ATAK

AirAware

Plug-in Version: 0.8
ATAK 5.8.0
10 November 2026



Contents

Overview 4
Before you start 5
The front page 6
The layers 7
A layer's own settings 8
TFR 9
Restrictions in view 10
A restriction's details 11
Geofencing a restriction 12
Your geofences 13
NOTAMs 14
NOTAM kinds and the key 15
A NOTAM's details 16
Airspace 17
Airspace colors and classes 18
Special Use airspace 19
UAS ceilings 20
What a square says 21
UAS No-Fly 22
The no-fly row 23
A no-fly area's details 24
Obstacles 25
An obstacle's details 26

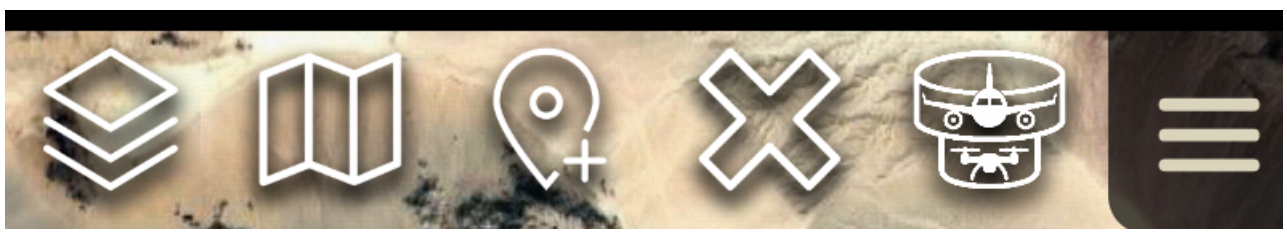
Contents

METARs 27
Settings 28
The map key 29
UAS Flight Plan 30
The launch point 31
The circle 32
Drawing the area to cover 33
Need a ceiling 34
Given a ceiling 35
Islands 36
Obstacles in the plan 37
The obstacle list 38
An obstacle's details 39
Planner settings 40
Types and the map key 41
When there is no terrain data 42
When there is no network 43
Filing an authorization 44
Notifying Flight Service 45
This manual 46
Worth knowing 47

Overview

AirAware answers one question for anyone working under or in the air: **what is in the column of air I am in, and what am I allowed to do here.**

Eight layers draw on the map, each switched on its own. Everything is drawn on this device. Nothing is sent to a TAK Server, nothing is shared with other users, and nothing about you or your position leaves the phone.

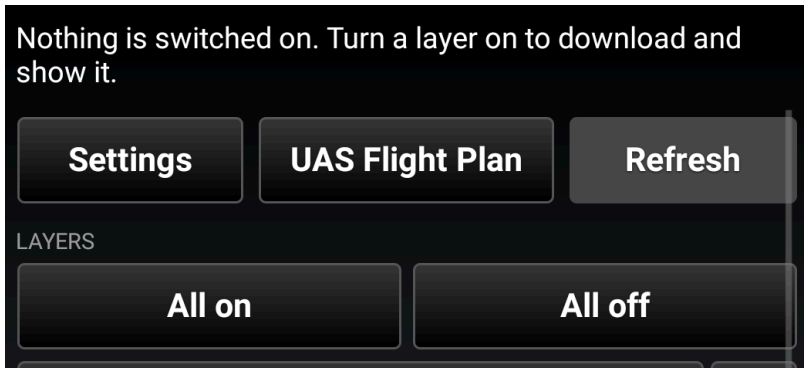


Open it from the ATAK toolbar. The pane opens at half width.

Before you start

- **Everything here is advisory.** AirAware is not a substitute for current charts and NOTAMs, and it is not a clearance. Check the official source before you fly.
- **Network for the first look at an area.** Each layer downloads what it needs for where you are looking, then works from what the phone holds. A phone that has seen an area once can show it again with no signal.
- **Elevation data** is needed by the UAS flight planner only. It reads what ATAK already carries and says so plainly where it is missing.
- **Altitudes.** Restrictions and airspace are drawn between their published floor and ceiling. Obstacle labels are height above the ground; the sea-level top is on the obstacle's own page.

The front page

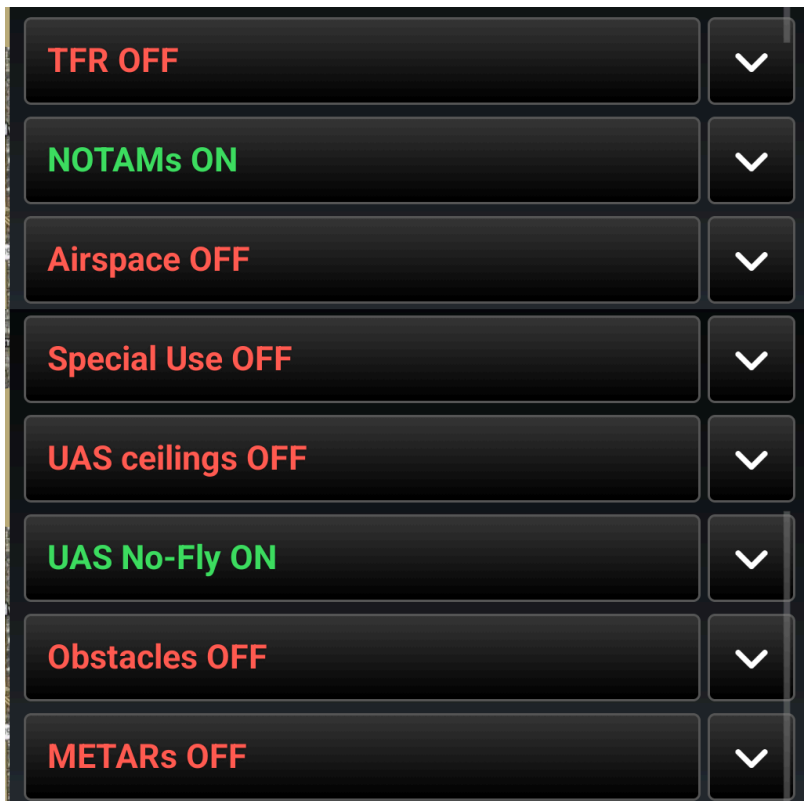


Three buttons across the top:

- **Settings** opens the page that holds everything set once and left.
- **UAS Flight Plan** opens the planner, which is its own screen.
- **Refresh** asks for restrictions and airfield conditions again now.

Under them, **LAYERS**, with **All on** and **All off** for when you want the whole picture or a clean map in one tap.

The layers

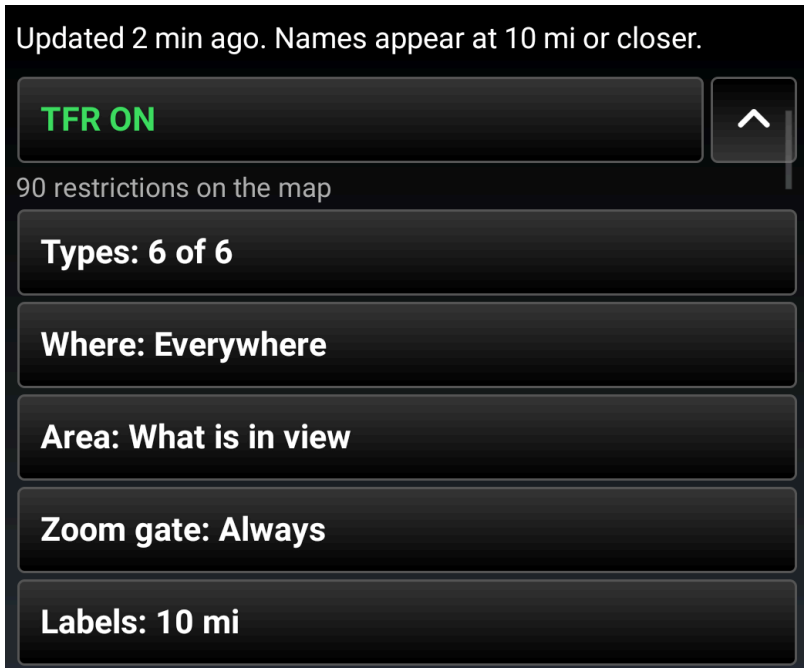


One row per layer. The row itself is the switch: it reads the layer's name with **ON** in green or **OFF** in red, and tapping it turns the layer on or off.

Switching a layer off **hides** it. Nothing is deleted, so a layer you turned off before losing signal comes back when you turn it on again.

The arrow on the right opens that layer's own settings, and a line of text saying what it is showing right now. The arrow works while the layer is off, so a layer can be set up before it is switched on.

A layer's own settings



Each layer carries only what belongs to it:

- **TFR:** Types, Where, Area, Zoom gate, Labels.
- **NOTAMs:** Kinds, Show at, and the key.
- **Airspace:** Classes, Show at, 3D, Names on the map.
- **Special Use:** Kinds, Show at, 3D, Names on the map.
- **UAS ceilings:** Show at.
- **UAS No-Fly:** Show at, 3D.
- **Obstacles:** Kinds, Taller than, Show at.
- **METARs:** Show at.

Show at and **Zoom gate** are read off ATAK's own scale bar. Pick the distance the bar has to read before the layer draws, and the layer stays out of the way until you are close enough for it to mean something.

TFR

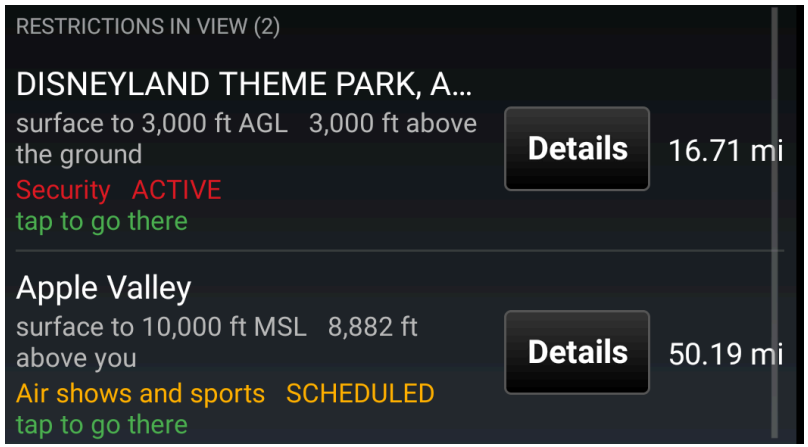
Temporary Flight Restrictions as the FAA publishes them, drawn as a volume from the published floor to the published ceiling.



Red is in effect now. **Amber** is scheduled and not yet active, so a restriction that starts this afternoon is visible this morning and reads differently from one you are already inside.

Some restrictions are published with no shape at all, as a reference to other airspace. There is nothing to draw for those, and the pane says so rather than leaving them out.

