Add-on
AEROFLY FS2
FLIGHT SIMULATOR

AEROSOFT®

Lukla Mount Everest

EXTREME

Manual

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Lukla

Mount Everest – Extreme

Manual

Add-on for

Aerofly FS 2

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Starting Off

Introduction

"Gateway to Mount Everest" and "World's Most Dangerous Airport"; certainly the most commonly used attributes for an airport that seems out of this world. But it's not only about Lukla; there's much more to this package...

Truth be told: There are airports that are higher (see Tingri included in this package). There may be airports that have a shorter runway. There even may be airstrips somewhere that have an even worse upwards slope of the runway. Or others that have a mountain wall at the end of their runway. What makes Lukla standing out is its combination of all those factors in one single airport!

Not enough thrill for you? Count in weather as a factor. No navigational aids. Limited documentation of approach and takeoff routes. An uncontrolled airpace with fixed wing aircraft and helicopters.

You want more? Bring your engines (and brakes!) to their limits by heading up the valley to Syangboche, an even higher located bumpy airstrip surrounded by rocks high above a steep valley. Or try to find a helicopter that can reach even higher located helipads or even land at the Mount Everest basecamp, located right next to sharp glacier pinnacles between rock outcrops.

Fly out of Tumlingtar in larger jets to explore the highlands of Tibet without having to worry about international borders. Bring airliners to their limits when taking off from the to be built airport of Tingri. Or simply enjoy the landscape while flying passengers and cargo between many small airfields (all of them challenging) within a massive coverage area of 200x200 kilometres.

This package will replace "Lukla X – Mount Everest" by the same lead developer. One of our most popular sceneries of the past decade that has won many awards – among them the Simflight Award. This new version is a completely new development setting the bar even higher again, coming with much more content than the previous version.

System Requirements

- Operating System: Microsoft Windows 7 / 8 / 10 (64bit)
- Processor: Dual-Core, 2,4 GHz (Quad-Core, 3,0 GHz recommended)
- Memory: 4 GB RAM (8 GB recommended)
- Graphics card: 2 GB VRAM, OpenGL 4.5
- Free hard disk space: 8 GB

Support

Support for this product is done by Aerosoft. We prefer to do support on the support forum for one simple reason, it is fast and efficient because customers help customers when we are sleeping.

- Support Forums: http://forum.aerosoft.com
- If you prefer support by email: https://helpdesk.aerosoft.com/portal/newticket

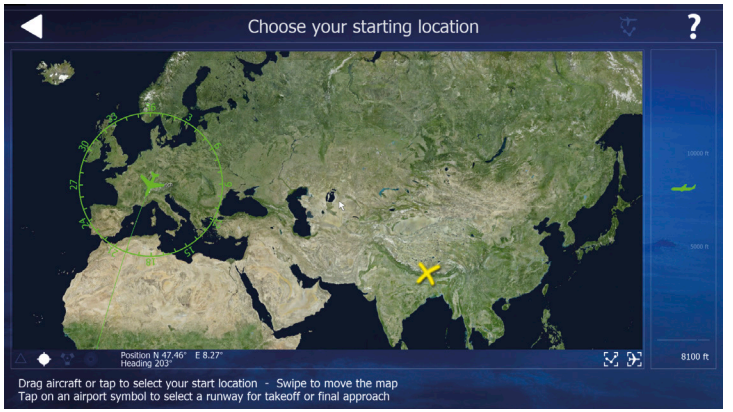
Please note that email support can be slow when things are busy (shortly after a major release for example). We try to get back to you in 24 hours, but if you want an answer fast, go to the forums.

We feel strongly about support. Buying one of our products gives you the right to waste our time with questions you feel might be silly. They are not. We offer support in English, German, Dutch, French, Spanish and Portuguese.

How To Get Started

After installation, simply run Aerofly FS2. Select "Location":

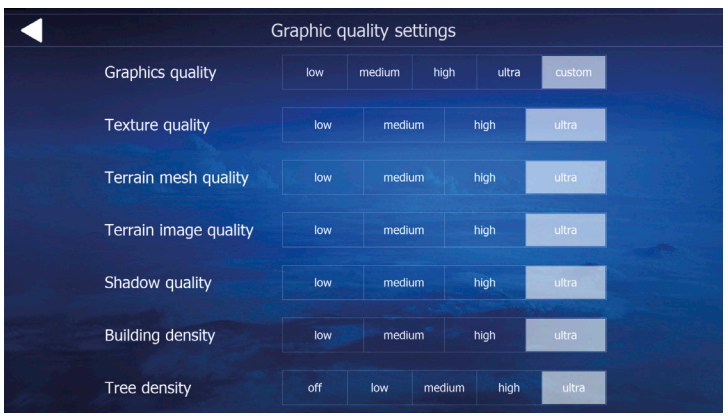
Zoom into the highlighted Himalayas area (yellow marker) until airports become visible:



Select the airport/helipad of your choice (note that helipads can only be selected if you selected a helicopter previously):

