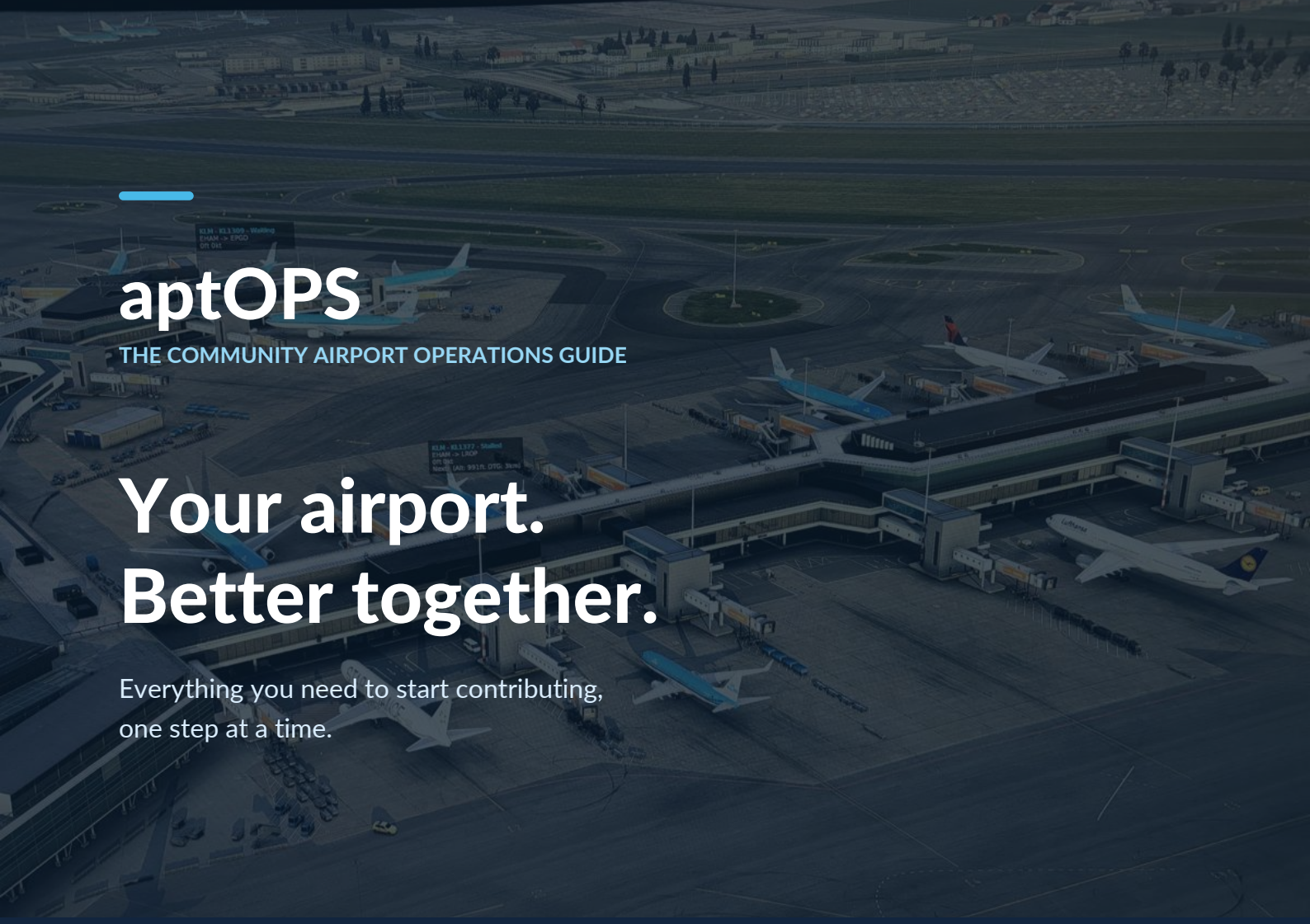


aptOPS

THE COMMUNITY AIRPORT OPERATIONS GUIDE

Your airport. Better together.

Everything you need to start contributing, one step at a time.

INSIDE THIS GUIDE

1. Find or create an airport
2. Build runway, stand and arrival rules
3. Save, submit and review safely

USER MANUAL / EDITION 1.2

October 2026 | For virtual aviation simulation only

YOUR COMPANION FOR AIRPORT OPERATIONS

Find what you need, fast.

This guide is written for first-time aptOPS users. You can start at Chapter 1 or jump directly to the task you want to complete. The page numbers below are clickable.

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CHAPTER 01 / END-USER GUIDE

Welcome to aptOPS

What aptOPS does, what it does not do, and the quickest way to get started.

aptOPS is a community workspace for **virtual airport operations**. It helps people describe which runways to use in particular conditions, which gates suit certain aircraft or operators, and how simulated arriving aircraft can follow connected ATC-style paths. A contributor proposes the information; a reviewer checks it before it becomes available as approved data.

Three things you can contribute

SERVICE	YOU CAN SET UP	WHY IT HELPS
Runway rules	Runways for arrivals and departures, conditioned on wind and time.	Consistent runway choices across changing conditions.
Stands & gates	Aircraft type, classification, size and operator restrictions for each stand.	More suitable parking assignments.
Arrival routes	Connected path points that end on a runway inbound centerline.	Predictable simulated arrival vectors.

Most visitors start in the **Airport directory**. You can search without editing. To create an airport, edit its services, rate it or report a problem, you need to sign in through the website portal.

> **Simulation use only**
> aptOPS does not publish official airport procedures, clearance instructions or real-world flight safety guidance. The examples in this manual are illustrative, not a source for actual flight planning.

Your first five minutes

01 **Open the airport directory**
Go to **/aptops** on the Virtual Air Traffic website.

02 **Choose an airport**
Enter an ICAO code such as **EHAM**, or part of an airport name, in the search field.

03 **Explore the three service tabs**
Select the airport, then switch between **Runway rules**, **Stands & gates** and **Arrival routes**.

04

Try a safe preview
Use **Try the conditions** on the runway page. The preview does not publish anything.

05

Contribute only when ready
Sign in, make an edit, **Save draft**, and later **Submit for review**.