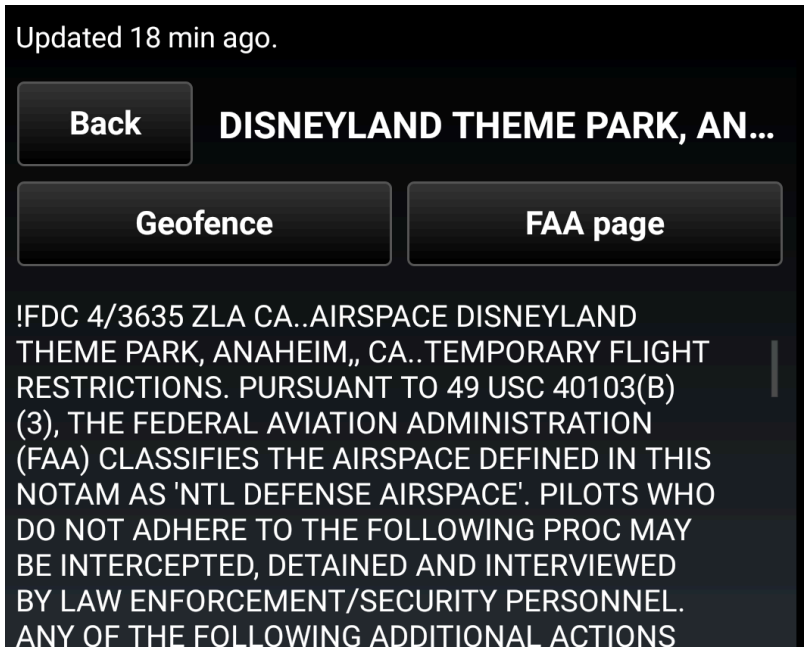
Restrictions in view



Under the layers is the list of what is on the map, newest first. Each row says what the restriction is and when it runs.

The list and the map follow one rule. If a restriction is not on the map it is not in the list, and the status line at the top says why: the zoom gate, the type filter, or that nothing has reached the phone for this area yet.

A restriction's details

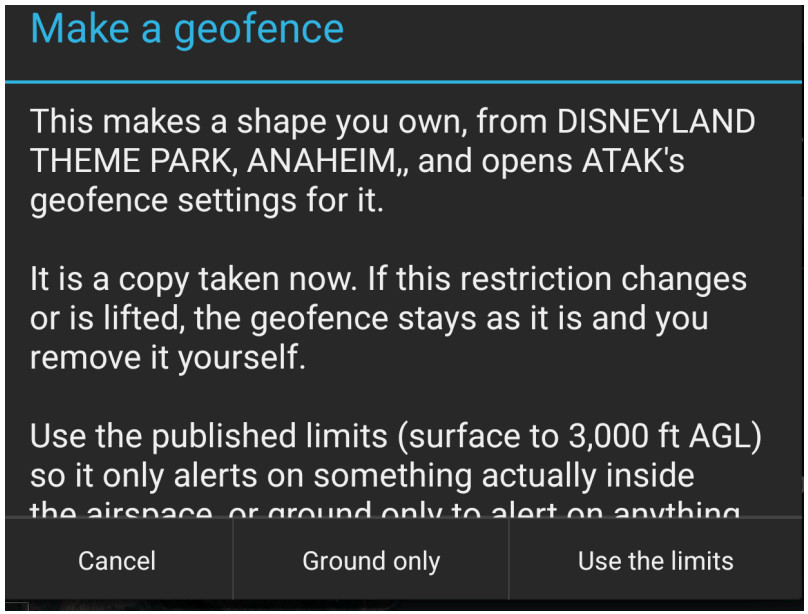


Tap a row, or tap the shape on the map, for the restriction's own page: what it is, where, the floor and ceiling, when it runs, and the full text as the FAA wrote it.

FAA page opens the official notice in a browser.

Geofence puts an ATAK geofence on the restriction, so you are warned when you cross it. Geofences you have made are listed under Settings, and the pane tells you when one no longer matches a live restriction.

Geofencing a restriction

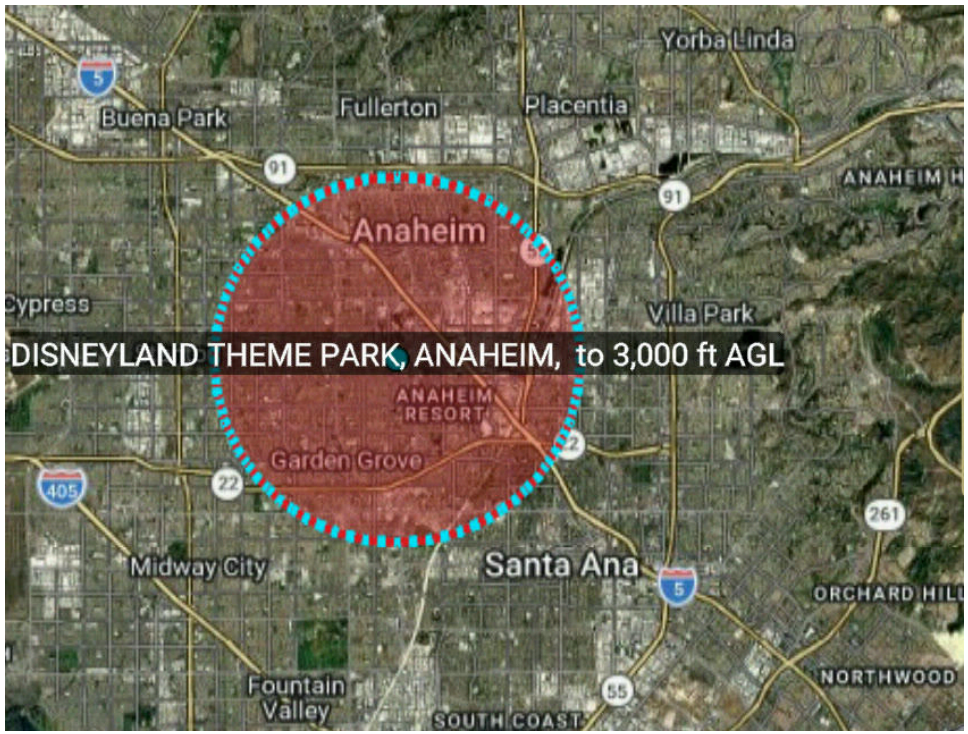


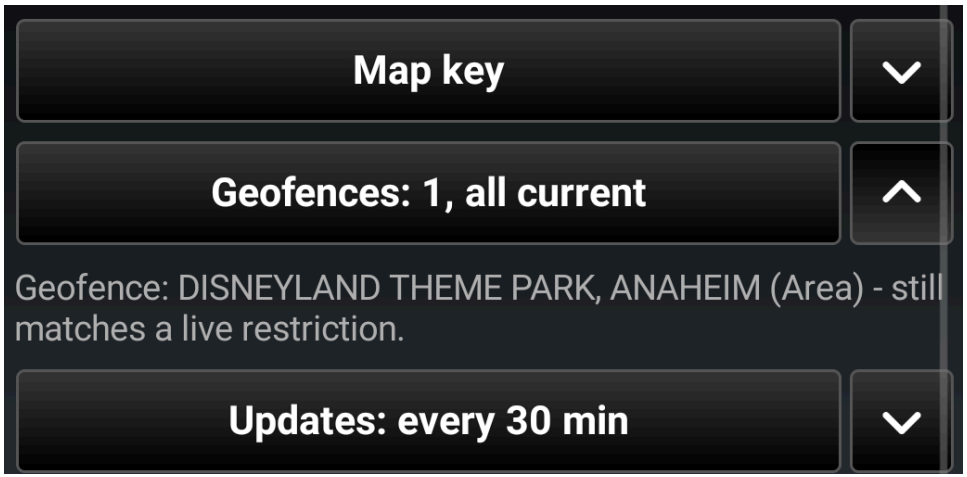
Geofence on a restriction's details page makes a shape you own from its outline and opens ATAK's own geofence settings for it, so you are warned when you cross it. A restriction with more than one area asks which one first.

Choose the published limits so it only alerts on something actually inside the airspace, or ground only if you want it whatever the altitude.

It is a copy taken at that moment. If the restriction moves or is lifted, the geofence stays as it is until you remove it.

Your geofences

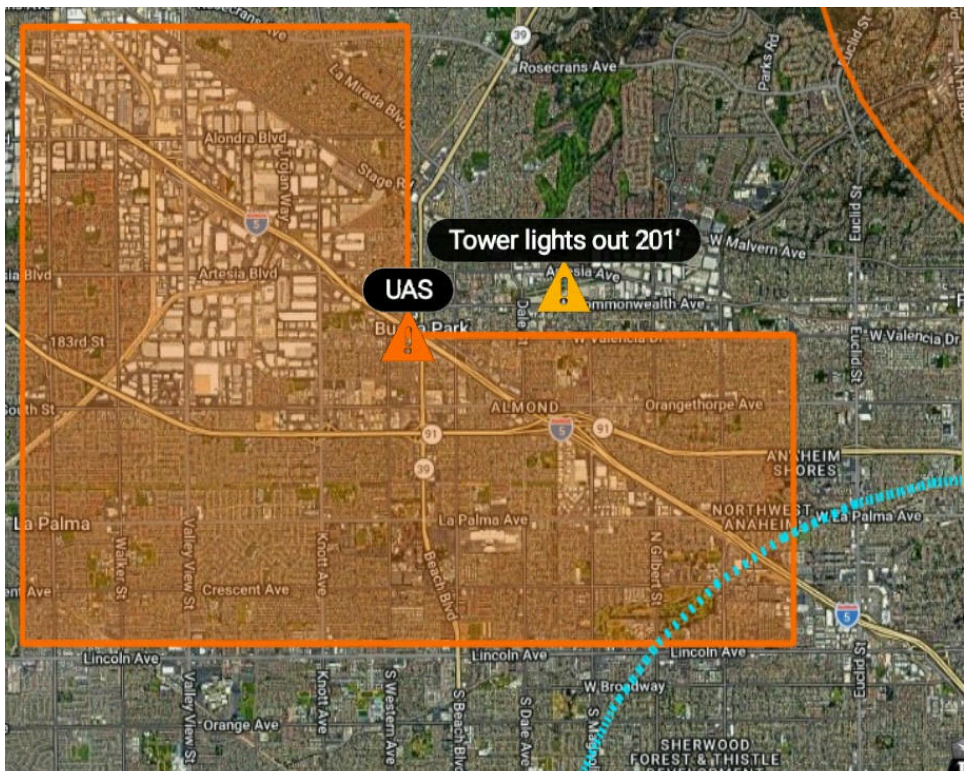




The shape sits on the map over the restriction it came from. **Geofences** under Settings lists what you have made and says whether each still matches a live restriction, with a way to remove one that does not.

NOTAMs

What is going on in the air right now that no chart shows: drone operations, parachute drops, towers with their lights out, cranes, closed runways.

