Above The Sky Adventures

French Alps

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French Alps - Tour Introduction

Above The Sky Adventures
Premium Flight Simulation Experiences

Prepare for three hours of continuously spectacular terrain, where every heading change reveals new perspectives on one of Earth's most dramatic mountain ranges.

Your journey traverses the most spectacular alpine terrain in Europe, following an arc through the heart of the French Alps. From the crystalline waters of Lac du Bourget to the towering peaks of Mont Blanc, this flight path captures the geological magnificence that has drawn mountaineers, artists, and visionaries for centuries.

The valleys beneath your wings witnessed Hannibal's legendary crossing, sheltered medieval pilgrimage routes, and became the cradle of modern mountaineering. Fortifications built by Vauban guard ancient passes, while villages preserve centuries-old architectural traditions adapted to extreme mountain environments.

Soar above evidence of tectonic collision where the African plate pushed beneath Europe, creating these dramatic peaks. Glacial valleys carve through limestone and crystalline rock, while hanging valleys and cirques tell the story of ice ages past. Modern glaciers continue their slow retreat, visible markers of climate transformation.

Tour Highlights

- **Lac du Bourget** - France's largest natural lake contained within glacially-carved trough; Abbaye d'Hautecombe royal necropolis visible on western shore
- **Chamonix Valley** - Birthplace of mountaineering cradled between Aiguilles Rouges and Mont Blanc; Mer de Glace glacier; 1821 Compagnie des Guides establishment
- **Mont Blanc Massif** - Europe's highest peak at 15,774 feet; crystalline granite core thrust upward 30 million years ago; Bossons Glacier descending north face
- **Massif des Bauges** - Limestone Pre-Alps reaching 7,200 feet; Gouffre Berger cave system penetrating 3,900 feet; karst topography with underground drainage
- **Saint Jean de Maurienne** - Maurienne valley capital; 11th-century cathedral containing Saint Thècle tomb; Fréjus Rail Tunnel (1871) linking France-Italy
- **Col du Galibier** - High pass at 8,678 feet; Tour de France "Circle of Death" since 1911; Henri Desgrange monument; 19th-century military fortifications
- **Massif des Écrins** - Wilderness granite peaks with Barre des Écrins at 13,461 feet; 40+ glaciers including retreating Glacier Blanc; 1973 National Park protecting 226,000 acres
- **Briançon Citadel** - Europe's highest city at 4,334 feet; Vauban's UNESCO-listed fortifications from late 17th century; Pont d'Asfeld single-arch bridge spanning Durance gorge
- **Grand Lac de Laffrey** - Largest glacial lake on Laffrey plateau; Prairie de la Rencontre where Napoleon confronted royalist troops during 1815 return from Elba
- **Grenoble** - "Capital of the Alps" at 702 feet where Drac and Isère converge; Fort de la Bastille 1,200 feet above city; 1968 Winter Olympics host; nuclear research and microelectronics hub

Complete Flight Guide – French Alps (LFLB to LFLS)

- Pre-Departure Brief

Aix-Les-Bains airfield sits at 780 feet elevation on the western shore of Lac du Bourget, France's largest natural lake.
The field operates Class G airspace with AFIS service on 120.575 MHz.
Runway 36/18 measures 3,937 feet, adequate for DA40-NG operations.
Departure northward follows the lake's eastern shore, climbing toward mountain terrain.

Altitude: Depart runway 36, climb to 3,500 feet maintaining visual separation from terrain
Advisory: Morning departures offer smoother air; thermal activity builds mid-morning

- Departure Procedure

After takeoff, maintain runway heading until 1,500 feet AGL.
Turn left to 355° following the eastern shoreline of Lac du Bourget.
Climb at 90 knots.

WAYPOINT 1: Lac du Bourget

Navigation:
Magnetic Heading: 354° following eastern shoreline toward Annecy
Altitude: Continue climb to 6,500 feet, rate 500 feet per minute
Landmark: Abbaye d'Hautecombe visible on western shore at 2 o'clock position
Weather: Monitor wind patterns; lake orientation channels valley winds north-south

Lac du Bourget stretches beneath your climb path by following the eastern shoreline from departure, maintaining this natural corridor as the lake's distinctive elongated shape provides continuous visual reference.
The white stone church of Abbaye d'Hautecombe on the western bank at your 10 o'clock position serves as an unmistakable landmark. Its Gothic spires contrast sharply against the dark forest backdrop.
Measuring 11 miles long and 1.8 miles wide, this glacially-carved trough reaches depths of 476 feet, its deep blue waters darker than the turquoise alpine lakes awaiting further east.

Roman settlements dotted these shores two millennia ago, drawn by strategic position and abundant fish stocks.
Gothic spires mark this royal necropolis where Savoy nobility found burial from the 11th century onward.

Glacial moraines form the southern boundary, deposited when alpine ice sheets retreated 12,000 years ago.
The lake's elongated shape follows the primary axis of glacial flow, carved by ice hundreds of meters thick.
Modern bathymetric surveys map underwater pinnacles and terraces that record fluctuating lake levels through geological epochs.

Lakeside towns like Aix-les-Bains developed spa traditions exploiting thermal springs.
These geothermal waters rise from depths where limestone beds contact impermeable crystalline basement rocks.
Belle Époque hotels line the waterfront, architectural remnants of 19th-century health tourism.

WAYPOINT 2: Lake Annecy

Navigation:
Magnetic Heading: 070° toward Col des Aravis, beginning climb into alpine terrain
Altitude: Climb to 8,000 feet
Advisory: Turbulence increases beyond this point; secure all loose items

Following the valley northeast from Lac du Bourget, Lake Annecy's exceptional turquoise waters distinguish it immediately from the darker lake behind—track along the western shoreline using medieval Annecy town on the northern shore as your primary visual anchor.
The contrast in water color is dramatic even from altitude, with mountain streams rather than glacier-laden rivers maintaining this remarkable clarity throughout the 10.5-mile lake length.
Tournette peak rising to 7,710 feet on the eastern shore provides excellent orientation, its distinctive roche paillon rock formations unmistakable against the alpine skyline.