CHAPTER 02 / END-USER GUIDE

Find your way around

A tour of the navigation and the labels you will see every day.

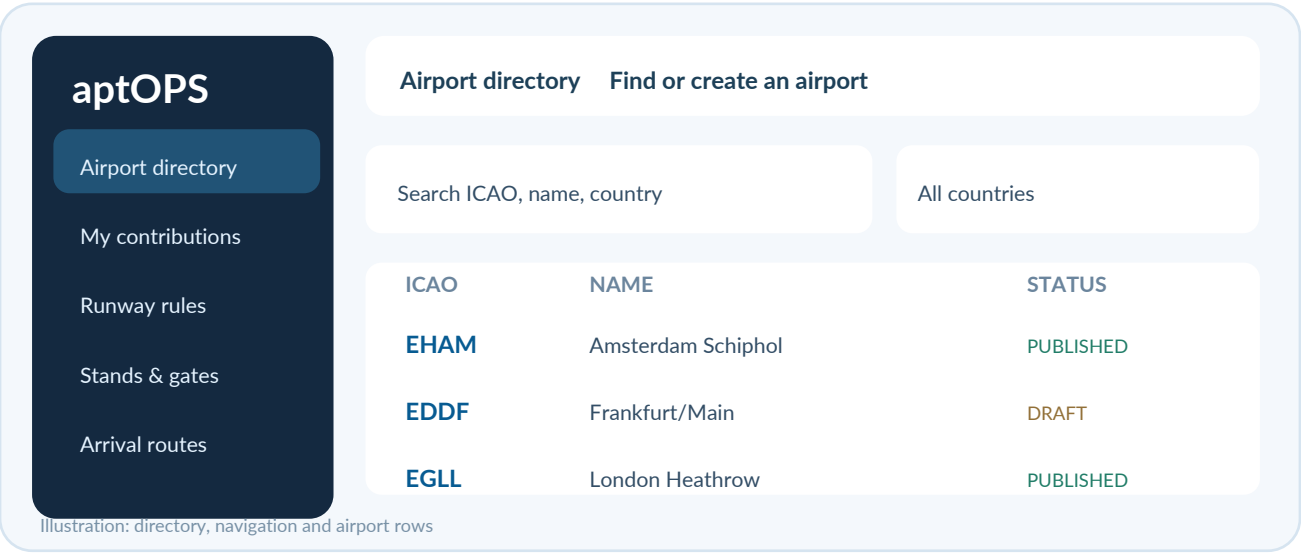


Illustration: directory, navigation and airport rows

The dark left sidebar is your home base. On smaller screens, use the menu icon in the top bar to open it. The central area changes as you choose an airport or editing tool.

SIDEBAR ITEM	WHAT IT OPENS
Airport directory	The searchable list of community airports.
My contributions	Airports where you have draft or submitted work.
Review queue	Pending airport changes, visible to moderators and administrators.
Runway rules / Stands & gates / Arrival routes	Service editors for the currently selected airport.
User manual	This PDF, opening in a new browser tab.
Appearance	Optional workspace photo, blur, darkness and fit options.

SIDEBAR ITEM	WHAT IT OPENS
Virtual Air Traffic	Return to the main website.

A few useful words

- **ICAO** is the four-character airport identifier, such as EHAM.
- **Draft** is your working copy. It is not the public approved version.
- **Published** means an independent reviewer approved that version.
- **Priority** controls which matching runway rule or stand/route preference takes precedence.
- **Runway designator** is the runway end, such as 18L or 36R; each physical strip normally has two ends.

CHAPTER 03 / END-USER GUIDE

Sign in and understand your role

Who may browse, contribute, and approve community changes.

You can open the directory and inspect published airport data without signing in. Editing requires a registered account signed in through the website portal. Look at the account area in the top-right corner to confirm you are signed in.

01

Choose Sign in
If the page shows **Sign in** or **Sign in to create**, open the website portal and sign in with your usual account.

02

Return to aptOPS
Go back to **/aptops**; the top bar should show your account name and role.

03

Open an airport
Choose an airport. Controls such as **New rule** or **Add stand** become available when editing is permitted.

ROLE	CAN DO
Visitor	Browse the directory and inspect airport services.
Contributor	Create airport drafts, edit their configuration, save, submit, rate published airports, and report issues.
Moderator	Contributor actions plus independent review of others' submissions and report handling.

ROLE	CAN DO
Administrator	Administrative role assigned by the website; cannot approve their own submission either.

> **Why self-approval is not possible**
> Even a moderator or administrator cannot approve a revision they authored. An independent second account is always required.

About the interactive demo

Some installations enable an explicitly labelled **Interactive demo**. It contains example airport information and a **Try as reviewer / contributor** switch. Demo edits stay in that browser; they do not write to the production airport database or become available to the plugin. If the blue demo banner is absent, you are using the live service.

CHAPTER 04 / END-USER GUIDE

Search and sort the airport directory

Find an airport even when you know only part of its name or country.

01 **Open Airport directory**
Select the first sidebar item. The directory shows airport ICAO, name, country, publication status, services and community rating.

02 **Search by text**
Click **Search ICAO, airport or country** and enter, for example, **EHAM**, **Amsterdam** or a country. Press **/** to focus the search from elsewhere on the page when not already typing.

03 **Narrow down your results**
Use **All countries** to choose a country and the **All airports / Published / Drafts** buttons to choose publication status.

04 **Change the order**
Use the **Sort by ICAO** menu for name, country, recent updates or rating; column-heading buttons can also change the sort direction.

05 **Open a matching row**
Select the airport's ICAO/name link. If there are more than eight matches, use the pagination buttons below the table.

How to read status and statistics

Published airports have at least one approved revision. A **draft** airport is still being prepared. The headline counters show airports, published airports, configured stands and arrival routes. These figures describe the community workspace; they are not live aircraft-traffic data.

> **No results?**
> Clear the country and status filters or shorten the search phrase. The reset-filters button appears after you have applied filters. If the whole directory cannot be loaded, use **Try again**.

CHAPTER 05 / END-USER GUIDE

Create a new airport

Use the ICAO lookup to fill ordinary airport facts, then review them before creating a draft.

The **Create airport** button is at the top of the directory for signed-in users. It opens a form titled **Make an airport your own.** You do not have to complete operational rules at this stage; create the workspace first and add its services afterward.