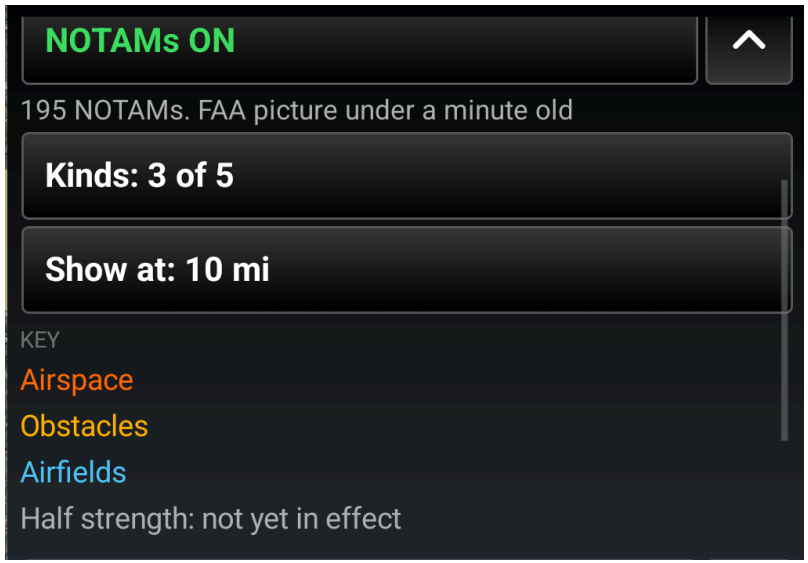


A takwerx relay reads the FAA NOTAM Management Service every three minutes and publishes the picture as tiles. The phone reads the tiles and never holds an FAA credential.

Where the FAA gives an area, in its geometry or in its text, the plugin draws it: here a drone-operations box over Buena Park and the edge of another over Brea. Otherwise a NOTAM is a glyph at its point, with a label saying what it is: “UAS”, “Tower lights out 201′”, “RWY 06/24 CLSD”.

A NOTAM is a notice, not a restriction. A drone-activity NOTAM tells pilots to expect drones; it does not close the airspace. Restrictions are the TFR layer.

NOTAM kinds and the key

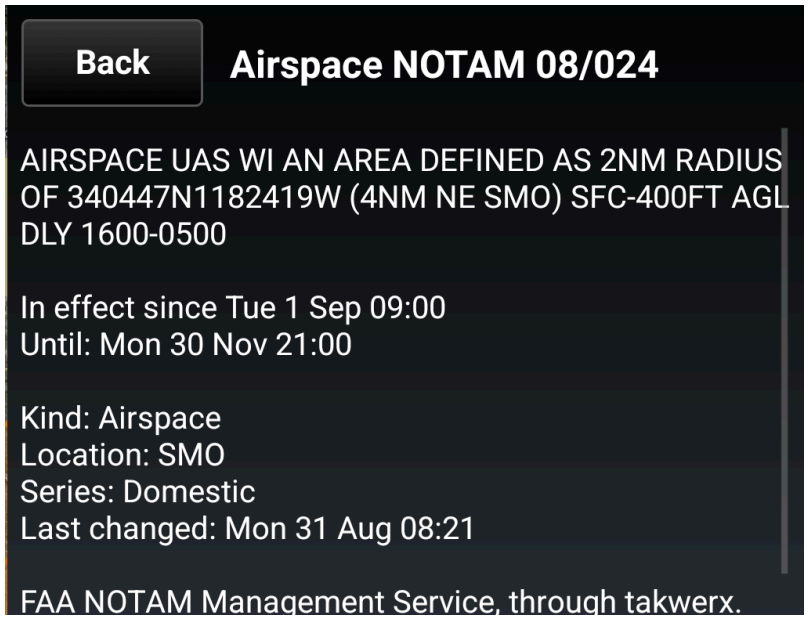


The row says how many are drawn and how old the FAA picture is; if no newer picture has reached the phone, it says so.

Kinds sorts them the way the FAA does: **Airspace** (drones, parachute jumping, rockets, fireworks, aerobatics), **Obstacles** (lights out, cranes), **Airfields** (runways, taxiways, services), **Navigation** and **Other**, the last two off by default. The key under the arrow shows each kind's color; a NOTAM that has not started yet is drawn at half strength.

Show at is the zoom gate, read off ATAK's scale bar: ten miles unless you change it.

A NOTAM's details

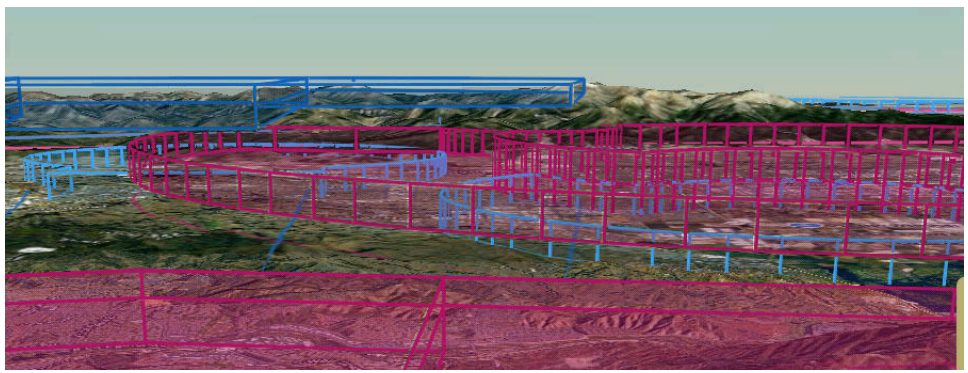


Tap one for its page: the text as the FAA issued it, when it started and ends, its altitudes, the kind, and the airport or center it was filed under. Nothing is paraphrased; the abbreviations are the language pilots read.

A NOTAM is a notice, not a restriction. A drone-activity NOTAM tells pilots to expect drones; it does not close the airspace. Restrictions are the TFR layer. Always check the official NOTAM search before a flight.

Airspace

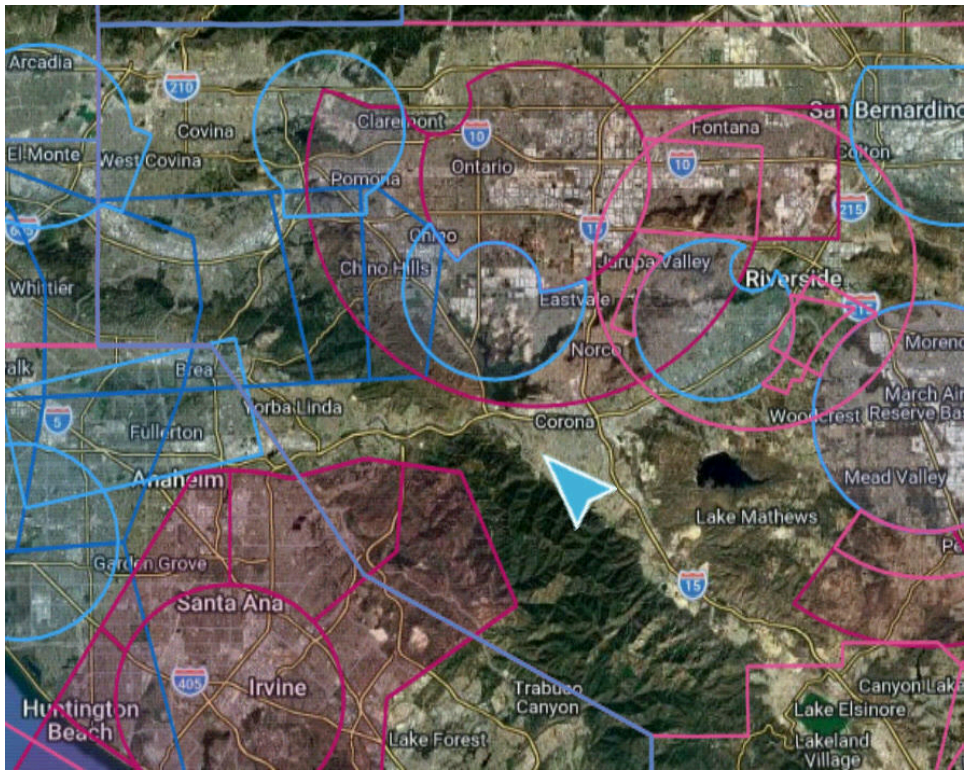
Class A through G, drawn one shelf at a time.



The FAA publishes a Class B airport as a stack of rings, each starting and ending at a different altitude. AirAware draws each of those steps as its own volume, so the upside-down wedding cake is the shape it really is rather than one ring with a note.

With **3D** on, each shelf stands between its own floor and ceiling. Tilt the map to see it. Airspace that goes up with no published ceiling is drawn so it does not swallow everything below it.

Airspace colors and classes

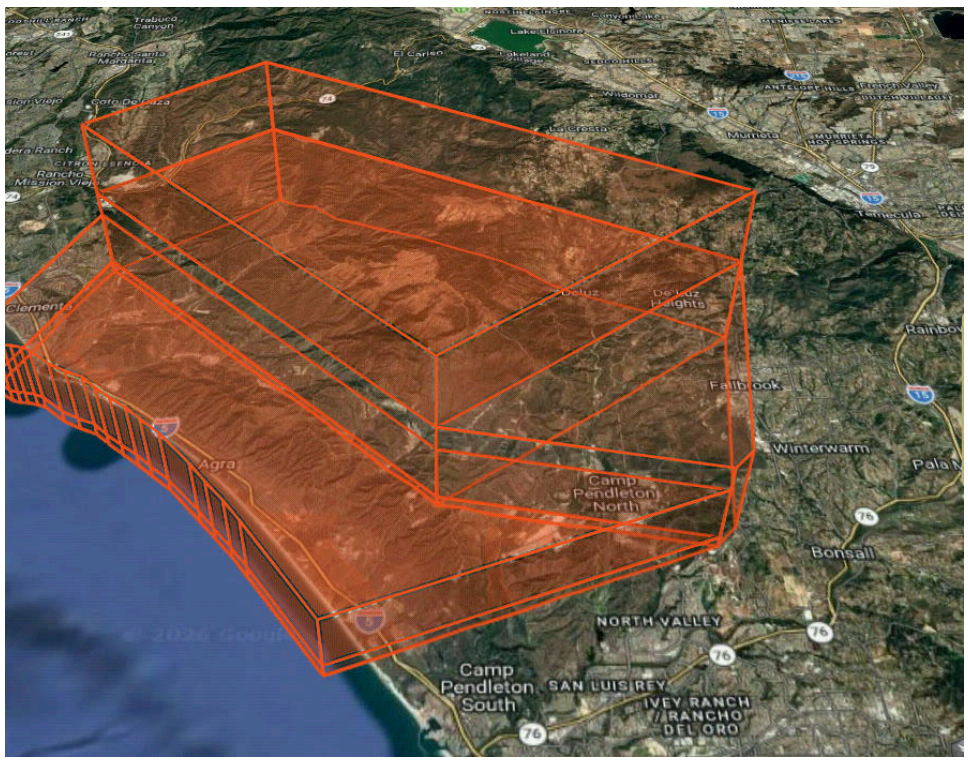


The colors are the sectional chart's: **blue** for Class B and D, **magenta** for Class C and E. Class E takes its color from how low it comes down, so Class E starting at 1,200 ft above the ground reads differently from Class E at 700 ft.