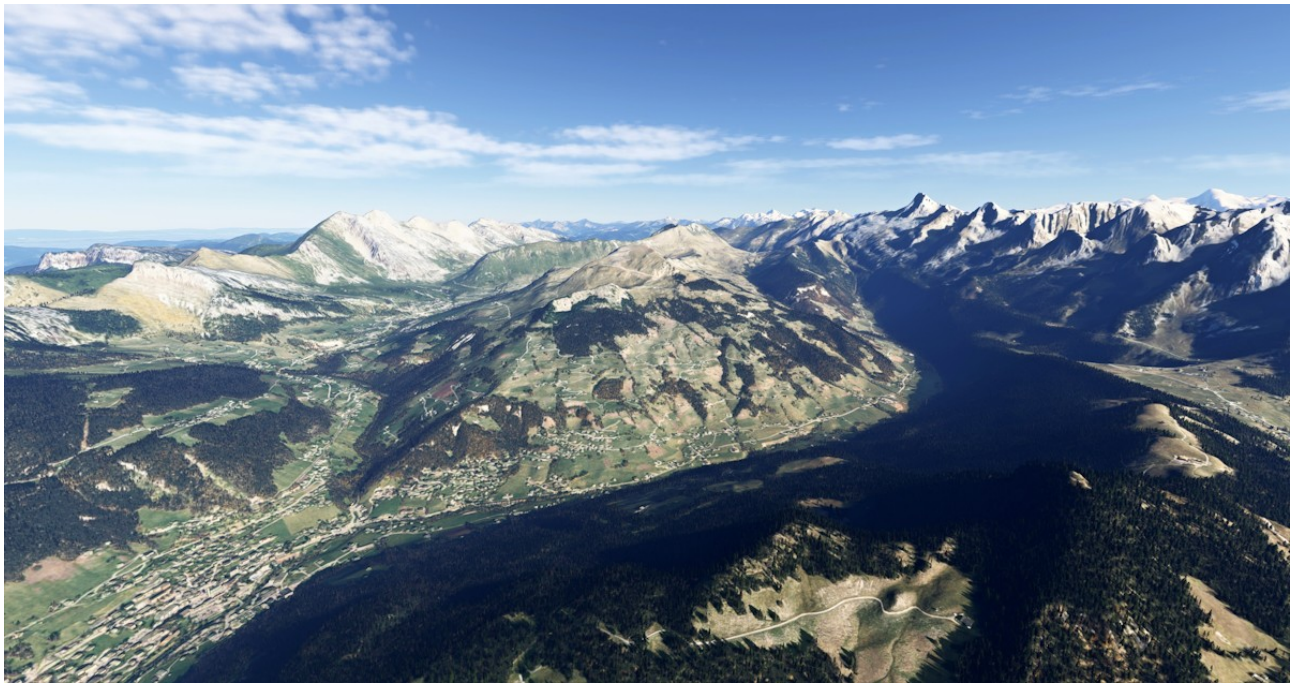
The lake divides into Grand Lac and Petit Lac sections by a narrow passage.
Fed primarily by alpine springs, these waters maintain transparency unmatched in the region.
The Palais de l'Isle, a 12th-century fortified building on an island in the Thiou River, served as mint, courthouse, and prison.

Medieval Annecy occupies the northern shore, its canals earning the nickname "Venice of the Alps."
Count Amadeus V of Savoy established the town's importance in 1295, capitalizing on position at alpine trade route junctions.
These Jurassic limestone beds tilt steeply, recording tectonic forces that elevated the Pre-Alps.

Hang gliders launch from Col de la Forclaz, riding thermal currents generated by differential heating of lake and mountain slopes.
The Fier River drains the lake northward through dramatic gorges.
At Gorges du Fier, the river cuts a vertical-walled canyon through limestone, accessible via suspended walkways.

WAYPOINT 3: Col des Aravis

Navigation:
Magnetic Heading: 055° following valley toward Sallanches and Mont Blanc massif
Altitude: Maintain 9,000 feet, providing 4,000-foot clearance over col
Landmark: Chapel at col summit visible at 12 o'clock position
Weather: Wind acceleration common through passes; expect turbulence



The valley eastward from Lake Annecy leads directly toward Col des Aravis, where a distinctive stone chapel crowning the 4,989-foot summit provides unmistakable confirmation of the mountain pass location.
Watch for La Clusaz ski resort's geometric lift patterns on the northern slopes as you approach—these installations serve as your left-side reference while tracking toward the natural gap between Aravis Range peaks.
The chapel's weathered stone walls stand prominently at the saddle, visible for miles as this historic crossing point has marked the route between Arve and Arly valleys since prehistoric times.

Below the pass, alpine pastures slope steeply on both flanks.
Reblochon cheese production dominates these high meadows, where Abondance cattle graze from June through September.
Stone mazots—small wooden storage buildings on staddle stones—dot the hillsides, protecting hay and tools from moisture and rodents.

The Aravis Range forms the first major barrier east of the Rhône Valley, capturing moisture from westerly air masses.
Limestone dominates the geology, thrust eastward during alpine orogeny.
Fossil-rich strata contain ammonites and belemnites from Jurassic seas that covered this region 150 million years ago.

La Clusaz ski resort occupies the northern slopes, its lifts and runs visible as geometric patterns against mountainsides.
Resort development began in 1907, making this one of France's pioneer winter sports destinations.
Summer transforms the area into hiking territory, with marked trails connecting mountain refuges.