Settings

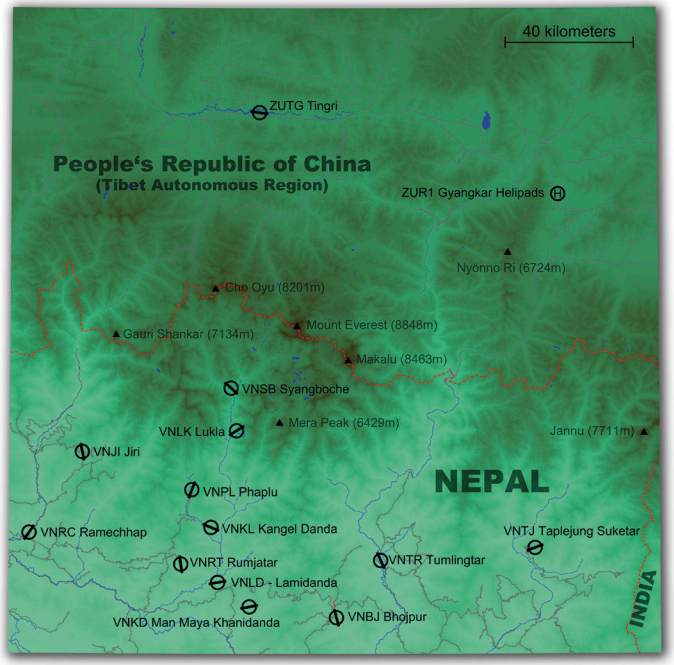
For best visuals maximum settings are recommended, provided your hardware permits you to do so:



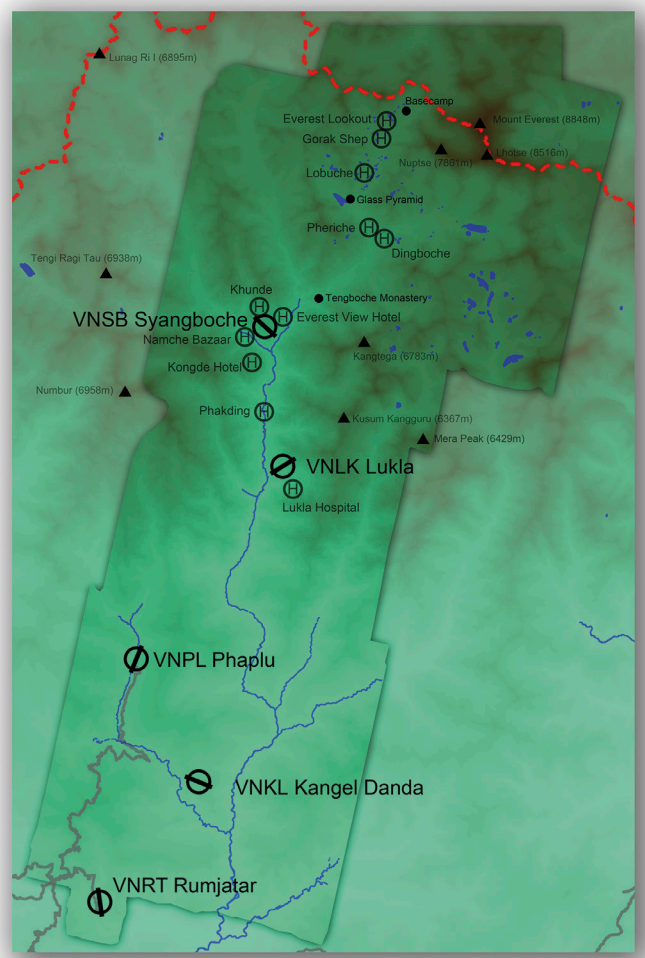
Overview Maps

NOTE: Alternatively to these maps you can use the Google Earth™ KMZ file available with this scenery. You will find it in your Windows Start menu.

General Map



Core Area Map



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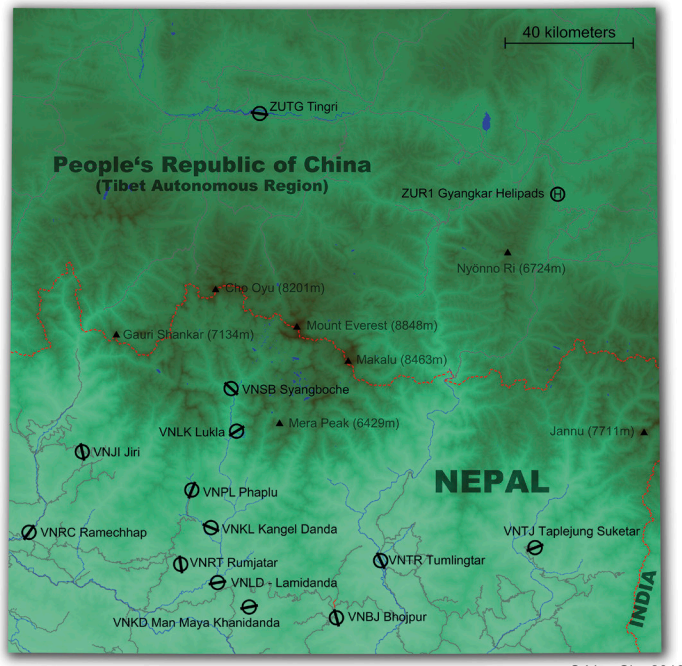
Coverage Map



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Airports And Maps

NOTE: All information provided in this manual is for flight simulation use only and is not intended for use in real world aviation!