Classes under the layer picks which ones draw. On a busy map, turning off the class you are not working under is the fastest way to see what matters.

Names on the map puts each shelf's name and heights beside it.

Special Use airspace

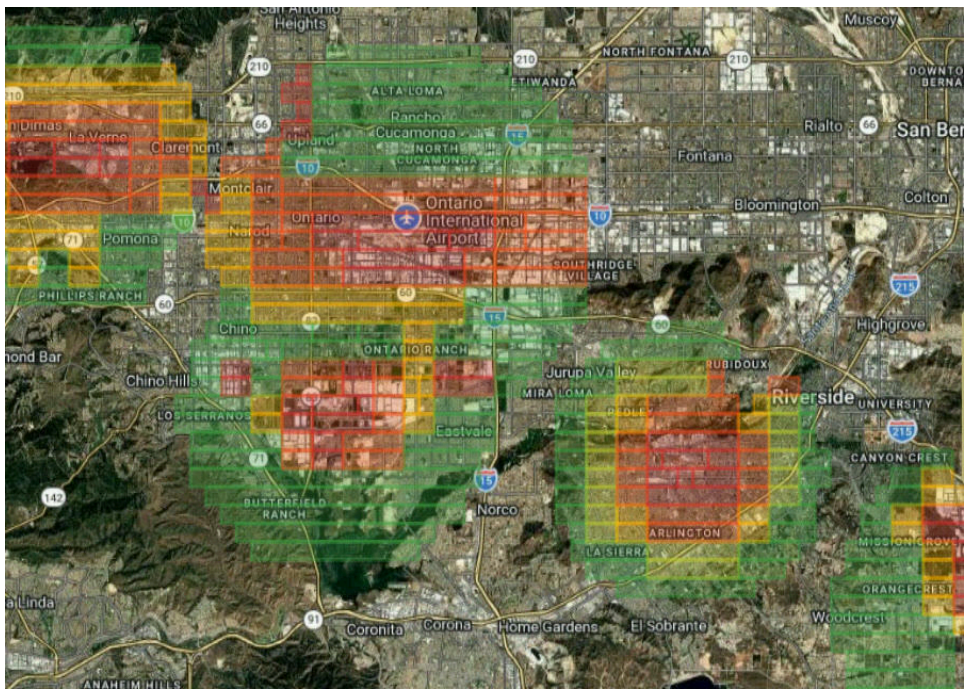


Prohibited, Restricted, Warning and Alert areas, and Military Operations Areas. **Kinds** picks which of those draw.

Each area's page says whether it is continuous or activated by NOTAM. An area that is only active when a NOTAM says so is still drawn, because you need to know it is there before you go looking for the NOTAM.

UAS ceilings

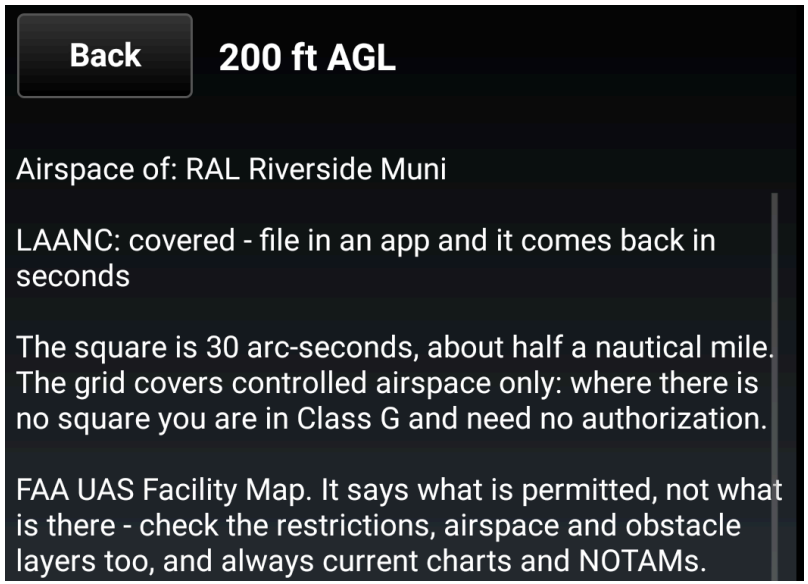
How high a drone may fly without an authorization, from the FAA's UAS Facility Map.



A grid of squares colored by their ceiling: **green** where you have the full height, through to **red** where you have very little. A **0 ft** square is drawn hardest of all, because it is the one that means you cannot fly there without coordinating first.

The grid is flat on purpose. It is a rule about the ground under you, not a volume in the air.

What a square says



Tap a square for its own page: the ceiling in feet above the ground, the airport the square belongs to, and whether that airport is covered by LAANC.

That last line is the difference between filing in an app and filing for further coordination, which is why it is on the page rather than left to be looked up.

These are the heights an authorization is granted against. They are not a clearance by themselves.

UAS No-Fly

Where no drone may fly at all: the FAA's National Security UAS Flight Restrictions, from the surface to 400 ft above the ground.

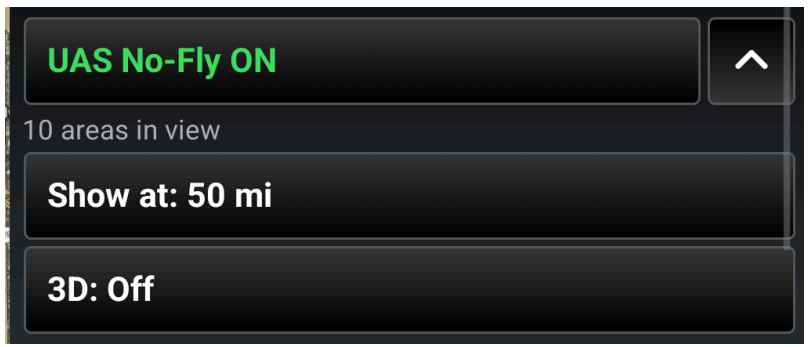


Military bases, Coast Guard stations, national laboratories, dams and nuclear sites, each drawn as a red ring with a light fill and the facility's name. Here San Diego Bay: Naval Base Point Loma, NAS North Island, Naval Base Coronado.

These are not ceilings and not notices. A UAS ceiling says how high you may fly with an authorization; a no-fly area says there is no authorization to apply for. It is a prohibition under 14 CFR 99.7, and it does not expire.

A part-time area (orange) is closed when the facility activates it. A pending one (gray) has been announced and is not yet in force.

The no-fly row



The whole country is one download, under two megabytes, kept on the phone and fetched again only when the FAA's list changes. The row says how many areas are in view.

Show at is the zoom gate, read off ATAK's scale bar: fifty miles unless you change it, because these areas are small and matter from a long way out.

3D stands each area up to its published ceiling. Off unless you switch it on: it is a rule about the ground, and the ring already says it.

When you are standing inside one, the pinned status line says so in words.

A no-fly area's details

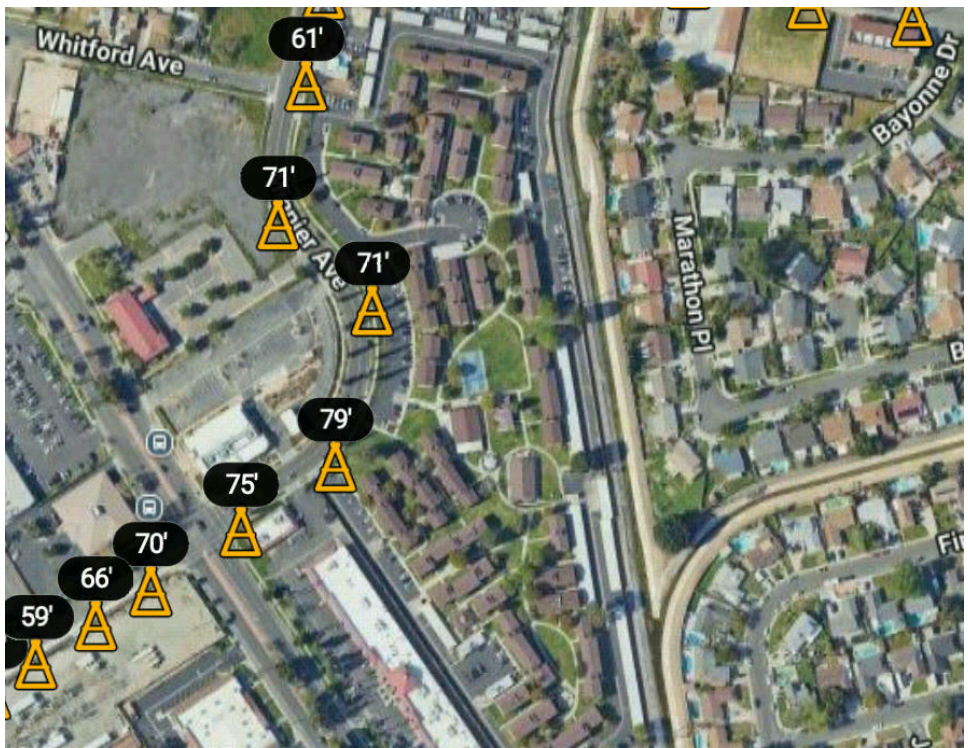


Tap one for its page: the prohibition in plain words, the facility and the base, who runs it, the reason, where it is, and the point of contact the FAA publishes with it, which is the number to call about it.

A part-time area's page also says how it is activated and what the FAA advises.

Obstacles

The FAA's Digital Obstacle File: towers, wire spans, transmission lines, turbines and stacks.

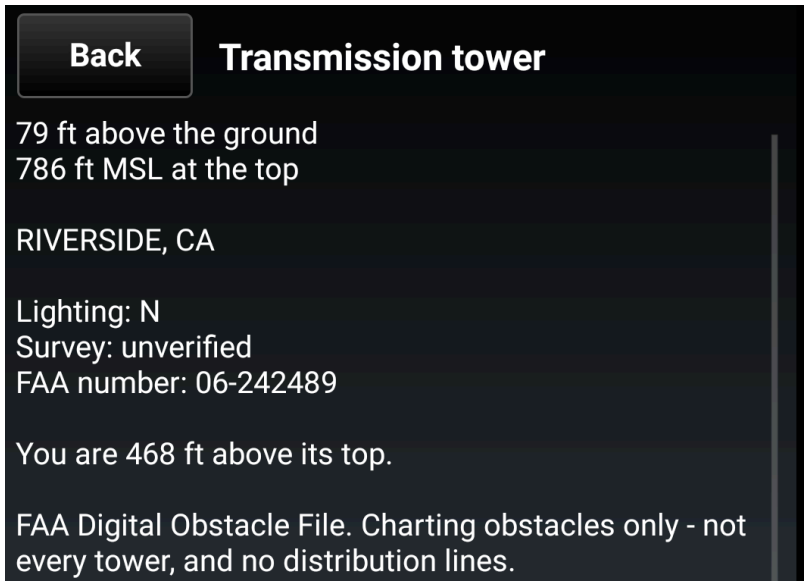


Each obstacle stands from the ground to its published top, with the tower symbol at the top and its height on a label above that.