WAYPOINT 4: Sallanches

Navigation:
Magnetic Heading: 085° following Arve Valley toward Chamonix
Altitude: Climb to 15,000 feet preparing for Mont Blanc approach
Landmark: Mont Blanc massif dominates eastern horizon
Advisory: Density altitude considerations above 10,000 feet; monitor aircraft performance

Tracking down the Arve Valley from Col des Aravis, Sallanches reveals itself at the strategic confluence of multiple alpine valleys at 1,804 feet elevation.

Follow the milky-gray glacial river cutting through the broad valley floor toward the neo-classical church of Saint-Jacques, whose distinctive bell tower rises prominently as your primary landmark. Mont Blanc's south face creates an overwhelming backdrop to the east, with nearly 13,000 feet of vertical relief within just 7 miles horizontal distance providing absolute navigational certainty. The town's orderly street grid, rebuilt after the catastrophic 1840 fire, creates geometric patterns easily distinguishable from typical organic alpine settlement layouts.

A catastrophic fire in 1840 destroyed most of the medieval town center.
Reconstruction created the orderly street grid visible today, rare urban planning in alpine communities.
The rebuilt church demonstrates neo-classical architecture, its bell tower a landmark for valley navigation.

The Arve River flows turbulent and milky-gray with glacial flour, sediment ground fine by Mont Blanc's glaciers.
This suspended rock powder gives the river its characteristic color and prevents aquatic plant growth.
During summer melt season, discharge increases dramatically, the river transporting thousands of tons of sediment daily toward Lake Geneva.

Sallanches served as a staging point for early Mont Blanc ascents.
Horace-Bénédict de Saussure offered substantial rewards in 1760 for the first successful summit attempt, attracting guides and adventurers.
The resulting 1786 ascent by Balmat and Paccard launched the sport of mountaineering.

WAYPOINT 5: Chamonix

Navigation:
Magnetic Heading: 095° maintaining valley centerline toward Mont Blanc
Weather: Valley winds accelerate afternoons; mountain wave activity possible downwind of peaks

Continuing up the Arve Valley, Chamonix occupies the dramatic U-shaped glacial corridor cradled between the Aiguilles Rouges massif on your left and the Mont Blanc range on your right.

Stay centered over the valley floor using the elongated town layout at 3,396 feet elevation as your primary reference.

The Aiguille du Midi cable car station and the Mer de Glace glacier descending from the heights provide unmistakable visual markers in this vertical landscape where surrounding peaks exceed 13,000 feet.
Keep the flat valley bottom directly beneath you, where alluvial deposits fill the classic glacial carving that created one of Europe's most spectacular mountain environments.

The valley's accessibility compared to surrounding terrain made it natural crossing point.
Benedictine monks established a priory in 1091, providing shelter for travelers crossing the Col du Bonhomme into Italy.
Crystal hunters and chamois pursuers knew the valley intimately before tourism arrived.

The 1786 Mont Blanc ascent transformed Chamonix from farming community to mountaineering capital.
British visitors during the Romantic era sought sublime landscapes, establishing tourism infrastructure.
The Compagnie des Guides formed in 1821, professionalizing mountain guiding and establishing safety standards.

Modern Chamonix stretches along the valley floor, constrained by avalanche zones and steep terrain.
The Aiguille du Midi cable car ascends from town to 12,605 feet, enabling tourist access to high-altitude viewpoints.
Infrastructure decisions balance economic development with avalanche mitigation and environmental preservation.

WAYPOINT 6: Mont Blanc Massif

Navigation:
Magnetic Heading: 190° tracking south toward Hauteluce and Beaufortain massif
Altitude: Maintain 15,000 feet
Landmark: Mont Blanc summit at 10 o'clock position relative to flight path
Advisory: Turbulence common in lee of major peaks; maintain cruise speed

Turning southward from Chamonix, Mont Blanc massif dominates your entire northern view.

Europe's highest peak at 15,774 feet remains visible on your port side as a constant reference, its broad snow-covered dome and surrounding needle-shaped aiguilles providing absolute positional awareness.
Track along the western flanks while watching for the Bossons Glacier descending the north face with its characteristic steep blue ice and numerous crevasses cutting dramatic patterns through the glacial surface. The massif's scale is overwhelming even from 11,500 feet, with crystalline granite and gneiss core rocks representing ancient basement thrust skyward during 30 million years of continental collision.