01 **Enter the airport ICAO**
Type the four-character code in **Airport ICAO**, for example EHAM. aptOPS searches the existing airport catalogue for an exact match.

02 **Wait for the lookup message**
If the airport is found, the form fills its name, country, country code, latitude, longitude, elevation in feet, and IANA timezone where those values are available.

03 **Check every suggested value**
All populated fields remain editable. Correct a misspelling or inaccurate coordinate if you have a better source. A value found in the catalogue is helpful but is not automatically authoritative.

04 **Add missing information**
If no exact match exists, use the optional airport-name search, or enter the airport details yourself. The ICAO lookup does not prevent manual creation.

05 **Create airport draft**
Select **Create airport draft**. If the form is valid, aptOPS opens that airport's Runway rules page. It is still an unpublished draft.

Understand the location fields

FIELD	MEANING / EXAMPLE
ICAO	Four-character airport code. Example: EHAM.
Latitude / longitude	Airport reference position in WGS84 decimal degrees. Northern and eastern coordinates are positive.
Elevation	Airport field elevation in feet above mean sea level.
Country code	Two-character ISO country code, for example NL.
Timezone	IANA timezone name such as Europe/Amsterdam, used for airport-local runway hours.

> **Avoid guesswork**
> Check the auto-filled latitude and longitude before publishing. The underlying catalogue can contain rounded coordinates. Runway thresholds, in particular, need accurate separately sourced geometry.

CHAPTER 06 / END-USER GUIDE

Import X-Plane apt.dat runway geometry

Select an original airport scenery file - no separate converter or JSON export is required.

Airport centre coordinates and **runway geometry** are different. A centre tells aptOPS roughly where an airport is. Each runway direction also needs its exact landing threshold and opposite physical end, including displaced thresholds. You can import these directly from an X-Plane **apt.dat** scenery file.

Step by step: import runways from scenery

01

Open the airport workspace
Find or create the airport, then open its **Runway rules** tab. In the airport diagram or settings panel, select **Airport data**.

02

Choose the X-Plane file
Under **Option 1 - Import from X-Plane apt.dat**, select an **apt.dat** file or a saved **.txt** airport extract. You can use a full file containing many airports.

03

Let aptOPS locate your airport
The browser scans the file locally for the workspace ICAO, such as EHAM. It reads X-Plane airport record 1 and runway record 100. No JSON conversion or server upload is necessary.

04

Check the preview
The editor displays the airport name and all runway directions found. EHAM, for example, has 6 physical runways (12 directions). Importing **replaces the runway list in this editor**; it does not change existing runway rules, arrival routes or parking assignments.

05

Choose optional reference details
If desired, enable **Also use airport elevation and reference coordinates**. Leave this disabled to keep your current airport centre and elevation. You can still edit those fields manually.

06

Load, inspect and save
Select **Use these runways**. Inspect individual thresholds or use the manual **Add runway** option if something is missing. Then select **Apply airport data**, **Save draft** and, when ready, **Submit for review**.

> **Nothing is published during an import**
> The file is parsed in your own browser. Using imported runways changes only your editable airport draft. A moderator still needs to approve any submitted change before it becomes public.

What aptOPS reads - and what it does not

The import supports land-airport **record 1**, optional ICAO metadata **1302 icao_code**, airport datum coordinates, and physical runway **record 100**. It applies threshold displacements during coordinate calculation. It does not import legacy X-Plane runway traffic-flow rules, arrival routes, stand assignments or taxi networks. Other scenery airport types such as heliports and seaplane bases are not supported by this runway importer.

The browser allows source files up to **512 MB**. If the airport is not found, or a matching airport has invalid or duplicate runway records, you will receive an error explaining what to correct. Changes remain editable until you apply them.

A separate optional **Import an aptOPS airport JSON** control may appear when *creating* an airport. That is for importing an entire prepared aptOPS configuration; it is **not required** to import runways into an existing airport from apt.dat.

> **Safety around displaced thresholds**
> The imported landing threshold position already includes any displaced-threshold distance. The displacement number is retained as metadata - do not shift the coordinates a second time.

CHAPTER 07 / END-USER GUIDE

Edit the airport data by hand

Add or correct directional runways, coordinates and source information.

The **Airport data** dialog has a list of runway directions. Select one to see its designator, landing threshold, opposite physical end, calculated true heading, physical length, width and displaced-threshold length.

01

Open the Airport data dialog
From Runway rules, find the **Airport diagram** card and select **Airport data**.

02

Select or add a runway
Choose a runway card to inspect it. To add a runway, select **Add runway** and enter a legal designator, for example 18L.

03

Enter geographic endpoints
Fill the landing threshold latitude/longitude and the opposite physical end latitude/longitude. True heading is calculated from those coordinates.

04

Check the physical dimensions
Verify runway length (metres), width (metres) and any displaced threshold. The editor offers a length calculation from the entered coordinates.

05

Check reciprocal direction
When adding a new runway, you can optionally create its reciprocal direction. Check that direction's actual threshold separately, especially if it is displaced.

06

Update airport-level details
Expand **Airport center, timezone and source** to change the airport reference coordinates, elevation, timezone and data-source note.

07

Apply to draft
Review errors, apply the geometry changes, and then save your airport draft from the page toolbar.

A designator already referenced by a runway rule or arrival route is protected. If you need to remove it, first update the dependent services in your draft. This prevents published-looking routes from pointing to runway directions that no longer exist.

CHAPTER 08 / END-USER GUIDE

Know when an edit is saved

Understand the toolbar before making an important contribution.



Illustration: contribution and publication workflow

An important distinction: editing a field, saving a draft, submitting it and having it approved are **four different actions**. None of them should be treated as interchangeable.

ACTION	WHAT HAPPENS
Apply to draft	Closes an edit dialog and updates your current unsaved workspace.
Save draft	Stores your private draft. Other people and the plugin keep using the approved version.
Submit for review	Creates a locked submission with your explanation; it waits for an independent moderator.
Approve	A different moderator publishes the reviewed complete airport configuration.

01

Look for the save status
At the top of each airport service page, you will see **Unsaved changes**, **Draft saved**, **Awaiting review** or a published-version message.