The label is height **above the ground**, because that is the number somebody flying low compares against their own height above the ground.

Taller than and **Kinds** keep the map readable. Over a city the file holds thousands, so the plugin draws the ones nearest what you are looking at and says in words when it has trimmed the rest.

An obstacle's details



Tap an obstacle for its page: height above the ground and its top above sea level, its lighting, whether the FAA has verified the position, how many there are at that point, and the nearest town.

Not every wire or tower is charted. The FAA's file holds the obstacles that affect charting; distribution lines are never in it. Treat an empty map as an absence of records, not an absence of wire.

METARs

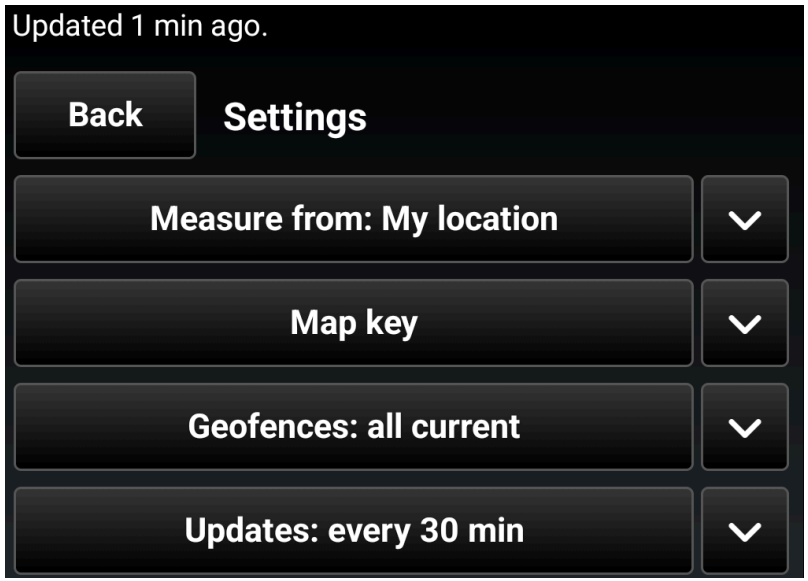


METAR observations drawn as flight-category chips in the aviation convention: **green** VFR, **blue** MVFR, **red** IFR, **magenta** LIFR.

The category is the one published with the observation. It is never worked out here from the numbers, so what you see is what the station reported.

Tap a chip for the observation itself and the time it was made. These are the one thing AirAware does not keep: an old observation is worse than none, so conditions are shown only while they are current.

Settings

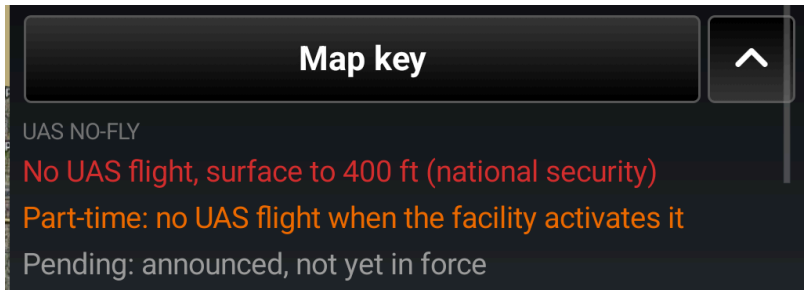


Everything set once and left, on folds that stay as you leave them:

- **Measure from** decides what distances are measured from.
- **Map key** names every color on the map.
- **Geofences** lists the ones you have made, and offers to remove a geofence whose restriction is no longer live.
- **Updates** is how often restrictions and airfield conditions are asked for again.

At the bottom, a line saying what this phone has already downloaded.

The map key

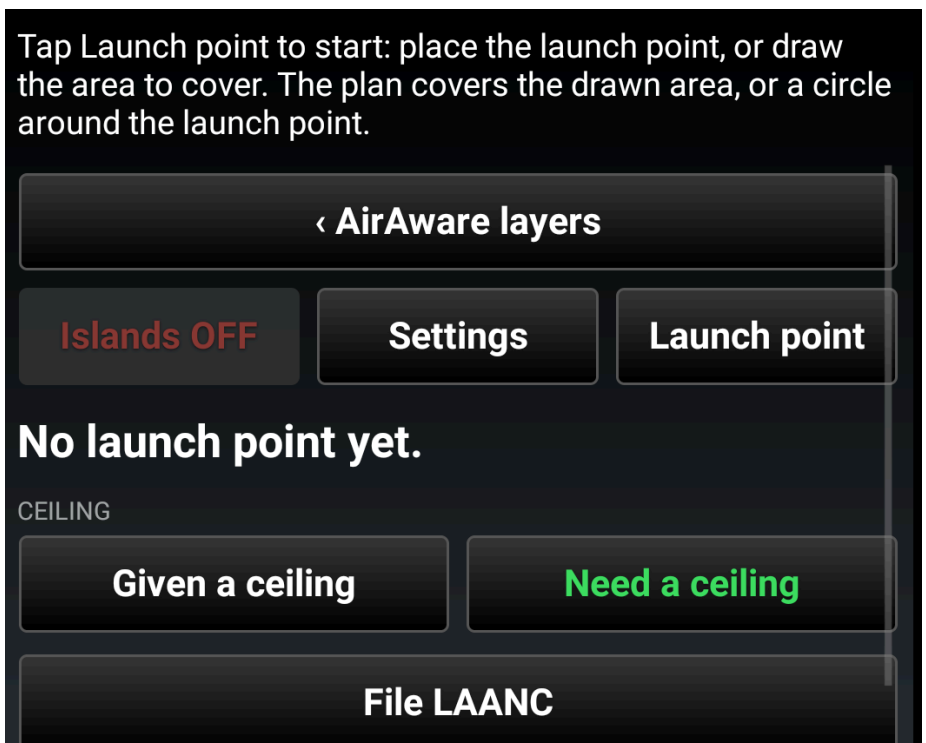


Open **Map key** under Settings for what every color means, in the same words the rest of the pane uses.

The key follows the same rule as the list and the map: if a layer is off, its colors are not in the key.

UAS Flight Plan

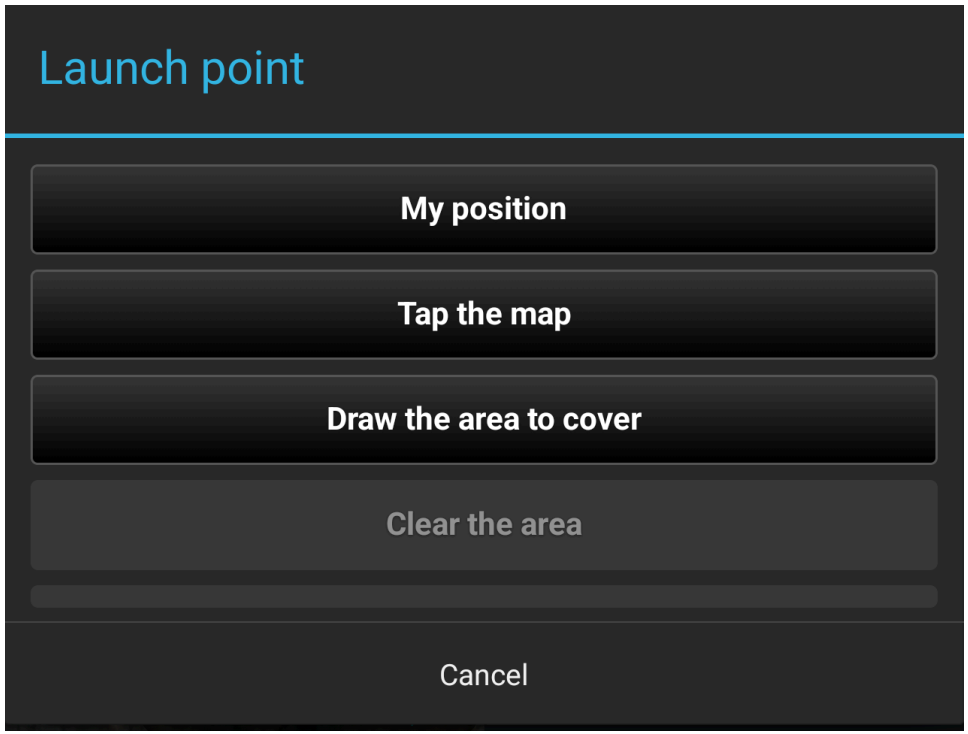
The planner is its own screen, reached from **UAS Flight Plan** on the front page. It answers two questions a UAS pilot has at the turnout before the radio call to Air Attack: **what ceiling does this mission area need**, and **what does the ceiling I was given do to it**.



At the top, **AirAware layers** goes back to the layer switches. Under it the status line, then **Islands ON/OFF**, **Settings** and **Launch point**, and at the bottom **File LAANC** and **Notify Flight Service**.

The planner keeps its own map drawings, separate from the layers.

The launch point

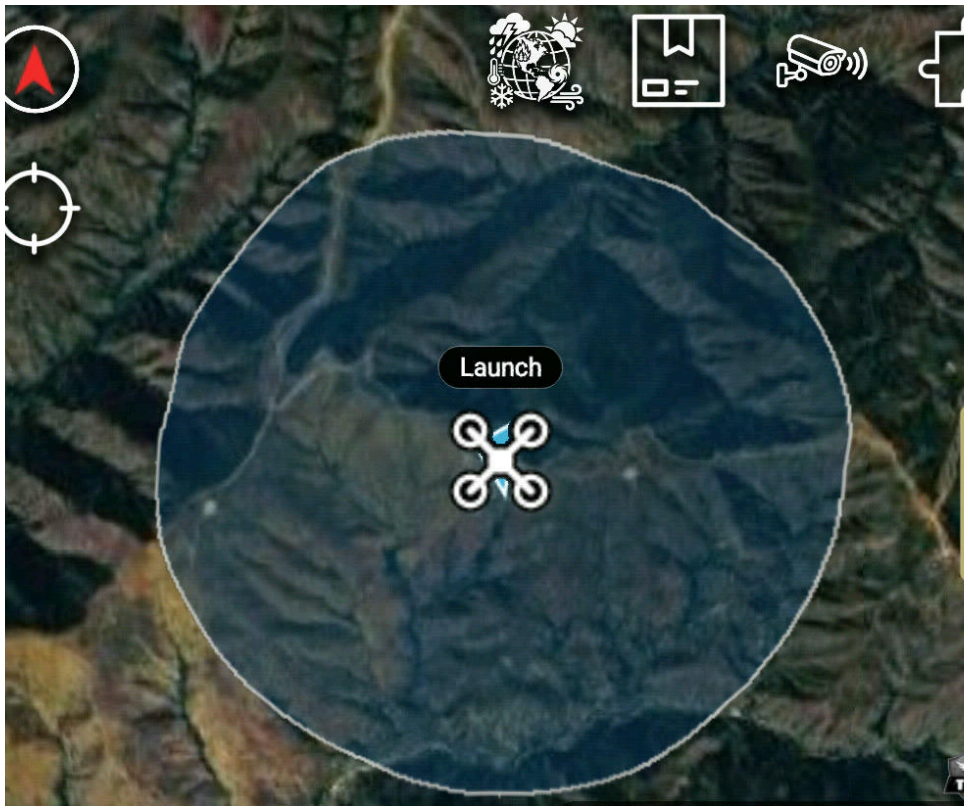


Tap **Launch point**. **My position** uses your own GPS fix; **Tap the map** lets you place it anywhere. **Draw the area to cover** starts the area instead.