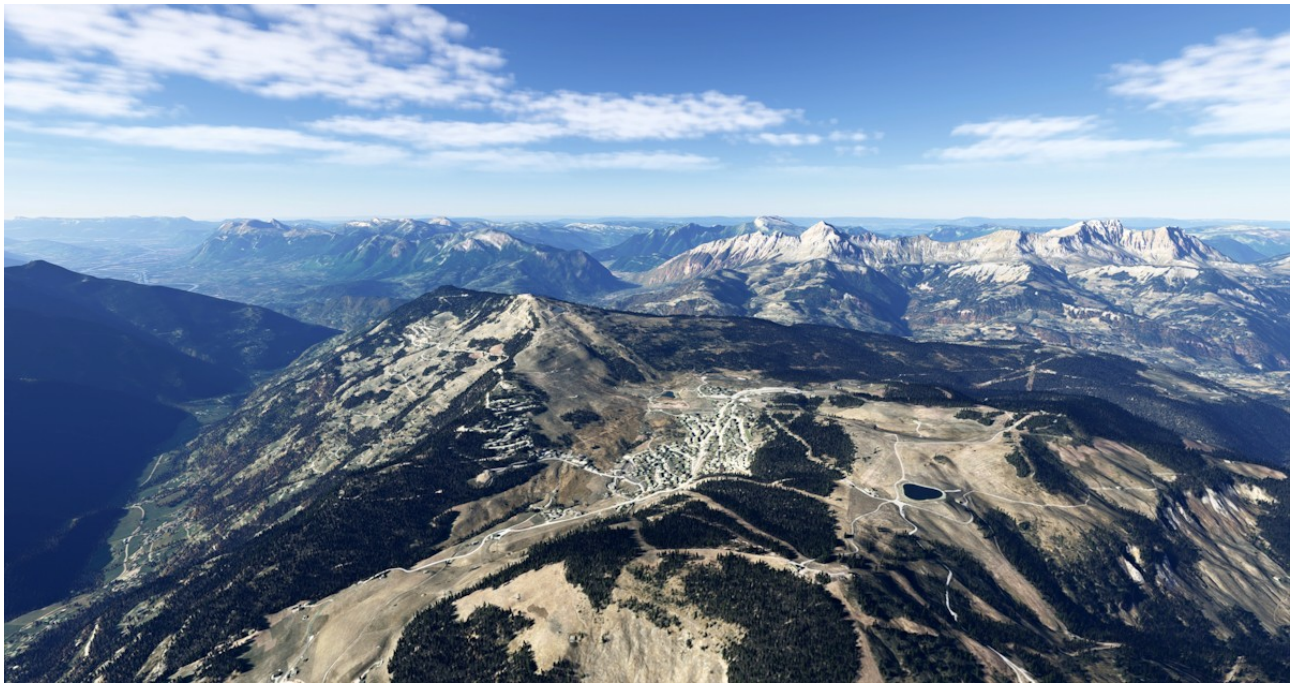
The African plate's northward drive beneath the European plate began 30 million years ago, initiating alpine uplift. Mont Blanc rose as overlying sedimentary rocks eroded away, exposing ancient metamorphic basement. Modern GPS measurements record ongoing uplift of 0.6 millimeters annually, countered by erosion.

Glaciers drape the massif on all sides, their blue ice visible where crevasses open.
The Bossons Glacier descends the north face, among the steepest glaciers in the Alps with gradients exceeding 45 degrees.
Glacial retreat since the 1850s has exposed rock previously ice-covered for millennia, revealing preserved flora and artifacts.

Aiguilles—needle-shaped granite spires—characterize the surrounding terrain.
These resistant rock pinnacles represent differential erosion, where joints and fractures control weathering patterns.
Climbers pioneered routes up these technical faces throughout the 20th century, establishing Chamonix as cradle of alpine climbing.

WAYPOINT 7: Hauteluce

Navigation:
Magnetic Heading: 245° toward Massif des Bauges and Maurienne approach
Altitude: Descend to 7,500 feet crossing high terrain
Landmark: Beaufortain peaks surrounding valley



Tracking into the Beaufortain massif from Mont Blanc, Hauteluce's scattered chalets across south-facing slopes at 3,937 feet elevation become visible as gentler peaks of 8,000-9,000 feet replace the dramatic granite spires behind you.
The valley opens wider compared to Chamonix's narrow confines—look for the distinctive steep-pitched roofs designed for heavy snow loads, their architectural style unmistakable from altitude.
Beaufortain peaks surrounding the high valley provide continuous visual references as you transition from Europe's highest terrain into this gentler but still impressively alpine landscape.

Beaufort cheese production defines this region's agricultural economy.
Hard-pressed wheels weighing 40 kilograms each require 500 liters of milk, produced from herds grazing high alpine meadows.
Cooperative fruitières—cheese dairies—collect milk from surrounding farms, maintaining centuries-old production methods.

Architecture here reflects adaptation to heavy snow loads.
Roofs pitch steeply, often exceeding 45 degrees, shedding snow before weight becomes structural threat.
Wooden shingles called tavaillons cover roof surfaces, held by wooden pegs that allow slight movement during thermal expansion.

The population practices transhumance, moving cattle to high summer pastures called alpages.
Stone shepherd shelters dot elevations above 6,500 feet, occupied June through September.
This seasonal migration optimizes pasture use and produces the rich milk essential for quality cheese.

WAYPOINT 8: Massif des Bauges

Navigation:
Magnetic Heading: 245° toward Saint Jean de Maurienne valley
Weather: Afternoon convection develops over limestone terrain; expect light chop
Advisory: Multiple valley orientations create complex wind patterns

Massif des Bauges rises to your west with its distinctive rounded limestone peaks reaching 7,200 feet at Arcalod summit—the contrast between these Pre-Alpine formations and the sharper granitic profiles behind you is immediately apparent.
Track between the Isère and Arly valleys while using the dense beech and fir forests cloaking lower elevations as visual markers, with bare limestone upper slopes providing clear differentiation from surrounding forested terrain.
The massif's Mesozoic sedimentary rocks folded during alpine orogeny create a landscape fundamentally different from the crystalline massifs you've just traversed.

Jurassic limestone beds dominate, laid down 150-200 million years ago in shallow tropical seas.
Fossil assemblages include corals, brachiopods, and crinoids, preserved in roadcut exposures.
Karst topography characterizes the surface, where water dissolution creates caves, sinkholes, and underground drainage networks.

The Gouffre Berger cave system penetrates over 3,900 feet deep, among Europe's most significant vertical caves.
Surface streams vanish into swallow holes, reemerging from springs at valley bottoms.
Villages occupy mid-elevation locations, typically 2,000-3,000 feet, avoiding flood-prone valleys and exposed ridgelines.

Cultivated terraces mark historical attempts to maximize limited arable land.
Stone walls support these hand-built agricultural platforms, now largely abandoned as mountain farming declined economically.