02

Save early and often
After editing a rule, stand, route or geometry, select **Save draft**. Confirm the success message.

03

Export a backup when needed
Use **Export** to download the working configuration as an aptOPS JSON file.

04

Only submit when complete
When the whole airport is ready, choose **Submit for review** and write a clear change summary of at least ten characters.

> **Important**
> The submission contains a complete airport snapshot, not just the single field you changed. Review all three service tabs before submitting.

CHAPTER 09 / END-USER GUIDE

Build your first runway rule

Tell aptOPS which runway ends should be preferred for a given set of conditions.

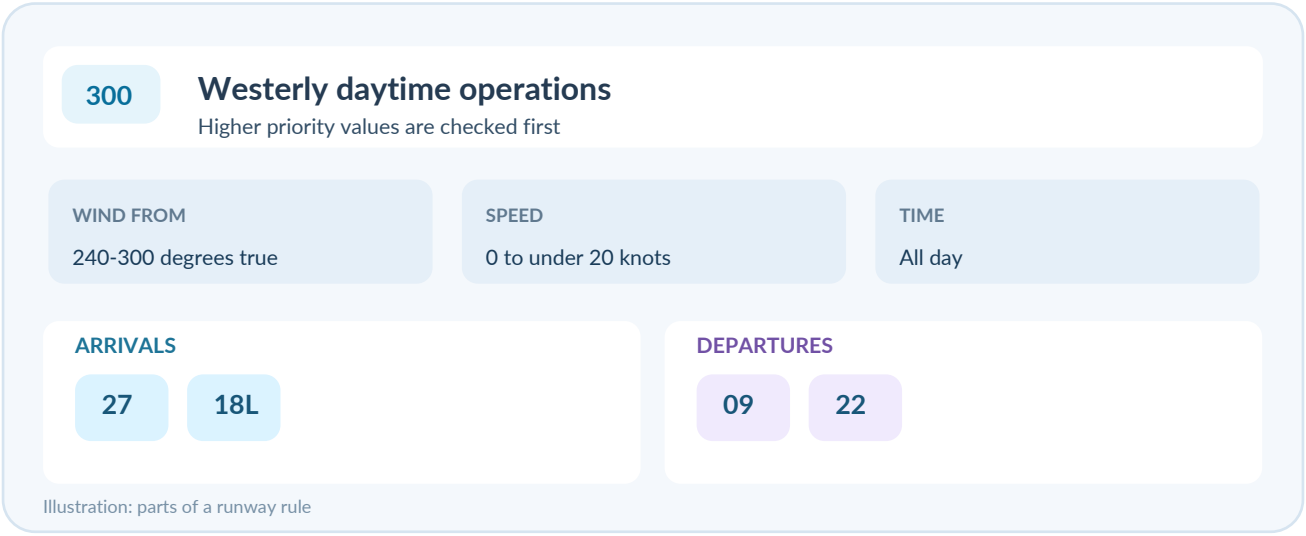


Illustration: parts of a runway rule

A runway configuration has a name, a numeric priority, conditions and two independently chosen runway groups: **Arrivals** and **Departures**. All matching conditions must be true before the rule can be selected.

01

Open Runway rules
Choose an airport, then its **Runway rules** tab.

02

Select New rule
In Operating configurations, choose **New rule** or **Create first rule**. Your airport needs valid runway directions first.

03

Give the rule a descriptive name
For example, **Westerly daytime operations**. Set a unique priority such as 300.

04

Enter wind conditions
Set **Wind sector from** and **Wind sector to** in true degrees, plus minimum and maximum wind speed in knots.

05

Set the time restriction if needed
Leave **All day** for a round-the-clock rule, or enable **Specific hours** and choose UTC or the airport's local time.

06

Pick arrival and departure runways
Select valid runway designators in the two groups. They do not need to be the same.

07

Apply, save, and test
Choose **Apply to draft**, then **Save draft**. Use **Try the conditions** to see whether the new rule wins.

CHAPTER 10 / END-USER GUIDE

Runway conditions explained

A simple guide to wind direction, speed boundaries, overnight rules and priorities.

Wind direction uses true degrees

Wind direction means the direction the wind is blowing **from**, expressed relative to true north. A wind from the west is about 270°T. This is not the compass direction the aircraft is travelling. The rule editor and its preview both use true degrees.

Understanding direction sectors

SECTOR	WHAT MATCHES
240° to 300°	Winds from 240° through just below 300° true.
330° to 030°	Winds around north; the sector wraps past 360°/000°.
000° to 000°	Every direction - the equal endpoints mean no directional restriction.

Understanding wind-speed ranges

Minimum speed is included. A specified maximum is **not** included. For example, a rule with 0 to 20 kt matches 0 through 19.999... kt but not exactly 20 kt. Use **No upper wind-speed limit** if the rule should also match unusually strong winds. Two rules can meet cleanly at the 20 kt boundary without ambiguity.

Time restrictions and overnight windows

You can select **UTC** or **airport local**. Local hours use the airport's IANA timezone and its daylight-saving rules. A window such as **23:00 to 06:00** includes late night and the early hours after midnight. Equal start and end times represent all day. The start time is included; the ending time is excluded.

Priorities when several rules match

aptOPS evaluates enabled runway rules from **highest numeric priority first**. Only the highest matching rule is chosen, and enabled runway rules need distinct priorities. It can be useful to give exceptional cases (for example, strong winds or night restrictions) a higher number than a general rule.

> **Illustrative example only**
> At a hypothetical airport, priority 500 might handle winds of 20 kt and above, priority 300 might handle typical westerly daytime operations, and priority 200 might handle overnight arrivals. Actual runway choices must come from reliable airport/scenery information.

CHAPTER 11 / END-USER GUIDE

Preview runway behaviour before submitting

See which configuration applies without changing anything published.

01 **Find Try the conditions**
On the right side of Runway rules, open the preview card. Its wind compass reflects the direction you choose.

02 **Set wind direction**
Move the slider or type a value in **Direction °T**.

03 **Set wind speed**
Type the speed in **Speed (knots)**. Try values exactly at a rule's minimum or maximum to check boundaries.