The plan covers the drawn area if there is one, otherwise a circle around the launch point.

Everything you set here comes back when ATAK restarts, with no network.

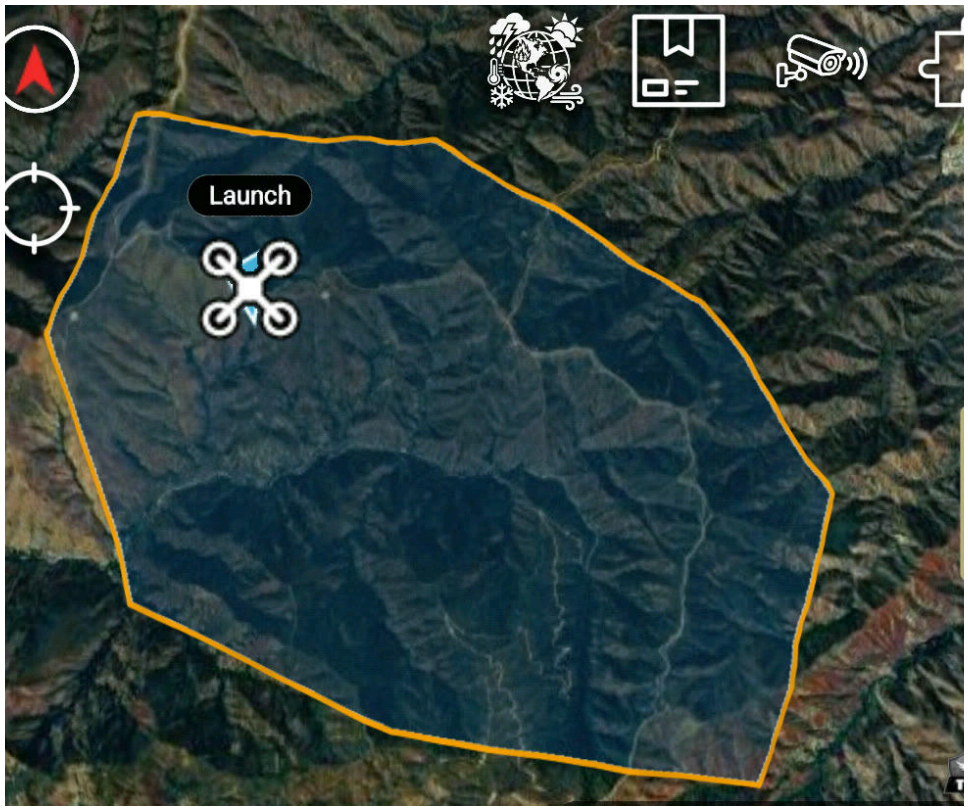
The circle



With no drawn area, the plan is a circle around the launch point. Set its size under Settings.

The circle is what the terrain and the obstacles are read for, so a bigger circle is a higher ceiling and a longer read.

Drawing the area to cover

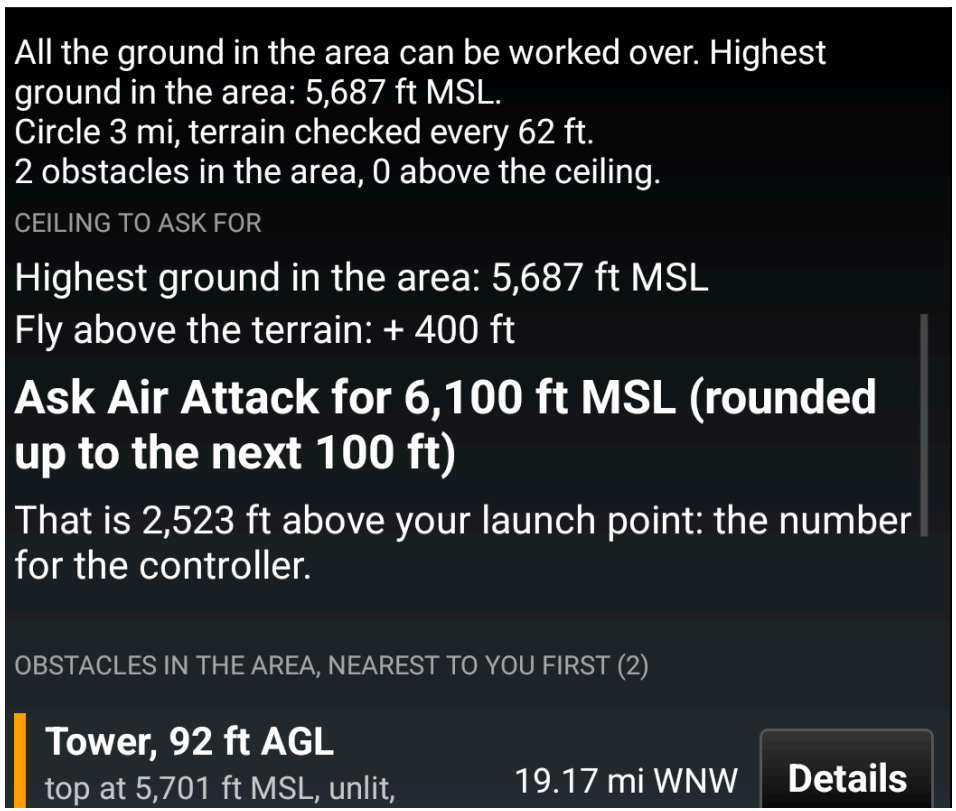


Draw the area to cover hands you ATAK's own drawing tools. Tap the map to place each corner, then tap the first marker to close the shape. Undo and End Shape are on ATAK's drawing toolbar.

The plan then covers exactly that shape rather than a circle, which matters when the mission is a strip along a ridge.

Need a ceiling

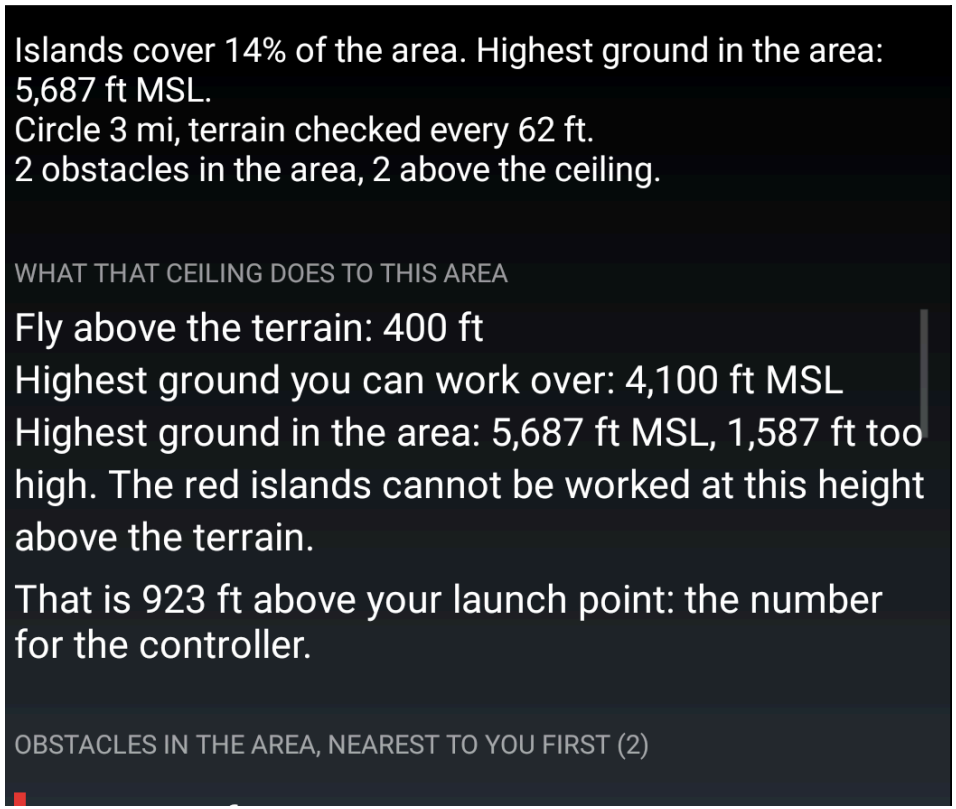
Under **Ground here** is the **Ceiling** row with two buttons. Pick the one that is your situation; the chosen one is green.



You are planning and have to ask Air Attack for a ceiling. The block reads the highest ground in the area, adds the height you fly above the terrain (Settings, Height above terrain), and rounds up to the next 100 ft.

The last line is the same number above your launch point, which is what the controller wants.