WAYPOINT 9: Saint Jean de Maurienne

Navigation:
Magnetic Heading: 165° following Arc valley toward Col du Galibier approach
Altitude: Climb to 11,000 feet for high pass crossing
Landmark: Arc River valley provides clear navigation reference

Following the Arc River valley as it cuts southwest to northeast through the Maurienne region, Saint Jean de Maurienne sits where the valley widens at 1,788 feet elevation.

The Romanesque cathedral of Saint Jean Baptiste with its distinctive tower dominates the townscape, providing unmistakable visual confirmation.
Track along the valley floor using the milky Arc River as your primary navigation reference through this natural alpine corridor utilized since antiquity for trans-alpine passage.
The valley orientation creates a geographic funnel perfectly aligned with your flight path toward the high passes ahead.

The cathedral dominates the townscape, its Romanesque origins dating to the 11th century.
A cloister adjacent to the cathedral contains the tomb of Saint Thècle, whose relics attracted medieval pilgrims.
Gothic additions reflect later prosperity as the valley became important salt trade route.

The Maurienne served as major route between Lyon and Turin, crossing via the Col du Mont Cenis.
This pass at 6,834 feet remained among the easiest trans-alpine crossings, though still arduous.
Napoleon ordered construction of a carriage road over the col in 1803, revolutionizing alpine transport.

Modern infrastructure includes the Fréjus Rail Tunnel, opened 1871, linking France and Italy beneath the massif.
The parallel Fréjus Road Tunnel followed in 1980, carrying highway traffic through 8.6 miles of excavated passage.
These engineering achievements reduced the journey from multi-day trek to minutes of transit.

WAYPOINT 10: Col du Galibier

Navigation:
Magnetic Heading: 170° descending toward Massif des Écrins
Altitude: Maintain 11,000 feet over col
Weather: Wind acceleration through col common; severe turbulence possible
Advisory: Col frequently obscured by clouds; maintain VMC conditions

Continuing up the valley toward the distinctive saddle between peaks of the Massif des Cerces, Col du Galibier rises to 8,678 feet elevation—the monument honoring Henri Desgrange at the summit provides visual confirmation of this legendary alpine pass.
Keep centered through the gap between steep terrain on both sides, watching for the saddle that connects the Maurienne Valley with the Romanche Valley through zones of structural weakness in the Triassic and Jurassic sediments.
This is one of the Alps' highest paved passes, where Tour de France history was written during the brutal 1911 edition that established the Galibier as the "Circle of Death."

Riders faced unpaved roads, primitive bicycles, and brutal gradients exceeding 12 percent.
The pass became legendary, where race outcomes were determined through suffering.
Geological forces thrust Triassic and Jurassic sediments skyward here during Miocene collision.

Glacial action modified the topography, widening the col and creating the broad summit plateau.
The road through the col typically opens June through October, closed other months by snow accumulation.
Avalanche paths scar both flanks, visible as vegetation-free corridors through otherwise forested slopes.

Spring snowmelt creates temporary waterfalls cascading from hanging valleys above the pass.
France fortified the Galibier during the late 19th century, fearing Italian invasion.
Fort du Télégraphe and other installations guarded the approach, now abandoned to weather.

WAYPOINT 11: Massif des Écrins

Navigation:
Magnetic Heading: 195° continuing south through high alpine terrain
Altitude: Maintain 13,000 feet for terrain clearance
Landmark: Barre des Écrins visible at 9 o'clock position
Weather: Glaciated peaks generate local weather; monitor cloud development

Tracking southward from Col du Galibier, Massif des Écrins dominates your eastern view with its wilderness of granite peaks and hanging glaciers.
Keep the Barre des Écrins at 13,461 feet on your left as it rises to become the tallest peak in the Alps outside Mont Blanc massif.

Watch for extensive glaciation covering high elevations, with over 40 named glaciers including the prominent Glacier Blanc descending from summit ridges in cascades of blue ice.
This massif remained largely unexplored until Edward Whymper's 1864 ascent of Barre des Écrins, requiring technical ice climbing skills then only recently developed.

The Écrins National Park, established 1973, protects 226,000 acres of high mountain terrain.
Park boundaries exclude permanent habitation while permitting carefully managed tourism and mountaineering.
Chamois, ibex, and golden eagles inhabit this protected wilderness.

Glacial retreat accelerates here as throughout the Alps.
The Glacier Blanc, one of the massif's largest, has receded over 1 kilometer since 1850 measurements began.
Exposed bedrock records glacial striations and plucking, evidence of ice movement during maximum extent.

The massif's core consists of Carboniferous crystalline rocks, intruded by granite plutons.
Metamorphism transformed original sediments into gneiss and schist, visible as banded patterns in cliff faces.
This ancient basement emerged as alpine collision stripped away overlying younger formations.

WAYPOINT 12: Briançon Citadel

Navigation:
Magnetic Heading: 95° toward Queyras valleys
Landmark: Briançon fortifications on hilltop visible at 12 o'clock

Briançon Citadel crowns a rocky promontory at 4,334 feet elevation—Europe's highest city perches where the Durance and Guisane rivers converge, its Vauban-designed fortifications unmistakable with their star-shaped bastions visible from miles away.
The Fort des Salettes occupies the highest position, its walls seemingly growing from bedrock as part of the layered defenses Sébastien Le Prestre de Vauban created in the late 17th century.
Track toward these UNESCO-listed fortifications commanding the route between France and Piedmont, a strategic position garrisoned since Roman times along the Via Domitia.

Medieval counts fortified the site further, recognizing its defensive advantages.
Vauban's genius created layered defenses adapting to mountain terrain.
Forts dot surrounding heights, with overlapping fields of fire covering approach routes.

Underground galleries connect bastions, allowing protected troop movement during siege.
The Pont d'Asfeld spans the Durance gorge, a single-arch bridge 180 feet long built 1729-1731.
This engineering marvel required innovative centering techniques, the stone arch rising from canyon walls without intermediate support.