04 **Choose test date and time**
Set **Test date & time (UTC)**. Local-time rules convert this instant using the airport timezone.

05 **Inspect the result**
The **Selected configuration** panel names the winning rule and shows its priority. The nearby airport diagram highlights arrival and departure runway ends.

06

Repeat across cases
Try wind from another sector, strong wind, daytime and overnight hours before you submit.

If **Scenery fallback** appears, no enabled aptOPS runway rule matches the supplied conditions. The intended integration then leaves the normal scenery/apt.dat runway decision in place. The web preview is not a live ATC clearance or weather feed.

Change, duplicate, disable or remove a rule

Use the controls on each rule card to edit, duplicate, toggle enabled/disabled, or remove it from your working draft. Duplicating creates a separate rule with a new priority that you can adjust. Removal does not delete an approved revision immediately; the change has to be saved, submitted and approved.

CHAPTER 12 / END-USER GUIDE

Create stands and gate assignments

Connect a real scenery parking position with the aircraft and operators that may use it.

An assignment tells aptOPS **which types of simulated aircraft are eligible** for a named stand or gate. It is a selection preference, not a new physical parking stand. The simulation still needs that location to exist in its scenery.

01

Open Stands & gates
Choose the airport's second service tab.

02

Select Add stand
Enter the visible stand/gate label such as **D23** and choose **Terminal gate** or **Parking stand**.

03

Match the scenery name
If the name displayed on the website differs from the exact scenery name, fill **Scenery stand name** as well.

04

Choose size and aircraft rules
Select maximum aircraft size code A-F; optionally enter ICAO aircraft type codes and choose classifications like Jet, Heavy or Propeller.

05

Choose operator restrictions
Enter three-letter **operator ICAO** codes separated by commas (for example KLM, TRA). Leave blank for any operator.

06

Choose how the filters combine
Select **All filters** (AND) or **Any filter** (OR), then set the priority and optional notes.

07

Include position only when needed
Add precise latitude/longitude and optional heading if two scenery stands share a name or you need a specific location.

08

Apply, then save
Select **Apply to draft**, verify the table row and save your draft.

CHAPTER 13 / END-USER GUIDE

Understand stand matching

Avoid common mistakes with size codes, aircraft types and airline identifiers.



Illustration: the Test matching panel

The five kinds of restrictions

SETTING	HOW IT IS USED
Size A-F	Always a maximum supported aircraft size, even with Any filters.
Aircraft ICAO	Aircraft type code such as B738, A320 or E190 - not a flight number.
Classification	Jet, Heavy, Turboprop, Propeller, or Helicopter.
Operator ICAO	Three-character airline/operator code, for example KLM; not the two-character IATA airline code.
All / Any filters	All means each populated group must match; Any means at least one populated group must match.

Codes **inside** a single entry group are alternatives. For example, aircraft type **B738, A320** means either type may satisfy that group. If the aircraft type field is empty, there is no aircraft-type restriction. If every type/operator/classification group is empty, only the enabled state and maximum size are relevant.

Two quick examples

- **All filters:** B738, Jet, KLM, Code C. A KLM B738 classed as a jet and no larger than C matches. Another operator does not match.
- **Any filter:** B738, Jet, KLM, Code C. A matching aircraft type OR jet class OR KLM operator can qualify, but the aircraft must still fit within maximum size C.

> **The assignment is not a reservation**
> The tester checks eligibility and priority. It does not know whether a stand is occupied at that moment. Final availability belongs to the simulator/plugin.

CHAPTER 14 / END-USER GUIDE

Find, test and maintain stands

Manage a large collection without losing track of individual parking positions.

01 **Find a stand**
Search by stand label, aircraft type, operator or aircraft classification using the field above the stand table.

02 **Filter the list**
Use the operator and maximum size menus, and the **All stands / Gates / Parking** buttons.

03

Change sorting
Click the stand name or priority heading to change how the table is ordered; use pagination if there are more than 12 rows.

04

Try Test matching
Select **Test matching**. Enter an aircraft ICAO (for example B738), operator ICAO, size code and classifications.

05

Read eligible results
The dialog shows how many enabled stands match, ordered by priority. If none match, inspect size and filter combinations.

06

Maintain the list
Use edit, duplicate, remove and enable/disable controls in a stand row; remember that each change starts in your working draft.

Why coordinates are sometimes important

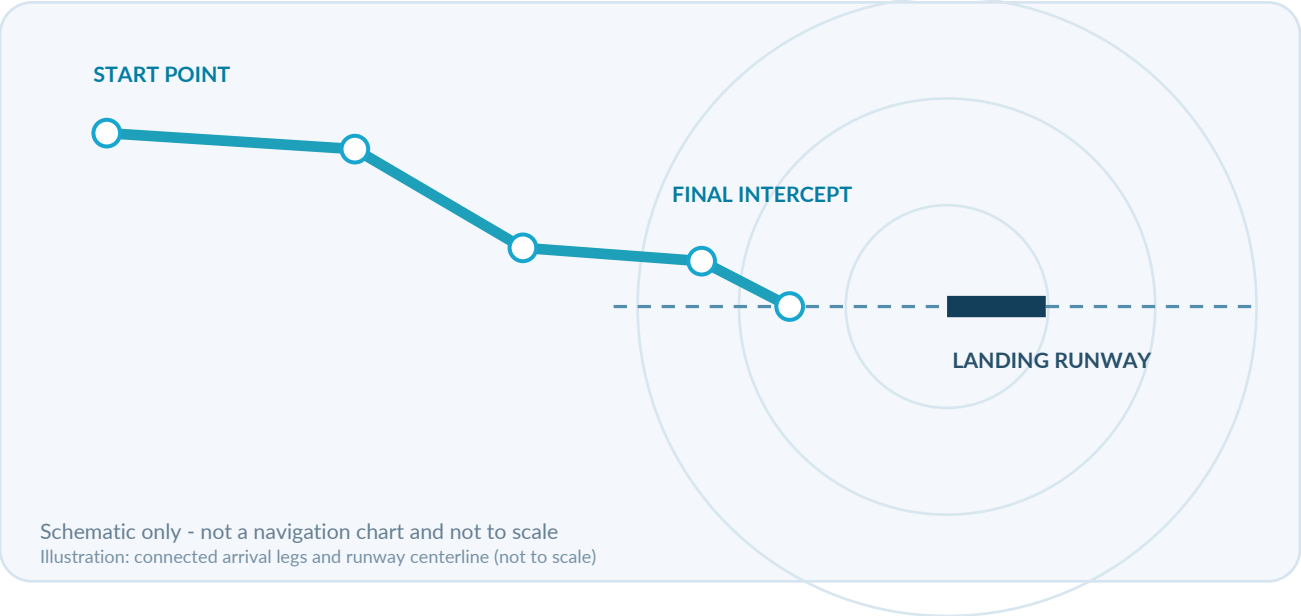
Some scenery packages contain two positions with very similar or identical labels. If you are assigning one specific stand, use its exact **Scenery stand name** and, where available, its real coordinates. This avoids ambiguity and can improve the accuracy of the plugin adapter.

