons continues to work with NPO Saturn to ensure that in addition to its POA certification, the company achieves an EASA Part 145 Maintenance approval by the end of 2012.

Summary of Baines Simmons services utilised

Consulting support

Human Factors & Error Management

Training courses

Facilitated on-site customised training days – Human Factors

EASA Part 145 – Successfully applying the Regulation

EASA Part 21 Subpart G – POA Essentials