Within the citadel walls, narrow streets follow medieval layout.
Houses built against ramparts economized space, their upper stories overhanging cobbled lanes.
The collegiate church of Notre-Dame contains sundials on multiple facades, marking hours in this sun-drenched altitude.

WAYPOINT 13: Queyras Regional Park

Navigation:
Magnetic Heading: 140° following valley systems southward
Advisory: Numerous side valleys create complex terrain; maintain visual navigation
Weather: Sheltered valleys may harbor different conditions than main route

Queyras Regional Park stretches across high valleys where distinctive larch forests and wooden villages mark this protected landscape receiving exceptional sunshine hours

Track along the Guil River valley as it cuts through schist and limestone formations with alternating gorges and wider alluvial sections.

Watch for villages built from larch wood and stone occupying valley floors, their architecture adapted to seismic activity and heavy snow loads creating a distinctive regional style.
The region's microclimate differs markedly from northern Alps, with villages like Saint-Véran sitting above 6,500 feet among Europe's highest permanently inhabited settlements.

The Guil River carved the park's central valley, cutting through schist and limestone formations.
Medieval bridges span narrow sections, their arched construction withstanding centuries of flood events.
Larch forests—deciduous conifers unique among European alpine trees—cloak middle elevations.

These trees shed needles in autumn, their golden foliage contrasting with dark evergreen firs.
Timber from these forests built local structures, the rot-resistant wood valued for durability.
Residents developed sophisticated solar architecture, with south-facing galleries capturing winter sun.

Communal ovens baked bread on designated days, economizing fuel in timber-scarce environments.
The park protects diverse wildlife including marmots, whose whistles alert to aerial predators.
Bearded vultures reintroduced in the 1990s now soar these valleys, scavenging bones from predator kills.

WAYPOINT 14: Alpe d'Huez Resort

Navigation:
Magnetic Heading: 200° tracking toward Lac de Serre-Ponçon
Altitude: Maintain 13,000 feet
Landmark: Ski resort infrastructure visible on south-facing slopes
Advisory: Helicopter traffic possible near resort areas; maintain vigilance

Alpe d'Huez Resort occupies east-facing slopes above the Romanche Valley at 6,102 feet elevation —this purpose-built ski station constructed beginning in 1936 sits on unusual south-facing runs that earn it the nickname "Island in the Sun."
Track over the resort while watching for the twenty-one hairpin turns of the access road made famous through Tour de France cycling stages, with Dutch corners painted orange by Dutch cycling fans honoring multiple victories.
The resort's aspect provides maximum sun exposure requiring different snow management compared to typical north-facing resorts, while mining galleries honeycombing the mountain document silver and lead extraction from Roman times through the 19th century.

Cycling history made Alpe d'Huez legendary beyond winter sports.
The Tour de France first climbed here in 1952, creating one of cycling's most mythic ascents.
Modern riders face 8.1 miles at 8.1 percent average gradient, with sections exceeding 13 percent.

Mining history predates resort development.
Underground galleries honeycomb the mountain, some adapted as tourist attractions.
The Musée d'Huez documents this industrial heritage, displaying mining equipment and minerals.

Below the resort, the Romanche Valley carries water from glacial sources toward the Isère confluence.
Hydro electric installations harness this flow, part of France's extensive Alpine energy infrastructure.

WAYPOINT 15: Serre-Ponçon Lake

Navigation:
Magnetic Heading: 285° descending toward reservoir
Landmark: Large reservoir unmistakable; Savines-le-Lac town on eastern shore

Serre-Ponçon Lake spreads across the landscape as an artificial reservoir created by damming the Durance River—completed in 1961, the 400-foot earthen dam forms one of Europe's largest by volume, holding 1.3 billion cubic meters.
Track toward the unmistakable 18-mile-long lake using Savines-le-Lac town on the eastern shore as your reference, this relocated settlement built after the original village was submerged during reservoir construction.
Church steeples occasionally emerge during drought years when water levels drop significantly, reminders of the entire villages relocated and ancestral lands lost beneath these waters.

The reservoir transformed local geography.
What was previously dry valley became lake surrounded by beaches and marinas.
Tourism replaced agriculture as primary economic activity, yacht harbors and waterside developments proliferating.