Nepal is a country where only limited documentation about the individual airports is available. There have, however, been considerable improvements in the past decade. The information here has been gathered from various sources including a pilot flying in the area.

Due to the lack of up-to-date to-scale charts for the airports we decided to create our own charts and added approach and safety information where those were available.

VNLK Lukla (Tenzing Hillary Airport)

Lukla is without a doubt the star of all airports in the area! Likely the worst sloped runway and a mountain wall at the end makes last minute go-arounds impossible. In addition to that there is unpredictable mountain weather and it is buzzing with scheduled fixed wing and helicopter traffic in a very small area. Legend has it that planes do not need to take off properly; they just need to fall off the end of the runway to gain enough speed to fly.

There are daily flights between Lukla and Kathmandu during daylight hours in good weather. Although the flying distance is short, rain commonly occurs in Lukla while the sun is shining brightly in Kathmandu. High winds, cloud cover, and changing visibility often mean flights can be delayed, or the airport closed.

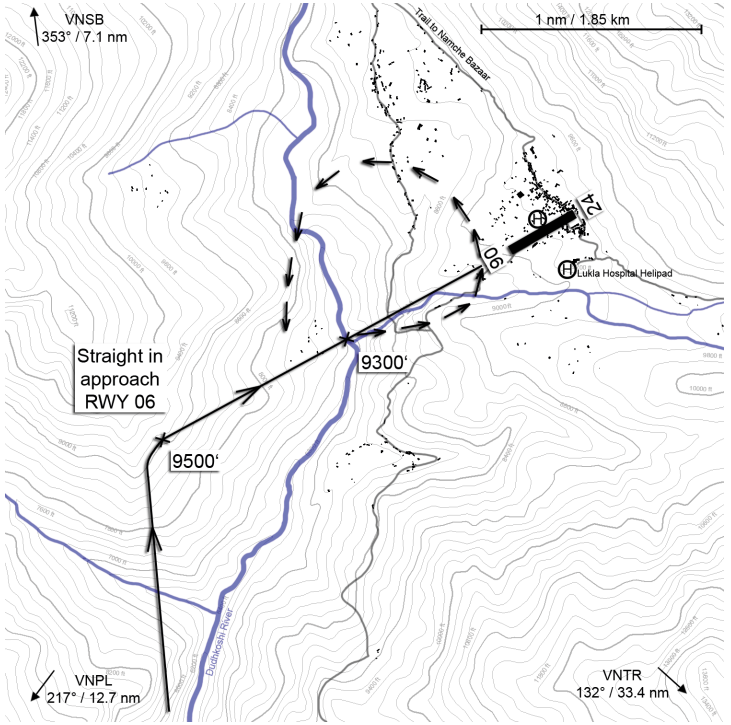
Lukla is not connected to the nation's road network and only accessible by foot or air. Yet it is a place buzzing with tourists, small scale accommodations, cafés, Wi-Fi hotspots, Sherpas and everything else a modern tourist needs. Called "The Gateway to Everest", it is Lukla where most people start their ascend to Mount Everest. Most climbers and their equipment are flown to the airport in March/April to get acclimatized to the thin air. Once acclimatized they move on to the final push to Everest in April/May. October is the best time for viewing mountains and this is when most not-so-adventurous tourists are flown in in large numbers.

The airport is not only used for passenger flights, but also for transporting most of the building material and cargo to the town, as most of the roofs on the houses at Lukla have to be transported by aircraft.

In 1964 it was the legendary Sir Hillary and his Himalayan Trust who were looking for a flat patch of land to build an airstrip as close as possible to Mount Everest. As it seemed impossible to find a place flat and long enough, they finally decided on a patch of land for sale in the little village of Lukla. Hillary described the construction of the airfield in more detail in his memoirs "View from the Summit".

It wasn't until 2001 that the runway was paved. In January 2008, the airport was renamed in honour of Sherpa Tenzing Norgay and Sir Edmund Hillary, the first people confirmed to have reached the summit of Mount Everest, and also to mark their efforts in the construction of this airport.

Due to the difficulties of successfully landing at the airport, the Civil Aviation Authority of Nepal sets high standards: Only experienced pilots, who completed at least 100 short-takeoff-and-landing (STOL) missions, have over one year of STOL experience in Nepal and completed ten missions into Lukla with a certified instructor pilot, are allowed to land at the airport.



VNLK Lukla – General Information:

Name	Tenzing Hillary Airport (Lukla)
ICAO code	VNLK
IATA code	LUA
Coordinates	N27.41.1 E86.43.5
Elevation	2851.688 m / 9356 ft
Operational	Yes

Operation hours	Jan, Feb, Nov, Dec: 06:45-18:00 local time Mar, Apr, Sep, Oct: 06:15-18:30 local time May, Jun, Jul, Aug: 06:00-18:45 local time
Start of operations:	1964
Servicability:	All weather
Fuel	- not available -
Rescue and fire fighting services	ATV with limited fire fighting equipment
Navigation	- not available -
Coms	HF SSB: 5805.5 (not applicable for Aerofly FS2) VHF: 122.3 (not applicable for Aerofly FS2)
Metereological info	Yes (tower observation)
Services	AFIS VFR
Ground transportation	- not available -
Type of aircraft	D228, DHC6, L410, Y12, C208