> **Use the right data source**
> Do not invent coordinates to make a stand appear on a map. Web assignments cannot add taxiway connections or parking nodes to the actual scenery.

CHAPTER 15 / END-USER GUIDE

Understand the arrival map

What the route editor shows, and what the coloured guidance means.



The **Arrival routes** page contains a route library on the left, a map in the centre, and a route points editor below. It draws straight, connected segments: aircraft are expected to follow the points in order, ending on an intercept with the runway extended centreline.

Two distances that matter

AREA	WHAT IT MEANS
100 NM service area	All route points must lie no more than 100 nautical miles from the airport reference position.
25 NM final intercept	The final point should lie before the selected landing runway, between 1 and 25 NM from its threshold along the inbound extended centreline.

The page draws runway threshold/centreline geometry from the airport's configured runway directions. If a runway has no valid geometry, the page warns you that runway coordinates are required before drawing a usable route.

Basemap controls

The default map uses standard OpenStreetMap imagery with attribution. Map controls can include zooming, panning and a light/dark map style. The route geometry is stored as latitude/longitude points; it does not depend on the image tiles continuing to load.

CHAPTER 16 / END-USER GUIDE

Draw your first arrival route

Create a connected path from outside the airport toward a runway intercept.

01

Choose Arrival routes
Open the airport's third service tab. In Route library, select the **+** control for **Create new arrival route**.

02

Name the route
In Route settings, replace the default title with a clear name such as **North Sea arrival**.

03

Choose a landing runway
Select a runway designator with valid geometry, for example **18R**. Choose a unique numeric route priority for that runway.

04

Activate drawing mode
Choose **Draw route** on the map. Click where the flight should enter your 100 NM service area to place its first point.

05

Click successive waypoints
Continue clicking to form connected, straight legs. Keep points in the actual sequence you want the aircraft to fly.

06

Aim for the inbound centreline
Position the last waypoint before the landing threshold on the extended runway centreline, no closer than 1 NM and no farther than 25 NM away.

07

Finish and snap if useful
Choose the finish control; leave **Snap final point to centerline when finishing** enabled if you want aptOPS to align the last waypoint automatically.

08

Read the validation panel
Check the point editor below. Correct any listed issue, save the draft and submit for review only when the route is valid.

> **Start far enough out**
> To build a useful route, start where the aircraft needs guidance, not on top of the runway. The route's first point is its origin in the simulated arrival service area.

CHAPTER 17 / END-USER GUIDE

Fine-tune waypoints and route settings

Use mouse editing or precise numbers - both are supported.

After drawing, click a waypoint on the map to select it. You can drag the point to adjust the route visually. For fine control or keyboard-only use, open the **Route points** table and enter exact WGS84 latitude/longitude values.

01 **Select the point**
Click its dot on the map or its row in the point list.

02 **Edit coordinates or labels**
Change latitude, longitude or the point label. The map reflects valid coordinates.

03 **Adjust the sequence**
Use the point-row reorder controls to move an entry earlier or later. The segments are redrawn in that new order.

04 **Optionally set altitude or speed**
Enter feet above mean sea level and speed in knots when you have supporting information, or leave them blank.

05 **Undo a mistaken change**
Use the route editor's **Undo** button, or Ctrl+Z / Cmd+Z when not typing in an input.

06 **Duplicate, disable or delete**
The route settings area offers duplicate/delete controls and a **Route enabled** switch. A removal only affects your draft until approved.

Useful route settings

CONTROL	PURPOSE
Route name	Human-readable identification for the proposed vector pattern.
Landing runway	Runway end used for the final intercept and validation.
Priority	Preference when multiple enabled routes serve the same runway. Higher is preferred.
Route enabled	Exclude the route from active use without deleting it.
Controller notes	Optional explanation of where/when the route should be used.

CHAPTER 18 / END-USER GUIDE

Fix an invalid arrival route

What the messages mean and how to solve them.

A route can be saved unfinished in your private draft. Before publication, enabled routes undergo geometry checks. Read the issue list below the Route points table rather than guessing why Submit is blocked.

MESSAGE / SYMPTOM	WHAT TO CHECK
Not enough points	Add at least two valid geographic points to create a segment.
Outside service area	Move the point inside the 100 NM radius around the airport centre.
Points too close together	Separate adjacent points by more than 0.02 NM.
Final intercept too near/far	Place the last point 1-25 NM before the runway threshold.
Off the extended centreline	Use **Snap final point**, then recheck the map.
Final leg approaches from a poor angle	Reshape the penultimate point so the last segment meets the inbound centreline within 45 degrees.
Conflicting route priority	Give enabled routes for the same runway different priority numbers.

> **A snap is not a magic fix**
> Snapping corrects the last point's location on the centreline; it does not repair a badly angled final segment or incorrect runway threshold geometry. Move earlier points if needed.

When the route passes its checks, the workspace shows **Ready for review** and a green confirmation beneath the table. That means the geometric rules passed, not that the route is an officially approved procedure.

CHAPTER 19 / END-USER GUIDE

Submit a polished contribution

Help reviewers understand and trust your changes.

01

Finish all three sections
Inspect Runway rules, Stands & gates and Arrival routes. You are submitting the whole airport configuration.

02

Save the working version
Select **Save draft**. Do not navigate away while the page still says **Unsaved changes**.