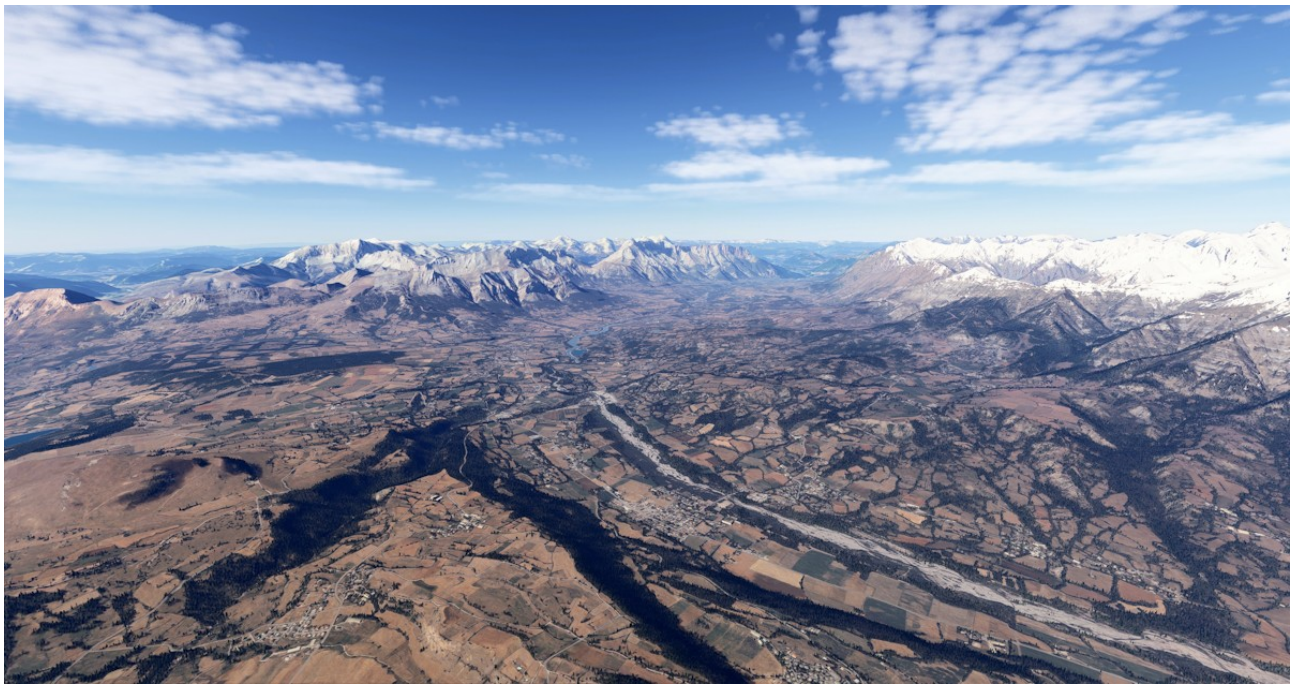
Geological benefits include flood mitigation downstream.
The Durance historically produced devastating floods, destroying crops and infrastructure.
Controlled releases from Serre-Ponçon regulate flow, protecting lower valley communities.

The surrounding mountains display distinctive geology.
To the west, the Massif des Écrins' crystalline rocks contrast with sedimentary formations eastward.
This contact zone marks a major tectonic boundary within the Alpine system.

Birdlife adapted to the reservoir environment.
Great crested grebes, common terns, and grey herons nest along shores.
Ospreys migrating from Africa hunt fish in these waters during summer months.

WAYPOINT 16: Chabottes

Navigation:
Magnetic Heading: 315° following valleys toward Lac du Sautet
Altitude: Descend to 8,500 feet
Weather: Valley winds variable; terrain channeling affects local conditions
Landmark: Small mountain community visible in valley below



Narrow valleys cutting through pre-Alpine ranges lead toward Chabottes, where scattered hamlets at 3,117 feet elevation occupy high ground with farms clinging to south-facing slopes for maximum solar exposure.
Follow the Champsaur Valley below Chabottes, historically linking Grenoble with Gap while avoiding higher passes, its narrow sections easily defended making it preferred route for muleteers transporting goods through steep tracks carved into hillsides.
The commune's settlement pattern typifies mountain communities where reliable springs emerging from fractured bedrock determined village locations, with stone fountains marking these essential water sources.

Agricultural land here remains marginal, limited by altitude and steep terrain.
Hay production dominates, with meadows mown twice during brief summer season.
Barns built into hillsides provide shelter for livestock during winter months when snow isolates valleys.

Water management shaped settlement patterns.
Villages clustered near reliable springs, essential where groundwater emerges from fractured bedrock.
Stone fountains mark these sources, their continuous flow valued for livestock and domestic use.

Depopulation affected these high valleys during 20th-century rural exodus.
Many hamlets lost inhabitants as younger generations sought urban employment.
Recent years brought limited repopulation, retirees and lifestyle migrants purchasing abandoned properties.

WAYPOINT 17: Lac du Sautet

Navigation:
Magnetic Heading: 315° descending toward reservoir
Altitude: Descend to 6,000 feet
Landmark: Narrow reservoir in gorge visible ahead
Advisory: Steep valley walls create confined airspace; maintain centerline

Lac du Sautet fills the Drac River gorge as a narrow reservoir created in 1935 by concrete arch dam, among France's early large-scale hydroelectric projects

The reservoir stretches 6 miles through canyon where dark waters contrast with pale limestone cliffs.

Track along the reservoir centerline where steep valley walls create confined airspace, using the dramatic vertical relief on both sides as clear boundary references.
The dam's construction employed innovative techniques for its era, with workers blasting galleries through cliff faces and positioning equipment via aerial cableways spanning the gorge.

The reservoir submerged the old road through the gorge.
A new route carved higher on canyon walls replaced the valley-floor passage.
Tunnels and galleries protect this road from rockfall, their portals visible as dark openings in cliff faces.

The Drac River drains glaciated peaks of the Écrins massif.
Even during summer low flow, the water carries suspended sediment from glacial grinding.
This sediment gradually fills the reservoir, reducing storage capacity over decades.

Geological forces created this narrow gorge.
The Drac exploited structural weaknesses in Jurassic limestone, cutting downward as the Alps uplifted.
Near-vertical beds demonstrate extreme folding during tectonic collision.

Rock climbing gained popularity on these cliffs starting in the 1970s.
Steep limestone offers technical routes with spectacular exposure above the reservoir.

WAYPOINT 18: La Mure

Navigation:
Magnetic Heading: 315° toward Laffrey lakes
Landmark: Town in valley with mining heritage visible

La Mure occupies the Matheysine plateau at 2,952 feet elevation, a former coal mining center where anthracite was extracted from Carboniferous-age seams beginning in the 18th century until the last mines closed in 1997.
Track toward the town in its structural depression within alpine terrain, where softer coal-bearing rocks eroded faster than surrounding crystalline massifs creating a plateau dotted with lakes occupying basins scoured by glaciers.
The Chemin de Fer de La Mure, a narrow-gauge railway connecting mines to the Drac Valley through spectacular scenery via viaducts and tunnels, remains visible despite rockfall damage in 2010 suspending tourist operations.