Runway:

Type of surface	Bitumen
Runway dimensions	527 x 20 meters 12.99% upslope from rwy 06
Runway designation	24/06
Apron	1 bitumen apron at upper end of rwy 1 unsealed area north center of rwy with additional parking usually reserved for helicopters.
PAPI	- not available -

Approach and takeoff:

Takeoff RWY	24 only
Landing RWY	06 only
Approach	Aircraft must establish its approach on right base at 9700 ft.
Go-around procedure:	• Go-around below 9300ft is not possible due to the narrow valley surrounded by high mountains. • Go around no later than before crossing Dudkoshi River. Not below 9300ft with an immediate left turn climb. • Continue turning left until established on finals for RWY 06 again. Beware of high mountains to the west during the turn.
Safety advisories:	• Typical wind conditions: General: From south-west and south-east direction. In early morning: From north-east/west direction After 10:00: From south-east/west direction Downdrafts/updrafts are likely if tailwind is above 7-8 kts. • Beware of optical illusions because of the strong slope of the runway. Always keep enough engine power. • It is not recommended to fly if wind varies or is stronger than 8 kts. • When approaching with STOL airspeeds on short final, do not move above or below glidepath unless wind conditions are calm. • Do not turn off engines while approaching. • Only set full flaps when runway is in sight and final decision for landing has been made. • Beware of sun glare in early morning which may make it difficult to see the runway properly in haze.

Communication and Clearance	• Do not turn on engines before ensuring with security personnel that no passengers are near engines. • Do not start taxiing while still transmitting flight details unless approved. • Approval from Lukla AFIS is required for taxi, line-up and takeoff. • VHF communications need to be monitored by both pilots for other helictoper and aircraft movement in the area. After leaving Lukla area, pilots should continue monitoring VHF frequencies of Lukla and Kathmandu for aircraft movement around Phaplu, Lamjura and Jiri areas.
Caution:	• Downtrafts on approach may force pilot to increase speed to gain back altitude, which may cause a hard landing. • Due to the steep uphill gradient of runway aircraft should be landed by a slight amount of power on.
Escape Route Procedures:	• "Aviate, Navigate, Communicate"! • Follow Dudhkoshi River south down to Lamidanda. • Inform ATC and cabin crew. • Past Lamidanda, continue to Sunkoshi river. Follow Sunkoshi river east for Biratnagar and west for Kathmandu. • Stay above river for better ground clearance and visual navigation. • Do not fly over passes and ridges.
Limitations:	Visibility: Minimum 5000 m Cloud ceiling: Minimum 1500 ft Tailwind: Maximum 10 kts Crosswind: Maximum 15 kts VFR ONLY!

Source of some information: http://www.caanepal.gov.np/wp-content/uploads/2016/03/TENZING-HILLARY-AIRPORT.pdf

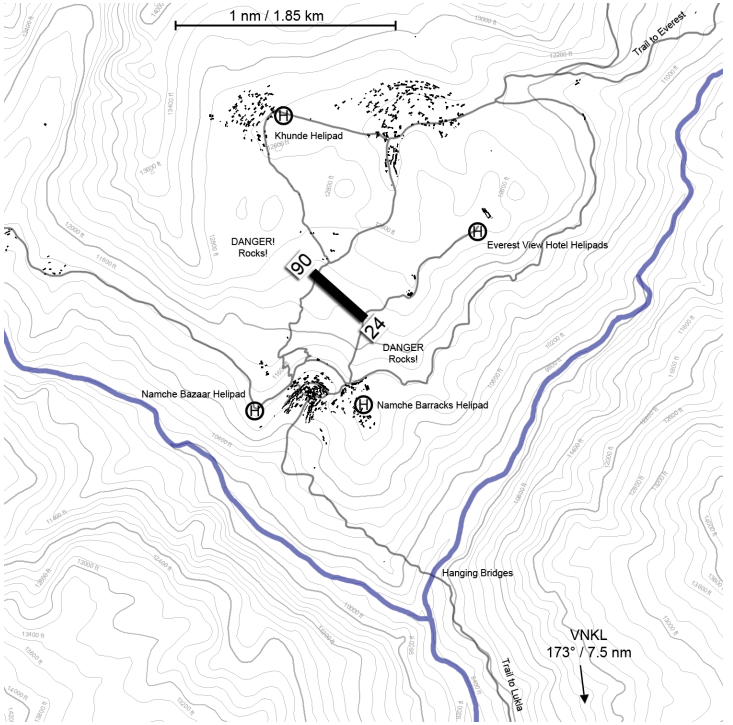
VNSB Syangboche

Although build just a few years after Lukla, and being closer to Mount Everest, Syangboche never really went into full operation like its companion further down the valley. It is located even higher than Lukla, making it a difficult destination for acclimatization to the thin air.

In addition to that local people from the villages below opposed to the opening of another airport higher up because it would threaten their businesses, cutting them off from the tourist stream hiking to Mount Everest.

For a while the airport was approached by Pilatus Porters, which seems to be one of the very few aircraft recommended to be used at this airport. Nowadays there are mostly occasional helicopter charter flights and cargo flights using the unpaved airstrip that is located right on the trail to Mount Everest.