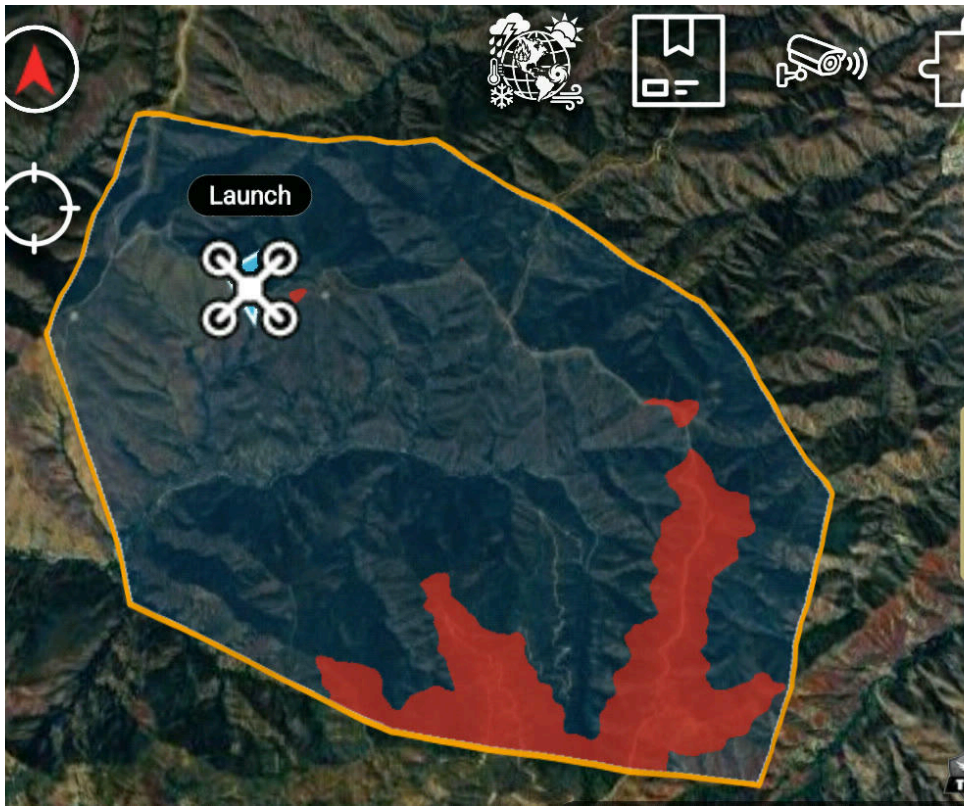
Given a ceiling



Air Attack assigned you a ceiling and you have to live with it. Tap **Given a ceiling** and type it. The block reads what that ceiling does to your area: the highest ground you can work over at your height above terrain, and how much of the area is too high.

The mission area has to be blue, or the ceiling is wrong for the mission.

Islands



Red islands are the ground you cannot work over at your height above the terrain. Blue is ground under the ceiling.

The edge of the painted area is the edge of what was checked, not a boundary in the world.

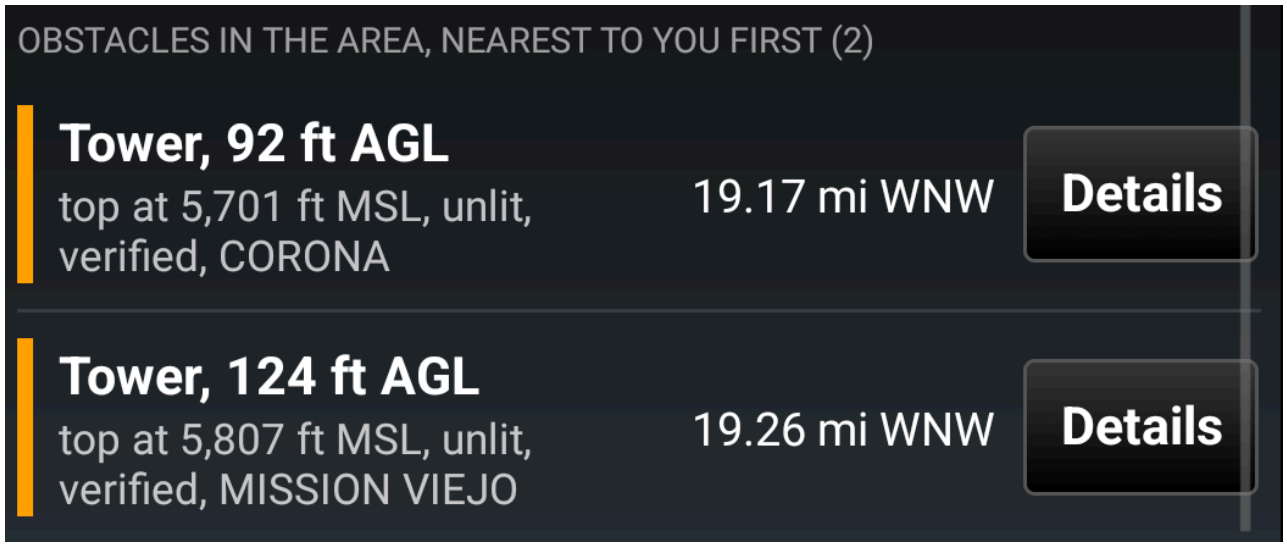
Obstacles in the plan



The planner draws the charted obstacles inside the plan area and says how many of them are above your ceiling.

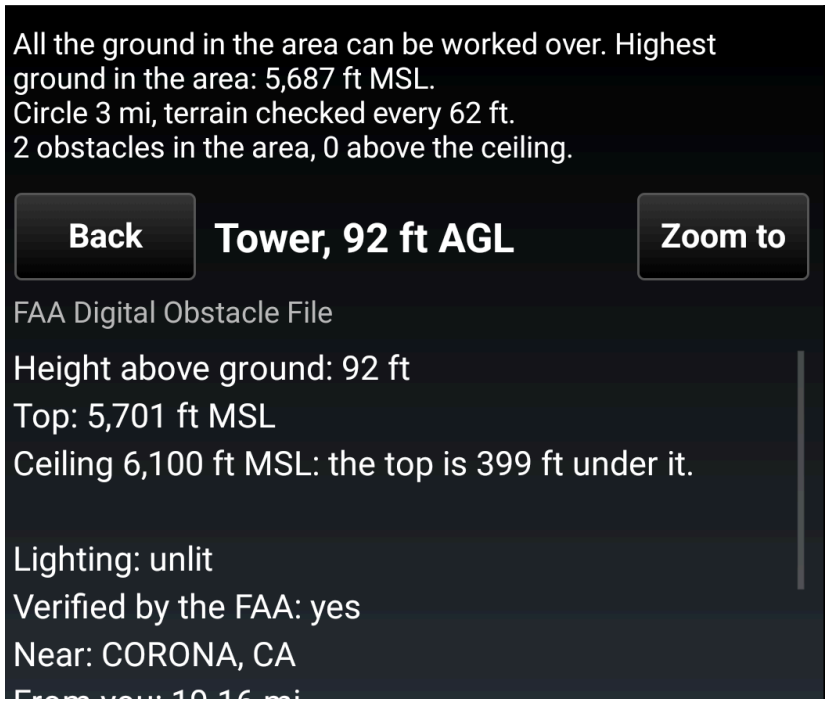
These come from the same FAA file as the Obstacles layer, read from what the phone already holds, so the planner works with no signal.

The obstacle list



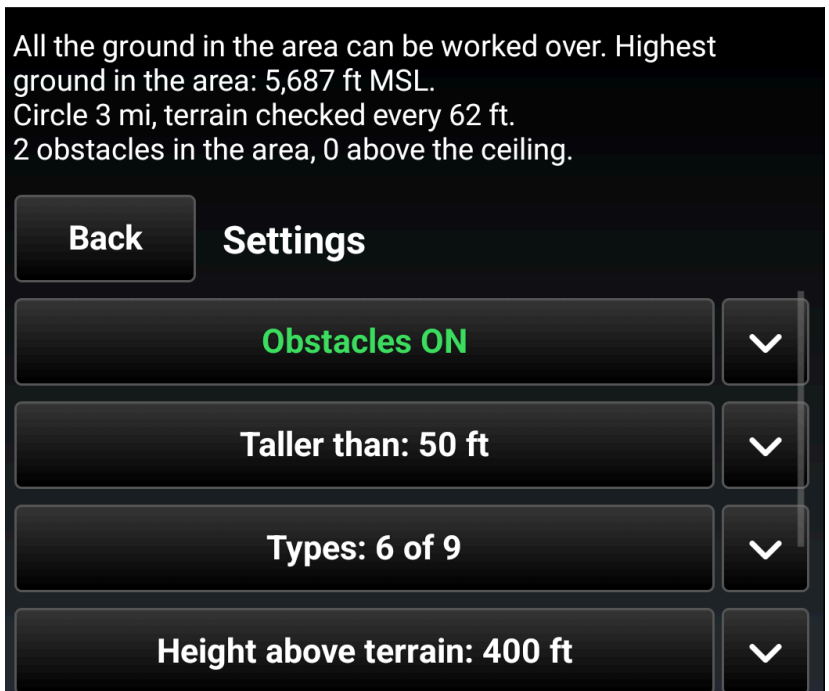
Under the readouts, the obstacles in the area, nearest first, each with its height, its top above sea level, its lighting and how far away it is.

An obstacle's details



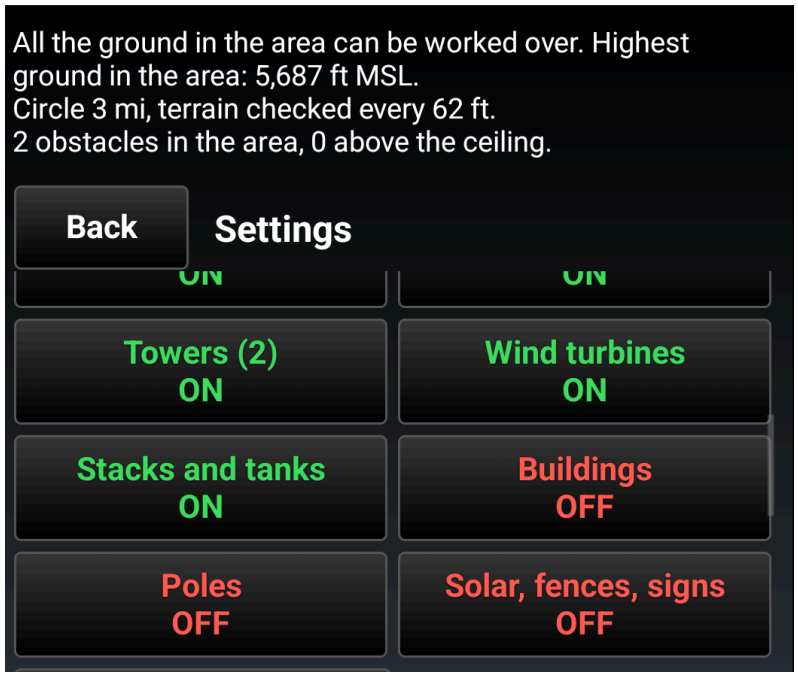
Details opens one obstacle: its heights, whether its top is above or under your ceiling, and the distance and bearing from the launch point.