Mine buildings, slag heaps, and workers' housing document the coal era.
A mining museum preserves tools, photographs, and oral histories from this vanished industry.
Modern La Mure struggles economically after mine closure.

Population declined as employment opportunities disappeared.
Tourism provides some replacement income, visitors attracted by railway history and mountain access.
Lakes dot the plateau, occupying basins scoured by glaciers during ice ages.

Industrial heritage remains visible throughout La Mure.
The Matheysine plateau occupies a structural depression within alpine terrain.
Softer coal-bearing rocks eroded faster than surrounding crystalline massifs.

WAYPOINT 19: Grand Lac de Laffrey

Navigation:
Magnetic Heading: 355° toward Grenoble
Altitude: Descend to 5,000 feet
Landmark: Largest of Laffrey lakes visible ahead
Weather: Approaching urban area; increased haze likely

Grand Lac de Laffrey spans approximately 1 square mile as the largest of several glacial lakes occupying the Laffrey plateau.
Its clear waters support recreational use while surrounding forest reaches the shoreline, creating wilderness character despite nearby development.
Napoleon passed these lakes during his return from Elba in March 1815, confronting royalist troops at the nearby Prairie de la Rencontre where his famous challenge diffused the confrontation and troops joined him for the march to Paris.
Track toward the memorial statue depicting Napoleon on horseback overlooking the prairie, this monument attracting history enthusiasts retracing Napoleon's route from the Mediterranean.

A memorial statue overlooks the prairie, depicting Napoleon on horseback.
Glacial action created these lakes during Quaternary ice ages.
The Romanche glacier advanced from the east, scouring depressions in softer sedimentary rocks.

Terminal moraines deposited at glacier's maximum extent now dam the lakes, preventing drainage.
The plateau's elevation creates cooler temperatures than valleys, affecting vegetation patterns.
Subalpine species extend to lower altitudes here, their range expanded by local climate.

Modern development includes vacation homes along lakeshores, their architecture attempting integration with forested surroundings.
Water quality remains high due to limited agricultural runoff and absence of major urban areas upstream.

WAYPOINT 20: Grenoble

Navigation:
Magnetic Heading: 345° toward city center and Isère Valley
Altitude: Descend to 4,000 feet
Advisory: High traffic density; maintain VFR at assigned altitude

Grenoble spreads across the valley where the Drac and Isère rivers converge at 702 feet elevation
France's flattest major city sits surrounded by three mountain ranges creating dramatic vertical relief: the Vercors massif to the southwest, Chartreuse to the north, and Belledonne to the east.
The Fort de la Bastille crowns a limestone bluff 1,200 feet above the city, with cable cars installed in 1934 providing an unmistakable landmark for navigation in this urban environment.
Track toward the river confluence while monitoring high traffic density, as Grenoble gained scientific prominence through nuclear research and microelectronics development earning it the nickname "European Silicon Valley."

The city's origins trace to Gallic settlement called Cularo, later becoming Roman Gratianopolis in 379 CE.
Strategic position at valley crossroads made Grenoble important military and commercial center.
Dauphiné province had its capital here, the provincial parliament meeting until the French Revolution.

The Fort de la Bastille built in the 1830s atop medieval fortifications never saw combat.
The Institut Laue-Langevin operates a high-flux nuclear reactor for materials research.
Numerous technology companies cluster here, concentrated around advanced research facilities.

The 1968 Winter Olympics transformed Grenoble's infrastructure.
New venues and improved transportation preceded the games, leaving lasting development legacy.
The Olympic Village housing remains in use, its architecture representing 1960s modernist ideals.

WAYPOINT 21: Voiron

Navigation:
Magnetic Heading: 285° following valley toward St Geoirs
Altitude: Descend to 3,500 feet
Landmark: Voiron town visible in valley; Chartreuse massif to the north

Following the Isère Valley westward as it exits the high Alps, Voiron occupies where the valley widens into productive lowlands at 951 feet elevation with 20,000 inhabitants positioned where the Morge River joins the Isère.
The town gained international fame for Chartreuse liqueur production, with the Carthusian monks' distillery relocated here in 1935 from the Grande Chartreuse monastery—track toward the distinctive industrial buildings housing cavernous cellars where liqueur ages in oak casks.
The Chartreuse massif rises dramatically north of town, its vertical limestone cliffs reaching 6,500 feet and housing the Grande Chartreuse monastery founded 1084 by Saint Bruno where the Carthusian order maintains strict enclosure.

The exact Chartreuse recipe remains secret, known only to two monks who prepare the herbal infusion.
130 plants and flowers create the distinctive flavor, the formula dating to 1737.
The distillery offers tours through cavernous cellars where liqueur ages in oak casks.

The longest cellar stretches 560 feet, one of the world's largest liqueur aging facilities.
Temperature and humidity control ensure consistent product quality across years.
Textile manufacturing historically dominated Voiron's economy.

Water power from mountain streams drove mills processing cotton and silk.
Industrial decline during the late 20th century forced economic diversification.
Caves perforate the Chartreuse limestone, including Grotte de la Balme with prehistoric occupation evidence.

ARRIVAL: St Geoirs (LFLS)

Navigation:
Magnetic Heading: 270° for final approach to runway 27
Altitude: Descend to pattern altitude 2,500 feet
Weather: Monitor ATIS 120.725 MHz for current conditions

Turn left and prepare for the Approach.

St Geoirs Airport, officially Grenoble-Isere Airpor, sits at 1,302 feet elevation in relatively flat terrain west of the alpine ranges, with runway extending 10.,73 feet accommodating commercial jet traffic alongside general aviation.

With St Geoirs' runway ahead and the dramatic alpine traverse behind, this journey across France's highest terrain completes. 21 waypoints linking lake shores to glaciated peaks, medieval cities to wilderness valleys, history to geography in a single unforgettable flight.