It is a popular destination for so called "Everest Skydives" that are done with helicopters ascending from here and dropping the skydivers high above the airstrip (fantastic views to Mount Everest in the distance included).



VNSB Syangboche – General Information:

Name	Syangboche
ICAO code	VNSB
IATA code	SYH
Coordinates	N 27.48.3 E 86.42.4
Elevation	3754.28 m / 12317 ft
Operational	No
Operation hours	Nov - Jan: 10:00-16:00 local time Feb - Oct: 10:00-17:00 local time

Start of operations:	ca. 1970
Servicability:	Seasonal
Fuel	- not available -
Rescue and fire fighting services	- not available -
Navigation	- not available -
Coms	- not available -
Metereological info	- not available -
Services	- not available -
Ground transportation	- not available -
Type of aircraft	C208

Runway:

Type of surface	Clay/Grass
Runway dimensions	405 x 30 meters 5.63% upslope from rwy 31
Runway designation	13/31
Apron	No designated apron. Parking capacity for 2 small aircraft.
PAPI	- not available -

Approach and takeoff:

Takeoff RWY	13 only
Landing RWY	31 only

Source of some information: http://www.caanepal.gov.np/wp-content/uploads/2016/03/SYANGBOCHE-AIRPORT.pdf

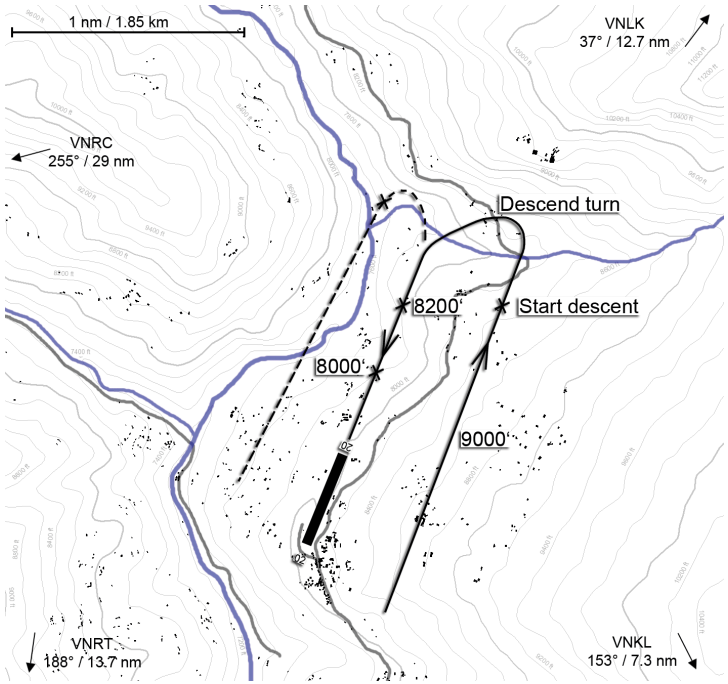
VNPL Phaplu

Phaplu is the closest airport to Mount Everest that is connected to the national road network. Due to rising tourist numbers there are more and more scheduled flights to this airport which is not only a gateway to Everest but a beautiful destination in itself.

The airport has an interesting location along a slope with the apron carved into the terrain and the tower and terminal on top of a high wall that follows the runway. Be cautious when taxiing here as you wouldn't be the first whose wingtip would touch the wall!

Approaches to the airport however are troubled by the harsh wind conditions in the valley. Due to strong wind the airport closes at noon, which means that flights are only happening in the morning hours when the weather is usually suitable for flying. Gusts of 43 knots have been recorded here.

Flights that cannot land in Lukla due to bad weather are often rerouted to Phaplu (provided the weather conditions here are suitable for flying).



VNPL Phaplu – General Information:

Name	Phaplu
ICAO code	VNPL
IATA code	PPL
Coordinates	N27.30.5 E86.35.1
Elevation	2461.074 m / 8074 ft
Operational	Yes
Operation hours	Jan, Feb, Nov, Dec: 06:45-12:30 local time Mar, Apr, Sep, Oct: 06:15-12:30 local time May, Jun, Jul, Aug: 06:00-12:00 local time

Start of operations:	1976
Servicability:	All weather
Fuel	- not available -
Rescue and fire fighting services	- not available -
Navigation	- not available -
Coms	HF SSB: 5805.5 (not applicable for Aerofly FS2) VHF: 122.5 (not applicable for Aerofly FS2)
Metereological info	Yes (tower observation)
Services	AFIS VFR
Ground transportation	Jeep, tractor, van
Type of aircraft	D228, DHC6, L410, Y12, C208

Runway:

Type of surface	Bitumen
Runway dimensions	680 x 20 meters 2.4% upslope from rwy 20
Runway designation	20/02
Apron	1 bitumen apron east of rwy 1 unsealed area west of rwy with additional parking and cargo capacity
PAPI	- not available -

Approach and takeoff:

