



# Flight Safety and Aviation Security

Flight safety and aviation security have always been a top and unconditional priority for Aeroflot Group. PJSC Aeroflot complies with Russian and international standards in flight safety.

## Flight safety

Flight safety level is assessed with an integrated indicator calculated as the number of aviation incidents (taking account of their overall flight safety impact) to fleet flight hours.

The flight safety index for Aeroflot Group was 99.261% in 2019, staying comfortably within the 99.000%–99.9% average range for this indicator. The flight safety index for Aeroflot airline was 98.932%, below the 2019 target (99.957%).

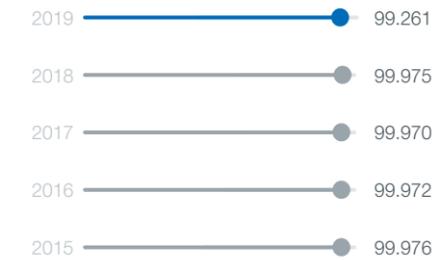
The lower 2019 indicator for Aeroflot airline vs 2015–2018 was due to the 5 May 2019 aviation incident with SSJ 100 aircraft that had an impact on the Group’s indicator of flight safety level as well.

The Safety Assessment of Foreign Aircraft (SAFA) ratio improved in 2019 vs previous years, down to 0.17 for Aeroflot Group and 0.27 for Aeroflot airline, driven by fewer irregularities reported by EU SAFA ramp inspections (conducted by ECAC inspectors under the SAFA programme in Europe), reflecting Aeroflot Group’s successful efforts in this area.

The SAFA ratio for the Group companies does not exceed the Blacklist threshold (Ratio ≤ 2) and as such meets the EU requirements as well the target ratios set by the Company (Ratio ≤ 0.95). Aurora airline was not subject to any inspections under the SAFA programme as the company did not offer flights to Europe.

### Flight safety level for Aeroflot Group

**99.261%**

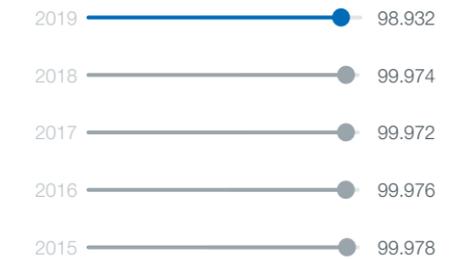


PJSC Aeroflot conducted regular inspections in 2019, including:

- airport refuelling facilities via the IATA Fuel Quality Pool (IFQP)
- monitoring of Aeroflot Group’s fleet for compliance with SAFA ramp inspection requirements, inspections of aircraft, safety equipment and on-board documentation
- apron inspections at Sheremetyevo airport and quality inspections of ground handling and maintenance

### Flight safety level for Aeroflot airline

**98.932%**



- inspections of airport readiness for ground handling and maintenance in relation to the launch of new scheduled flights
- inspections of airports covered by Aeroflot airline’s route network and representative offices
- daily inspection of Sheremetyevo airport’s airfield for bird activity control measures, inspection of wildlife management equipment and utilization of advanced technical developments.

Operational Review  
continued

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Inspections run by the Federal Air Transport Agency and Federal Service for Supervision of Transport (Rostransnadzor) commissions reaffirmed Aeroflot's ability to operate safe commercial flights as required by the Federal Aviation Rules.

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PJSC Aeroflot's Safety Management Committee plays an important role in flight safety management. The Committee's main responsibilities include risk analysis and development of measures to achieve targets for flight safety and prevention of aviation incidents. In 2019, flight safety management system development measures included an operational risks analysis followed by recommendations and mitigation proposals and capability expansion of the Flight Safety Risk Manager IT system.

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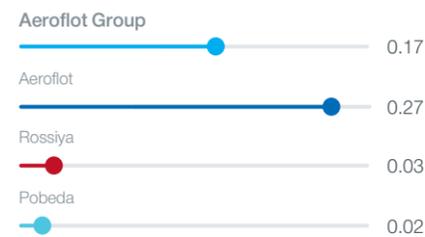
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PJSC Aeroflot continues to develop its voluntary reporting system. Under the initiative, employees can submit reports in the Voluntary Reporting section on the Company's intranet. All reports are reviewed and processed, with corrective action developed as necessary.

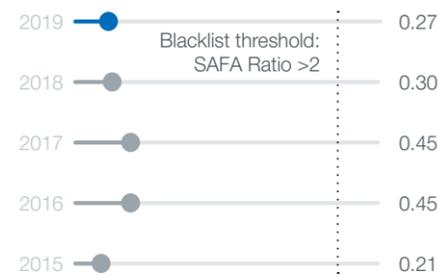
The company implements innovative technology to further improve flight safety management. A research project to study the possibility of building a predictive model of aviation incidents frequency in specific flight conditions was launched in 2019. The study covered the search for and analysis of external and internal data on aviation incidents and a review of possible approaches to using machine learning in predicting aviation incidents.

Aeroflot takes an active part in industry activity on aviation security and flight safety. For example, in 2019 Aeroflot participated in a meeting at the Federal Air Transport Agency to discuss the Civil Aviation Flight Safety Programmes project.

SAFA ratio for Aeroflot Group airlines, 2019



SAFA ratio for Aeroflot airline



Aviation and transportation security

In 2019, Aeroflot participated in the scheduled audit of the Russian Federation under the Universal Security Audit Programme Continuous Monitoring Approach (USAP-CMA). ICAO's audit findings noted the high level of aviation security at PJSC Aeroflot, consistent with best international practice.

Aeroflot has measures in place to ensure a high level of aviation and transportation security, as well as passenger and employee health and safety through liaising with airport security services, airlines and law enforcement authorities.

The Company continues to develop an automated aviation security management system. Authorised Company employees have access to information about real-time aviation security system status. The system helps monitor compliance with the standards set by the airline's Security Programme, recommended ICAO and IATA standards, and laws of destination airport countries.

Aeroflot continued to develop its canine service, a biotechnical system for systematic security monitoring of infrastructure facilities and transport.

The biotechnical system performs olfactory monitoring of Sheremetyevo airport facilities to detect explosives and explosive devices. These additional security measures using trained dogs and Aeroflot's innovative developments in this area attract a lot of interest from ICAO experts and canine handlers at international airports.

The Company is actively involved in developing the Russian legislation on aviation and transportation security. Aeroflot is represented in the Inter-Agency Working Group on Aligning Aviation and Transportation Security Regulations and the Inter-Agency Working Group on Transportation Security Equipment Certification, established by the Russian Ministry of Transport.

The Company's experts continued their longstanding involvement with SkyTeam Aviation Security Functional Experts (ASFE) group. For many years, Aeroflot's representatives in ASFE have led the experience sharing programmes to address unruly and disruptive passenger incidents.

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STRATEGIC REPORT

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