

AVOPSIM MANUAL

Airside Driver Training

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.

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Airside Driver Training

Airside driver training on your own airfield. AVOP pre-certification and recurrent training for everyone who drives airside, on a 1:1 digital version of your airport.



Program overview

New airside drivers have to learn a large, featureless site with strict access rules, mandatory hold points and aircraft that always have the right of way. Most of that learning normally happens in an operational vehicle with an instructor. AVOPSIM moves it to a training station: trainees drive the real layout, read the real signs and lighting, meet moving aircraft and vehicle traffic, and repeat until routes and procedures are automatic. Recurrent training and re-qualification use the same missions with updated layouts.

Program at a glance

Status	Available. Core AVOPSIM program
Trainees	Airside drivers, operations, maintenance, cargo and ground crew
Environment	Your airfield, signage, markings and lighting
Vehicles	Operations pickup and your other light and heavy units
Stations	Desk station or driving station

Included	Mission Editor and Examiner Console
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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**.

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](#).



Operations pickup in airport livery

Mission types

Route familiarization

Service roads, taxiway crossings, aprons and satellite areas on your own layout.

Signs, markings and lighting

Directional, location and mandatory signs, hold points, stop bars and guard lights.

Aircraft right of way

Pushbacks, arrivals and departures. Recognize conflicts and yield correctly.

Hotspots and restricted areas

Runway incursion hotspots and restricted zones flagged and scored.

Night and low visibility

Same routes in darkness, fog, rain and snow.

Recurrent training

Re-qualification and refresher runs on the current airfield layout.

Pre-test assessment

Scored missions before the practical AVOP exam.

Layout changes

New taxiways, closures and relocated stands trained before they go live.

Summary

Exercise	What is practiced
Route familiarization	Service roads, taxiway crossings, aprons and satellite areas on your own layout.
Signs, markings and lighting	Directional, location and mandatory signs, hold points, stop bars and guard lights.
Aircraft right of way	Pushbacks, arrivals and departures. Recognize conflicts and yield correctly.
Hotspots and restricted areas	Runway incursion hotspots and restricted zones flagged and scored.
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Running a mission

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

1. The instructor assigns a mission from the Examiner Console: route, traffic, time of day and weather.
2. The trainee drives the route from the vehicle cab, following signage, markings and hold points on the digital twin.
3. Aircraft and vehicle traffic move through the scenario. Yielding, hold-short compliance and speed are tracked.
4. The mission scores route compliance, incursions, hold point violations and speed. Results go to the training record.

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
Supports all levels	New hires, transfers from other airports and recurrent candidates run the same missions at different difficulty.
Objective assessment	Every mission returns a pass or fail against constraints you configure, plus a log of violations.
Self-paced practice	Desk stations let trainees repeat routes between instructor-led sessions.
Scenario replay	Instructors review a run with the trainee and repeat the exact situation.
Lower operating cost	No vehicle out of service, no fuel, and one instructor across several stations.
Radio ready	Add the AI radio communication program to practice calls on the same missions.

From the digital twin



Operations pickup in airport livery



Terminal apron and taxiways at Winnipeg



Night driving on a lit taxiway

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.