03

Choose Submit for review
The confirmation dialog summarises the number of rules, stands and routes in the airport snapshot.

04

Explain the changes
In **What changed?**, write at least ten characters, preferably including the purpose, affected runway/stand, and source or scenery version.

05

Submit and check the status
Choose **Submit for review**. The submission is locked for independent review; the older published version remains available.

A helpful example review note

> **Good change summary**
> Updated EHAM gate D23 to accept KLM B738 operations after checking the airport scenery stand names; also corrected the threshold coordinate for runway 18R.

What happens when someone rejects it?

The revision stays in history with a reviewer note explaining the issue. You can inspect that feedback and make a new or corrected draft for another review. Rejection is not deletion of your contribution.

CHAPTER 20 / END-USER GUIDE

History, ratings, reports and restoring

Use the community history rather than making changes blindly.

Each airport service page has a **History** button. This opens **Airport history & community**, where revisions are listed with their author, date, status and explanation. The history allows inspection of both published and submitted revisions.

01

Inspect an earlier version
Select **History**, then **Inspect changes** on a revision. You can inspect differences from the current published snapshot.

02

Download an archive
Select **JSON** on any listed revision, or use the workspace's main **Export** action for your current configuration.

03

Restore safely
Use **Use as draft** or **Restart from published**. The chosen snapshot is copied into the editor: it is not instantly republished.

04

Rate an airport
For a published airport, signed-in users can choose one to five stars in the History & community panel.

05

Report incorrect data
Choose **Report a problem** in History. Describe the issue clearly; the report goes into the moderation queue.

> **Ratings and reports are different**
> A star rating records your opinion of a published airport. A report asks moderators to investigate a specific issue. Neither action directly rewrites runway, stand or route data.

If aptOPS warns that a newer version has been published since you started your draft, export your current work before choosing **Restart from published**. That action starts a working copy from the new approved version, so you can reapply your changes safely.

CHAPTER 21 / END-USER GUIDE

For moderators: reviewing contributions

The extra controls available to trusted reviewers.

If your account has moderator or administrator privileges, the sidebar shows **Review queue**. It contains airports awaiting independent review. The system enforces permissions at the server, not just by showing or hiding buttons.

01

Open Review queue
Choose the sidebar item and an airport with a pending revision.

02

Read the author's explanation
Open the airport **History** and choose **Review changes** on the submitted revision.

03

Inspect the differences
Check airport metadata and runway geometry as well as modified rules, stand assignments and arrival routes.

04

Validate the configuration
Use the runway preview and stand matcher, and check route validation/errors. Compare airport coordinates and identifiers with trustworthy scenery or operational references.

05

Choose Approve or Reject
Provide a review note of at least ten characters explaining your decision. Only a different reviewer can approve an author's revision.

06

Confirm the result
An approval publishes that airport snapshot atomically. A rejection leaves the previously approved snapshot active.

Handling community reports

Below the review queue, moderators can see **Community reports**. Use **Review report** to inspect its description, open the airport workspace, and record an outcome: **Resolved** or **Dismissed**, with a brief resolution note. Marking a report resolved does not edit airport data - a separate contribution and approval is needed for corrections.

> **Review independently**
> If you authored the revision, ask another moderator to review it. Never treat publication as an automatic result of submitting a draft.

CHAPTER 22 / END-USER GUIDE

Personalise the aptOPS appearance

Replace the pale workspace background with a darkened, softly blurred photo from the website.

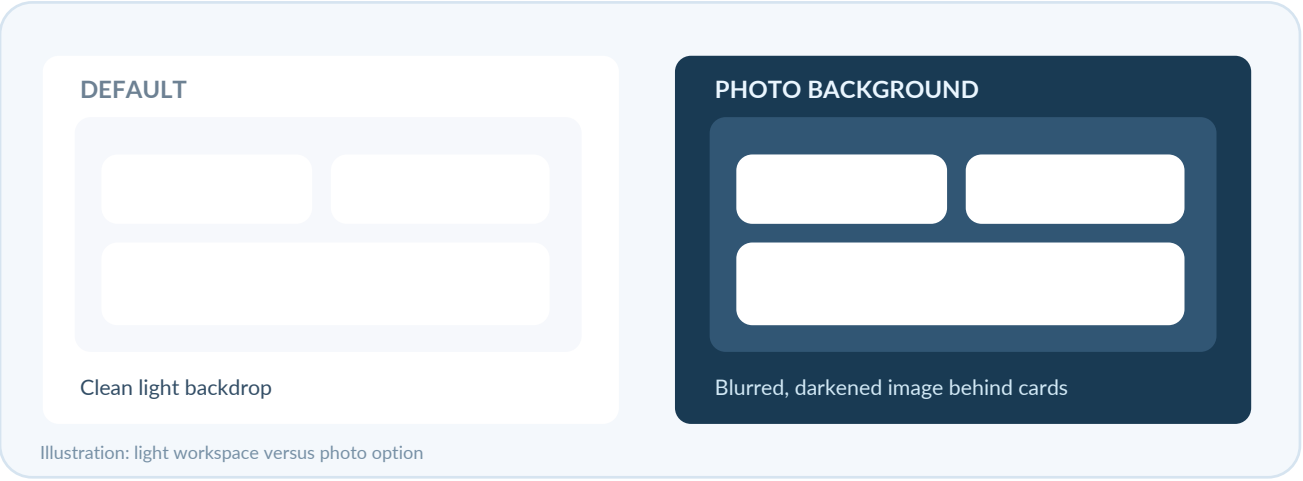


Illustration: light workspace versus photo option

At the bottom of the dark left sidebar, choose **Appearance**. The **Workspace appearance** popup lets you select an image already in the website's **/public** folder. This is an optional visual preference; the default appearance is unchanged until you enable a photo.

01 **Open Appearance**
Scroll to the bottom of the sidebar if needed and select **Appearance**.

02 **Switch the photo on**
Select **Use a photo background**. A photo is shown behind the main page, while panels and dialogs remain light for readability.

03 **Select a file**
Choose one of the images listed from **/public**, or enter a path such as **/photos/airport.jpg** and select **Use path**.

04 **Adjust the look**
Choose **Cover - natural proportions** or **Stretch - fill full area**, then adjust the **Blur** and **Darkness** sliders.