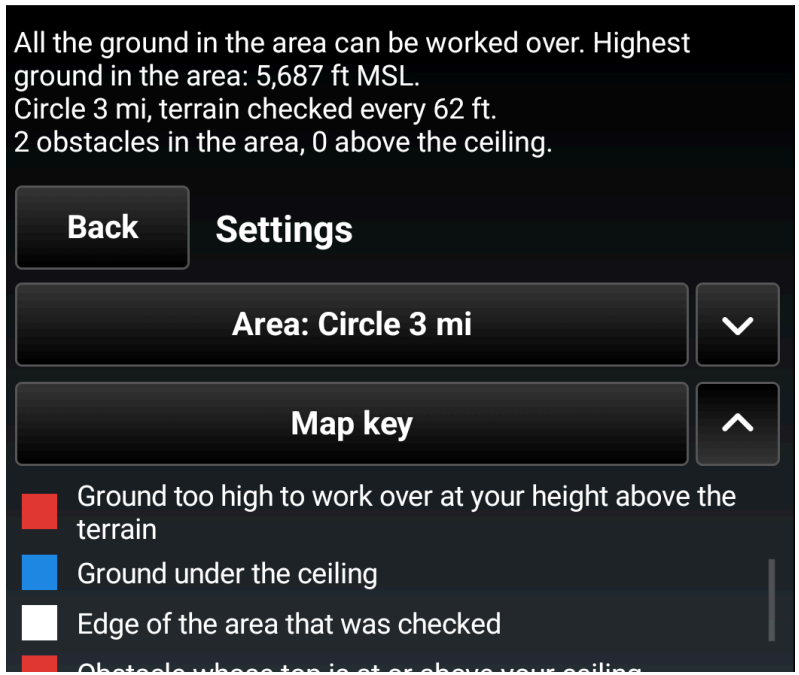
Planner settings



Back returns to the plan. Here are the obstacle switch, **Taller than**, **Types**, the **Height above terrain** you fly at, the separation, and the size of the circle.

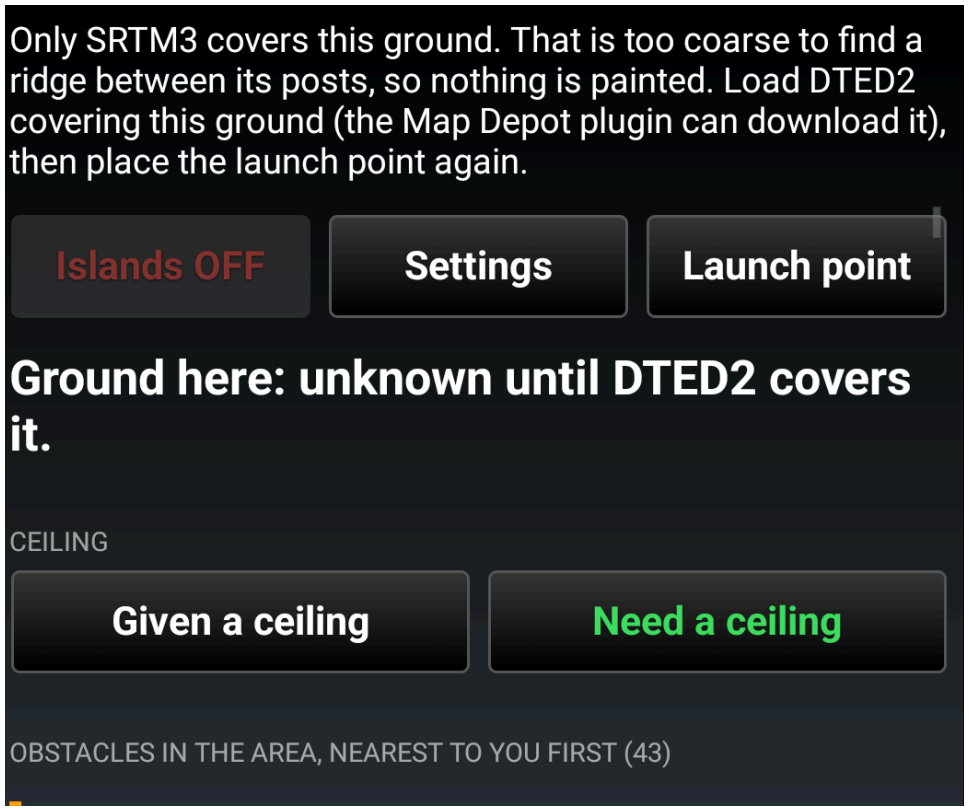
Types and the map key





Types picks which kinds of obstacle are drawn and listed. **Map key** names every color the planner puts on the map.

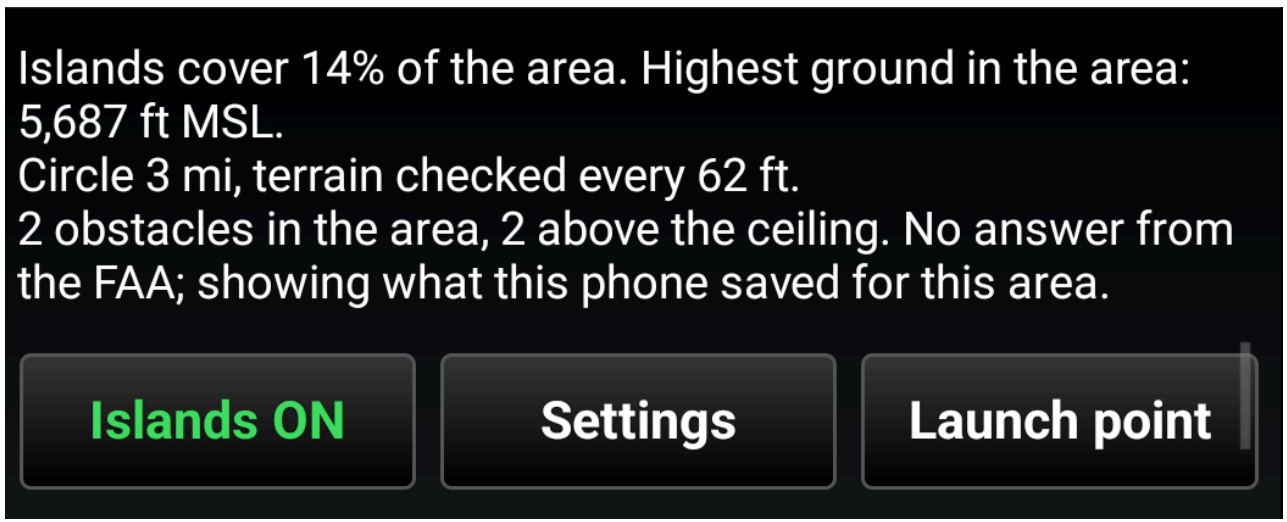
When there is no terrain data



The planner reads the elevation ATAK carries. Where it is missing, the plugin says so and leaves that ground unpainted rather than computing a ceiling from data it does not have.

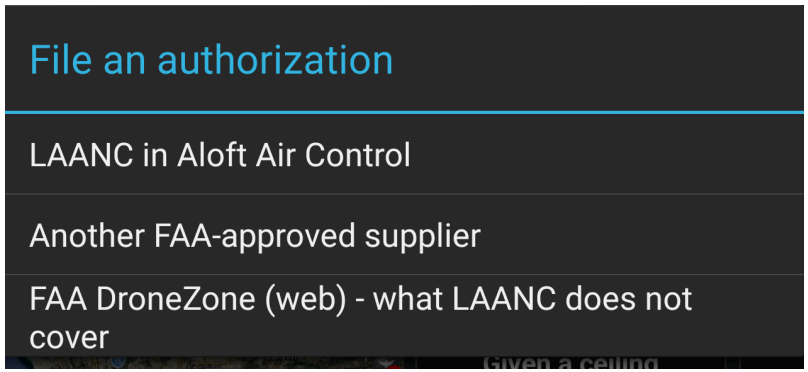
Load the elevation for the area and the readouts fill in.

When there is no network



The status line says what you are looking at in words, and names what it could not reach. A failed fetch never empties the map.

Filing an authorization

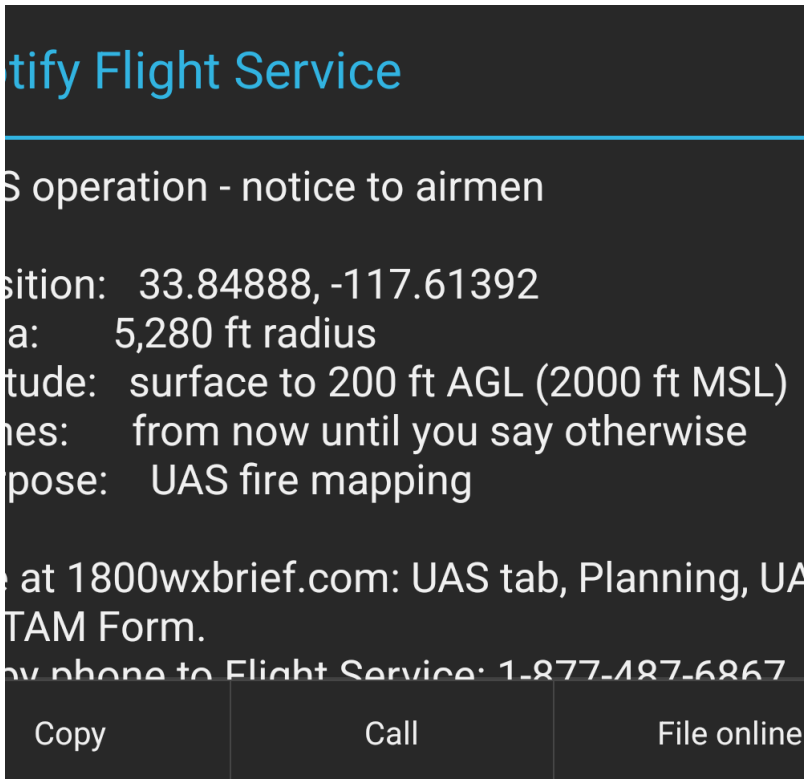


File LAANC asks which way you are filing and takes you there.

LAANC is granted through FAA-approved suppliers, not by the FAA directly, so the button opens the supplier's app if you have it and its website if you do not. Anything LAANC does not cover goes through FAA DroneZone instead, which is the second choice on the dialog.

AirAware does not file anything for you and does not send it your plan. It takes you to the form.

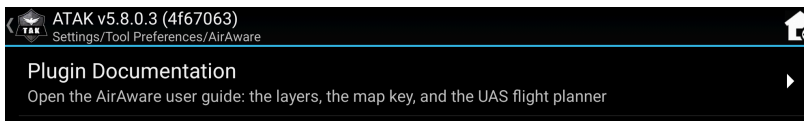
Notifying Flight Service



Notify Flight Service gathers the plan's own numbers, ready to read out or paste: where you are launching, the area, the ceiling, and when.

Nothing is transmitted. You place the call or open the form.

This manual



This guide is inside the plugin. Open it from **Settings**, then **Tool Preferences**, then **AirAware**, then **Plugin Documentation**.

Worth knowing

- **Advisory only.** Everything AirAware draws is a picture of published data at the time it reached this phone. It is not a clearance, it is not current by itself, and it does not replace charts, NOTAMs or a call.
- **Nothing is shared.** No TAK Server, no Data Sync, no CoT. What you switch on is on your device only, and your position is never sent anywhere.
- **What it holds, it keeps.** Airspace, restrictions, obstacles and UAS ceilings that have reached this phone come back after a restart with no network. METARs do not, on purpose.
- **It says what it is not showing.** A trimmed list, a layer under its zoom gate or an area that was never downloaded is stated in words on the status line. A quiet map is not the same as an empty sky.
- **Data** is published by the Federal Aviation Administration. Use of FAA data does not imply FAA endorsement.