Takeoff RWY	Both
Landing RWY	20 only

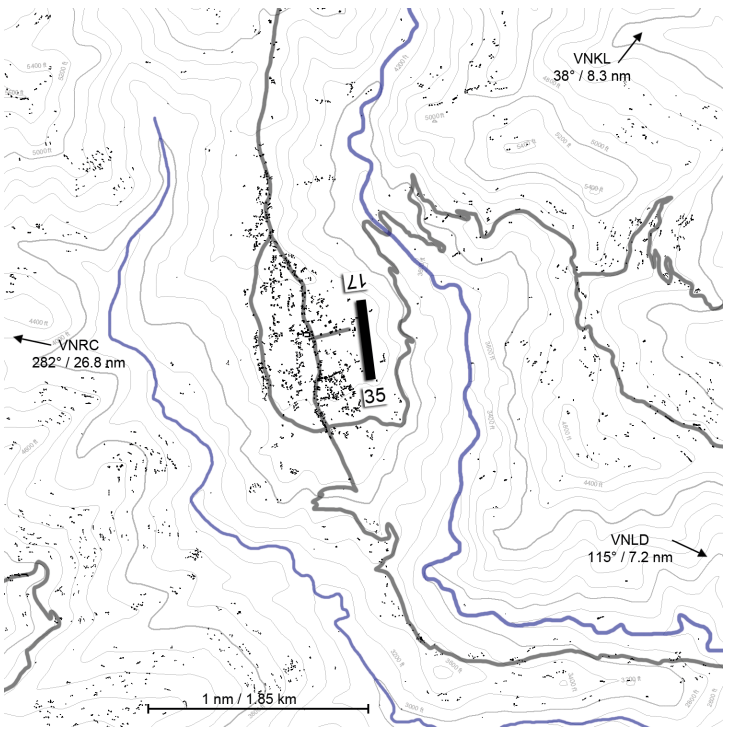
Suggested approach RWY 20	Turn from downwind, bank 30° at 500ft decend rate to establish slideslope towards RWY 20.
Takeoff	When taking off from 02, bank left immediately with minimum bank 30°
Safety advisories:	Turbulence on base and final turns to be expected in windy conditions. Left hand circuit recommended. Flight operations not recommended in changing wind conditions of more than 8 kts. Wind usually from southwest, usually getting very strong after 10:00.

Source of some information: http://www.caanepal.gov.np/wp-content/uploads/2016/03/PHAPLU-AIRPORT.pdf

VNRT Rumjatar

The airport of Rumjatar is located on top of a plateau at an immensely beautiful subtropical location.

Due to the fact that there are only few tourists flying here and many locals prefer longer but cheaper road transport options, the airport is sometimes without any scheduled connections.



VNRT Rumjatar – General Information:

Name	Rumjatar
ICAO code	VNRT

IATA code	RUM
Coordinates	N 27.18.1 E 86.33.0
Elevation	1373.062 m / 419 ft
Operational	Yes
Operation hours	Nov - Jan: 10:00-16:00 local time Feb - Oct: 10:00-17:00 local time
Start of operations:	1972
Servicability:	All weather
Fuel	- not available -
Rescue and fire fighting services	- not available -
Navigation	- not available -
Coms	HF SSB: unknown VHF: 122.3 (not applicable for Aerofly FS2)
Metereological info	Yes (tower observation)
Services	AFIS VFR
Ground transportation	- unknown -
Type of aircraft	D228, DHC6, L410, Y12, C208

Runway:

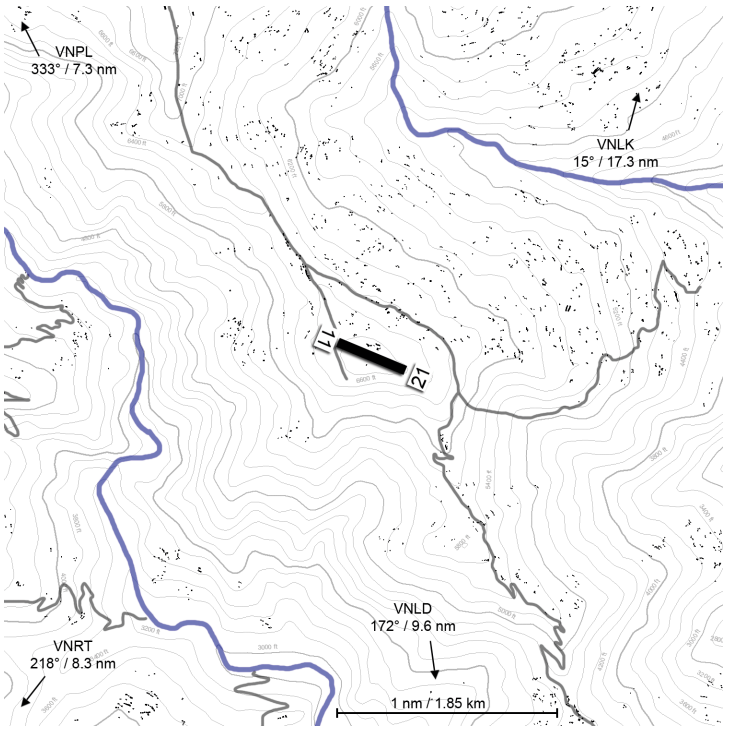
Type of surface	Bitumen
Runway dimensions	548 x 30 meters 4.33% upslope from rwy 35
Runway designation	17/35
Apron	1 bitumen apron west of rwy. Parking capacity for 3 small aircraft.
PAPI	- not available -

Source of some information: http://www.caanepal.gov.np/wp-content/uploads/2016/03/RUMJATAR-AIRPORT.pdf

VNKL Kangel Danda

Kangel Danda is spectacularly located on top of a mountain between Rumjatar and Lukla. At both ends of the runway there are steep cliffs letting you gain ground clearance quickly without even climbing.