05 **Keep or reset**
Choose **Done**. Changes are saved in your current browser. Use **Site default** to go back to the site's standard setting.

An administrator can optionally configure a default background for all visitors using the Next.js site environment. Ordinary visitors only change their own browser appearance. The background picker cannot upload arbitrary files to the server; the image must already exist inside the website's public folder.

CHAPTER 23 / END-USER GUIDE

Keyboard access, mobile and readability

A few small controls can make working with large configurations easier.

SHORTCUT / DEVICE	BEHAVIOUR
Tab / Shift+Tab	Move through buttons, menus, form inputs and links.
Enter / Space	Activate focused controls as supported by the browser.
/ in airport directory	Focus the airport search while you are not typing elsewhere.
Escape in arrival editor	Exit route drawing mode.
Ctrl+Z or Cmd+Z in arrival editor	Undo the last route-point change when you are not typing in an input.
Phone / tablet	Open the sidebar using the menu button in the top bar.
Keyboard route editing	Add a coordinate and edit/reorder points in the Route points table instead of dragging.

Forms provide descriptive labels and inline validation messages. Scrollable airport and stand tables can extend horizontally on narrow screens. If motion is reduced in your device accessibility settings, the UI minimises decorative animation. The photo appearance is optional; turn it off or increase darkness if text contrast is uncomfortable.

> **Avoid accidental lost work**
> Use Save draft before changing airports, switching demo accounts or leaving aptOPS. If you have unsaved edits, the website may warn you before navigating away.

CHAPTER 24 / END-USER GUIDE

Troubleshooting common problems

Start here if a control is disabled or the result is different from what you expected.

WHAT YOU SEE	WHAT TO TRY
Create airport is unavailable	Sign in through the portal and confirm your account is permitted to contribute.
ICAO lookup found nothing	Confirm it is four characters; use airport-name search or enter details manually.
Airport creation says “made from the website itself”	The site origin may be misconfigured behind the web server. Ask the site administrator; this is not fixed by changing browser form data.
New rule is unavailable	Check that your airport has directional runway geometry.

WHAT YOU SEE	WHAT TO TRY
Rule preview shows “Scenery fallback”	Check enabled state, priority, wind sector/speed boundary and UTC/local time.
No matching stands	Check size code, ICAO versus IATA codes and All versus Any matching.
Route editor cannot draw	Check sign-in permissions and whether a landing runway with valid geometry exists.
Arrival route is not ready for review	Read the detailed issue list; fix centreline, final leg, distances or duplicate priorities.
Saving a draft reports a conflict	Another revision may have changed. Export your work, refresh and reconcile it with the current published version.
Images do not appear	Check that the selected photo is in /public, use a URL path beginning with /, and ask an administrator to check file deployment.

When a save or import fails

Read the red inline error or toast carefully. Common causes are invalid fields, stale saved versions, missing sign-in, wrong ICAO, duplicate runway records, source files over the permitted size, or an API/database problem. Keep a JSON export of important work before trying a major reset. A browser reload can discard edits that have not been saved.

When the basemap does not load

The map depends on third-party map tiles, so tiles may be unavailable because of network conditions or tile-provider limits. Your route points and coordinate fields are independent of those tiles. Check your connection, or continue with exact coordinates and ask the site administrator to check map-provider settings.

CHAPTER 25 / END-USER GUIDE

Glossary for beginners

A compact reference to the terms used throughout aptOPS.

TERM	PLAIN-LANGUAGE MEANING
apt.dat	Airport scenery data format used by X-Plane.
Arrival vector / route	A set of connected segments for a simulated aircraft to follow.
Centreline	Imaginary straight line extending along the runway direction.

TERM	PLAIN-LANGUAGE MEANING
Draft	Your private editable copy of an airport configuration.
Elevation (ft MSL)	Airport height in feet above mean sea level.
ICAO airport code	Four-character airport identifier, for example EHAM.
ICAO aircraft type	Code identifying an aircraft type, for example B738.
ICAO operator code	Three-character airline/operator identifier, for example KLM.
IANA timezone	Full timezone name that includes daylight-saving rules, for example Europe/Amsterdam.
NM / nautical mile	Aviation distance unit. 1 NM is 1,852 metres.
Priority	Number used to order eligible rules or assignments; a larger number comes first.
Published revision	A full approved version of the airport configuration.
Runway designator	Runway end name, for example 09, 18L or 36R.
Threshold	Point where landing runway distance begins, including any displaced threshold.
True heading / degrees true	Direction measured clockwise from geographic north.
UTC	International reference time, independent of local clock changes.
WGS84	Global latitude/longitude reference used by the map and geometry editor.

CHAPTER 26 / END-USER GUIDE

Print-and-keep checklist

A final quick check before you send an airport for community review.

Run through these questions whenever you make an important airport change. The list is intentionally short enough to use as a checklist beside your screen.

Airport setup

- [ ] ICAO, airport name and country are correct.
- [ ] The airport timezone and centre coordinates are checked.
- [ ] Runway ends use valid names and accurate threshold geometry.

- [ ] Imported scenery sources or corrections are explained.

Runway rules

- [ ] Each enabled rule has a unique priority and a meaningful name.
- [ ] Wind sectors, exact speed boundaries and time windows are tested.
- [ ] Arrival and departure runway selections exist in airport geometry.
- [ ] Previewed cases include normal conditions, night and strong winds.

Parking and gates

- [ ] Each assignment names a real scenery stand.
- [ ] Operator codes are ICAO, not IATA; aircraft sizes are correct.
- [ ] All/Any matching and priority produce the intended eligible list.

Arrival routes

- [ ] Every route has the correct runway, sequence and descriptive name.
- [ ] Points stay within 100 NM; adjacent points are not too close.
- [ ] The final point is 1-25 NM out and aligned to the inbound centreline.
- [ ] Final leg angle and any route priorities pass validation.

Review and submit

- [ ] Saved the draft and exported a backup if the edit was substantial.
- [ ] Explained what changed and which sources were checked.
- [ ] Submitted for an independent review; did not assume it is already live.

> **You are ready**
> A clear, verifiable submission gives the next reviewer everything they need. Small, accurate improvements are more useful than large unsupported changes.

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