

AVOPSIM MANUAL

Deicing Operations

4 articles · Complete website edition

Includes all article text, tables and available illustrations. Videos and interactive resources are linked. Printed page numbers restart with each article. Use the clickable contents or PDF bookmarks to navigate.

Contents

- 01. Deicing Operations
- 02. Training exercises
- 03. Running a mission
- 04. Features and benefits

Deicing Operations

Aircraft deicing and anti-icing vehicle operation. Positioning, boom and basket control and fluid application at the stand and on the deicing pad.



Program overview

Deicing is a short season, a tight timeline and a close approach to the aircraft with a boom. Operators need to position the truck at wing, fuselage and tail without contact, apply fluids in the correct sequence and keep the flight deck and pad control informed. AVOPSIM models your deicing trucks with boom and basket controls, your stands and your deicing pad, with snow, freezing rain and night set per mission, so operators train the full procedure before the first event.

Note
Deicing operations is in beta. Ask the AVOPSIM team about early access.

Program at a glance

Status	Subscription program, on top of the AVOPSIM integration
Vehicles	Deicing and anti-icing trucks, modeled to your fleet
Environment	Your stands, deicing pad and apron in winter weather

Stations	Driving station or full cab with boom and basket controls
Missions	Stand and pad scenarios in the Mission Editor
Aircraft	Your carriers’ types and critical surfaces

In this manual

- Training exercises: the mission types instructors can assign, repeat and score.
- Running a mission: how a mission is set up, driven and scored.
- Features and benefits: what the program adds to your training.

Every program runs on the same digital twin, stations and instructor tools.

Deicing Operations

Training exercises

Each item is a mission type your instructors can assign, repeat and score. All of them run on your own airfield, and all of them can be built or adapted in the [Mission Editor](#).



Snow-covered airfield on the digital twin

Mission types

Pre-deicing checks

Vehicle, fluid and communication checks before approach.

Positioning at the aircraft

Wing, fuselage, tail and engine clearance.

Boom and basket control

Reach, height and standoff from the surface.

Application sequence

Type I deicing and Type IV anti-icing in order.

Critical surfaces

Coverage of wings, tail and control surfaces.

Holdover awareness

Timing from application to departure.

Flight deck and pad control

Calls before, during and after application.

Night and freezing rain

Low visibility and contaminated surfaces.

Summary

Exercise	What is practiced
Pre-deicing checks	Vehicle, fluid and communication checks before approach.
Positioning at the aircraft	Wing, fuselage, tail and engine clearance.
Boom and basket control	Reach, height and standoff from the surface.
Application sequence	Type I deicing and Type IV anti-icing in order.
Critical surfaces	Coverage of wings, tail and control surfaces.
Holdover awareness	Timing from application to departure.
Flight deck and pad control	Calls before, during and after application.
Night and freezing rain	Low visibility and contaminated surfaces.

Running a mission

A deicing operations mission follows the standard AVOPSIM flow: assign, drive, track, score. See [Running a training session](#) for the general session checklist.

1. The instructor selects the stand or pad, aircraft type, weather and traffic in the Mission Editor and assigns the mission.
2. The operator drives the modeled deicing truck to the aircraft and positions at each surface with clearance tracked.
3. Boom and basket are controlled from the cab or basket console. Fluid application is performed in sequence on the critical surfaces.
4. The mission scores clearance, coverage, sequence, timing and communication, and records the result.

After the mission

Results are recorded in the [Examiner Console](#). Review the violation log with the trainee and use [scenario replay](#) to repeat any situation that went wrong.

Features and benefits

Feature	Benefit
Off-season training	Full procedure practice before the first deicing event.
No aircraft required	Approach and application on a parked aircraft on the digital twin.
Clearance measured	Distance to wing, tail and engines tracked on every approach.
Sequence scored	Application order, coverage and timing checked the same way every time.
Full cab option	Tier 3 stations fit boom and basket controls.
Radio ready	Add the AI radio program for flight deck and pad calls.

From the digital twin



Snow-covered airfield on the digital twin



Winter apron with the control tower



Terminal and stands on the digital twin

What comes with every program

- **1:1 digital twin.** Your airfield, signage, lighting and buildings, reproduced from real-world data.
- **Microsoft Flight Simulator 2024 engine.** World, weather and physics maintained by Microsoft and Asobo.

- **Modular and scalable.** Add programs, vehicles and stations as you go, from desk station to full cabin.
- **Turn-key delivery.** Hardware, software, installation, instructor training and one year of support.