Unfortunately there are no scheduled flights here any more since the coms equipment got destroyed by a thunderstorm and there are no efforts being made to repair it. The goats grazing the airport are happy using it as a welcome pasture land.



VNKL Kangel Danda – General Information:

Name	Kangel Danda
ICAO code	VNKL
IATA code	KGL
Coordinates	N 27.25.0 E 86.38.1
Elevation	2005.474 m / 6580 ft
Operational	No
Operation hours	Jan, Feb, Nov, Dec: 06:45-12:30 local time Mar, Apr, Sep, Oct: 06:15-12:30 local time May, Jun, Jul, Aug: 06:00-12:30 local time
Start of operations:	2003
Servicability:	Seasonal
Fuel	- not available -
Rescue and fire fighting services	- not available -
Navigation	- not available -
Coms	HF SSB: unknown VHF: 122.5 (not applicable for Aerofly FS2)
Metereological info	- not available -
Services	- not available -
Ground transportation	- unknown -
Type of aircraft	L410, DHC6, Y12, C208

Runway:

Type of surface	Clay/Grass
Runway dimensions	520 x 26 meters 1.4% upslope from both ends towards center
Runway designation	29/11

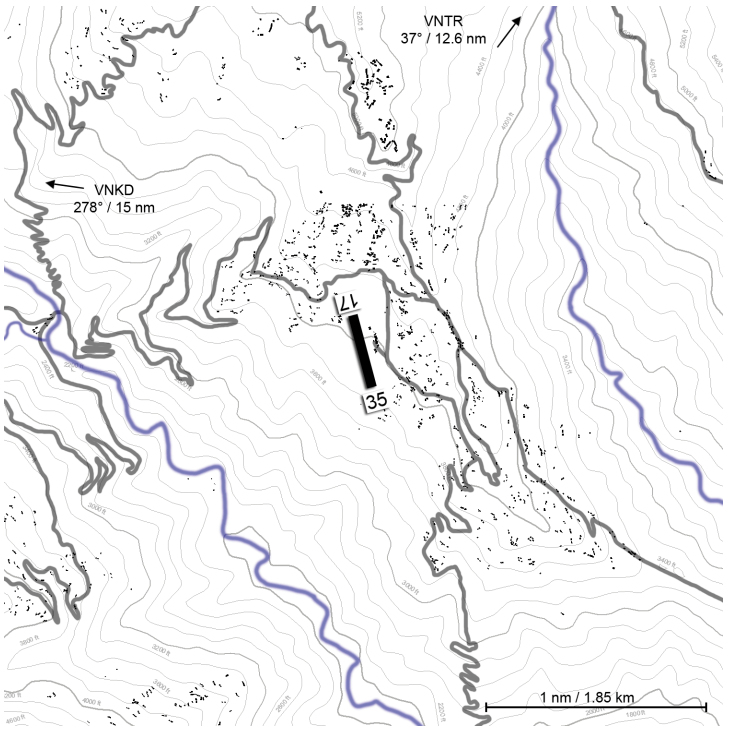
Apron	Clay/grass apron north of rwy. Parking capacity for 2 small aircraft.
PAPI	- not available -

Source of some information: http://www.caanepal.gov.np/wp-content/uploads/2016/03/KANGELDANDA-AIRPORT.pdf

VNBJ Bhojpur

An airport serving the local mountain villages with scheduled passenger flights.

The runway has been paved in 2017.



VNBJ Bhojpur – General Information:

Name	Bhojpur
ICAO code	VNBJ
IATA code	BHP
Coordinates	N 27.08.5 E 87.03.0
Elevation	1214.117 m / 3983 ft
Operational	Yes
Operation hours	Jan, Feb, Nov, Dec: 06:45-12:30 local time Mar, Apr, Sep, Oct: 06:15-12:30 local time May, Jun, Jul, Aug: 06:00-12:30 local time
Start of operations:	1978
Servicability:	All weather
Fuel	- not available -
Rescue and fire fighting services	- not available -
Navigation	- not available -
Coms	HF SSB: unknown VHF: 122.3 (not applicable for Aerofly FS2)
Metereological info	Yes (tower observation)
Services	AFIS VFR
Ground transportation	- unknown -
Type of aircraft	L410, DHC6, Y12, C208

Runway:

