COLD WEATHER OPERATIONS — AIRBUS A330 / A350

Airbus A330-200/300/800/900 and A350-900/1000. Exact variant, engine, and installed simulation model requirements govern.

FOR FLIGHT SIMULATION USE ONLY | EDITION 1.0 | EFFECTIVE 01 NOV 2026

1.0 GENERAL & FLEETWIDE APPLICABILITY

This AAVA Hub Operations supplement establishes fleetwide cold-weather expectations for the Airbus A330 and A350 families. It applies across all AAVA divisions, codeshare/partner flying, Heritage, cargo, charters, Virtual Contractors and events regardless of branding or callsign.

Order of authority: the aircraft/engine/installed add-on FCOM, QRH, AFM, FCTM, performance data and limitations control aircraft-specific system actions. This document complements — and does not replace — those publications. Evaluate actual and forecast precipitation, aircraft condition, taxi delays and contaminated-surface reports before operating.

2.0 CLEAN AIRCRAFT CONCEPT & PRE-FLIGHT

Do not depart with prohibited frost, snow, slush or ice on critical surfaces. Any aircraft-approved exception must be specifically established in the applicable aircraft documentation. The Captain retains responsibility for an appropriate clean-aircraft decision before takeoff.

- Check wings/leading edges, tailplane, flight controls and gaps, engine inlets, probes/ports, sensors and other variant-defined critical areas. Assess areas not visible from the flight deck; a cabin-window observation is not a universal substitute for an approved inspection.
- Inspect for ice ridges on the lower nose fuselage ahead of air-data probes. Airbus identifies this as a potential source of unreliable airspeed; ensure required removal without spraying fluids directly onto probes or ports.
- Reassess after changing precipitation, extended ground delays, suspected refreezing or uncertain anti-icing protection. Request another authorized check or retreatment when necessary.

3.0 GROUND DEICING / ANTI-ICING

Follow AAVA Ground Deice/Anti-Ice Procedures (HO-GD-001) and Crew Card (HO-CARD-001). Deicing removes existing frozen contamination; anti-icing delays new accumulation for a limited period. Coordinate specific A330/A350 treatment configuration, engines/APU, slats/flaps, ground personnel protection and sensitive areas per applicable aircraft documentation.

- Before treatment, communicate aircraft family and variant, contamination, fluid restrictions, expected delay and configuration requirements. The ground crew must follow aircraft-authorized spray precautions.
- After treatment, obtain the treatment/completion report, fluid identification and concentration as applicable, the start time of the final anti-icing application, and confirmation of the required post-treatment inspection.
- Do not assume that all fluid types, mixtures, lowest operational use temperatures or aerodynamic acceptance limits are interchangeable across aircraft or fluids.

4.0 HOLDOVER TIME & TAKEOFF DECISIONS

Use the FAA Winter 2026–2027 Holdover Time Guidelines supplied in the AAVA Winter Operations resource library. Apply correct fluid-specific table, dilution, temperature, precipitation type/intensity and all notes and restrictions. HOT begins at the start of the final anti-icing application. It is an estimate of fluid effectiveness, not a guarantee that an aircraft remains clean.

For changed weather, uncertain contamination, a published HOT exceedance, or conditions without an applicable HOT, use the authorized pre-takeoff check, contamination check, or repeat treatment as required by the governing procedure. Ice-pellet allowance provisions are separate from standard HOT and may be applied only when all published criteria are satisfied.

5.0 AIRBUS A330 — AIRCRAFT-SPECIFIC CONSIDERATIONS

5.1 Engine and wing anti-ice

A330 engine and wing anti-ice employ pneumatic/bleed-air heating arrangements. Required activation, probe/window protection, wing anti-ice eligibility on the ground, engine operating limits and any thrust or performance adjustments are variant- and engine-dependent. Follow the installed A330 FCOM/QRH and ECAM indications rather than generic switch-position or temperature rules.

5.2 Ground configuration and cold-soaked aircraft

Apply the relevant A330 cold-weather preparation, fuel-temperature and cold-soak limitations, as modeled. Special attention is required for ice formation on nonheated surfaces and flight-control gaps; determine treatment configuration and post-treatment actions from the correct variant procedures.

6.0 AIRBUS A350 — AIRCRAFT-SPECIFIC CONSIDERATIONS

6.1 Engine, wing and probe ice protection

The A350 uses hot bleed air for engine/nacelle anti-ice and wing ice protection; probes and flight-deck windows use electrical heat. Automatic/controlled system logic, ice detection, inhibit logic and operating indications differ from the A330. Follow the installed A350 variant FCOM/QRH for the applicable flight phase, not A330 switch practices.

6.2 A350 ground treatment and monitoring

Use A350-specific procedures for deicing protection, surface and sensor inspection, acceptable treatment configuration, and post-treatment checks. ECAM/system indications, limitations and protections are aircraft-controlled; do not infer that anti-ice operation on the ground or during takeoff matches the A330.

7.0 TAXI, TAKEOFF & CONTAMINATED-RUNWAY OPERATIONS

Review runway condition code, deposits, braking reports, crosswind, slope and runway length; obtain aircraft-specific contaminated-runway takeoff/landing performance appropriate to the model. Confirm any anti-ice performance and fuel penalties in the flight plan. A standard maximum-thrust instruction or a universal reverse-thrust cutback speed is not adopted for these aircraft.

- Taxi cautiously on snow, ice and slush; account for reduced traction, freezing of slush in mechanisms, jet blast, and visibility limitations. Follow aircraft taxi and brake guidance.
- Use variant-approved engine ice-shedding/run-up instructions only when specified for the installed engine and conditions. Do not apply invented time intervals or N1 values.
- Use normal/abnormal procedures for unreliable airspeed, ice detection faults and icing-related ECAM indications. Do not improvise ice protection logic.

8.0 APPROACH, LANDING & POST-LANDING

Plan anti-ice usage, approach configuration, landing distance and braking for actual conditions. After taxi through slush or heavy snow, apply type-specific flap/slat handling, inspection and ground-shutdown procedures before any configuration changes that could trap or damage frozen components. There is no fleetwide fixed flap position or engine run-up interval that replaces the appropriate A330/A350 instructions.

9.0 SIMULATION SCOPE & RELEASE CONTROL

This document governs AAVA simulation standardization, not real-world dispatch. The aircraft and engine-specific checklists, runway-performance numbers, temperature thresholds, ice-protection switch logic and limitations are intentionally controlled by the current aircraft/add-on operating publications. Where a simulator does not model a procedure or system, comply with the published AAVA ground/flight planning requirements to the extent supported without inventing aircraft behavior.

10.0 REFERENCE CONTROL

AAVA Hub Operations: Ground Deice/Anti-Ice Procedures (HO-GD-001); Deice/Anti-Ice Crew Card (HO-CARD-001); Winter Operations Reference Card (HO-CARD-002); Summer & Winter Standard Weights policy; FAA 2026–2027 Holdover Time Guidelines.

Airbus, Getting to Grips with Cold Weather Operations; Airbus Safety First, “Look Out for Ice Ridges on the Lower Nose Fuselage”; FAA AC 120-58, Pilot Guide — Large Aircraft Ground Deicing. Use the applicable Airbus A330 or A350 FCOM/QRH/FCTM and installed add-on revisions for all aircraft-dependent actions.