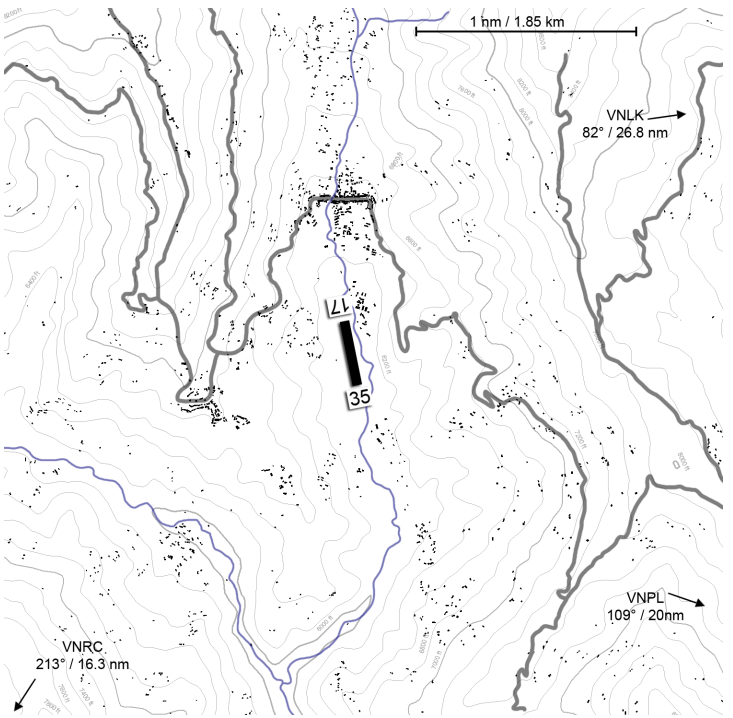
Type of surface	Bitumen
Runway dimensions	545 x 20 meters 7.2% upslope from rwy 35
Runway designation	17/35

Apron	1 bitumen apron east of rwy. Parking for 3 small aircraft.
PAPI	- not available -

Source of some information: http://www.caanepal.gov.np/wp-content/uploads/2016/03/BHOJPUR-AIRPORT.pdf

VNJI Jiri

Despite being a famous tourist destination, Jiri hasn't seen scheduled air traffic in many years. The airstrip seems to have been abandoned and it is unknown if it can still be used for takeoffs and landings. For years there are plans to bring the airport back to life.



VNJI Jiri – General Information:

Name	Jiri
ICAO code	VNJI
IATA code	JIR
Coordinates	N 27.37.35 E 86.13.50
Elevation	1854 m / 6083 ft
Operational	No
Operation hours	Nov - Jan: 10:00-16:00 local time Feb - Oct: 10:00-17:00 local time
Start of operations:	1976
Servicability:	Seasonal
Fuel	- not available -
Rescue and fire fighting services	- not available -
Navigation	- not available -
Coms	- not available -
Metereological info	- not available -
Services	- not available -
Ground transportation	- unknown -
Type of aircraft	DHC6, Y12, C208

Runway:

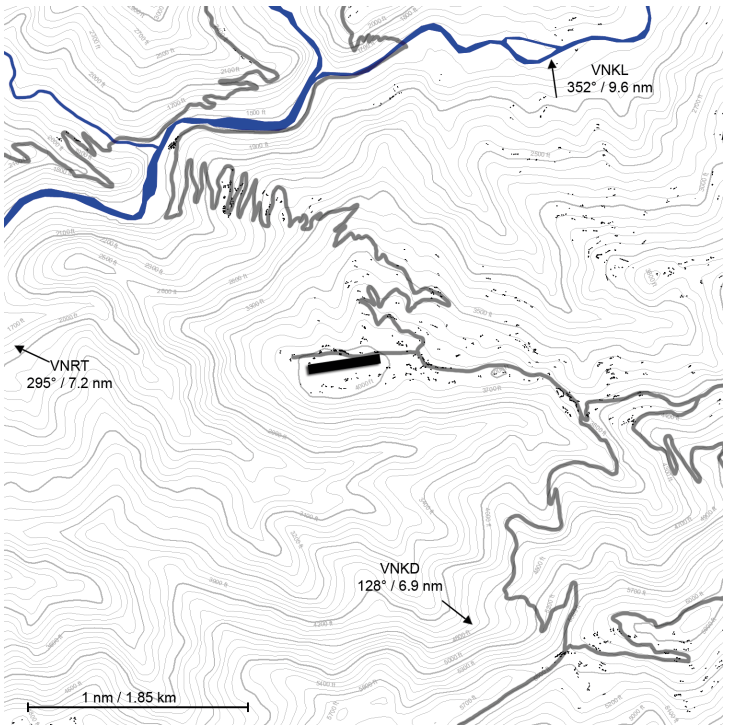
Type of surface	Clay/Grass
Runway dimensions	368 x 18 meters 2.25% upslope from rwy 32
Runway designation	14/32
Apron	No designated apron. Parking capacity for 3 small aircraft.
PAPI	- not available -

Source of some information: http://www.caanepal.gov.np/wp-content/uploads/2016/03/JIRI-AIRPORT.pdf

VNLD Lamidanda

An airport serving the local mountain villages.

The runway has been paved in 2018/19.



VNLD Lamidanda – General Information:

Name	Lamidanda
ICAO code	VNLD
IATA code	LDN
Coordinates	N 27.15.1 E 86.40.1
Elevation	1232 m / 4042 ft

Operational	Yes
Operation hours	Nov - Jan: 10:00-16:00 local time Feb - Oct: 10:00-17:00 local time
Start of operations:	1972
Servicability:	All weather
Fuel	- not available -
Rescue and fire fighting services	- not available -
Navigation	- not available -
Coms	HF SSB: unknown VHF: 122.5 (not applicable for Aerofly FS2)
Metereological info	Yes (tower observation)
Services	AFIS VFR
Ground transportation	- unknown -
Type of aircraft	DHC6, L410, Y12, C208

Runway:

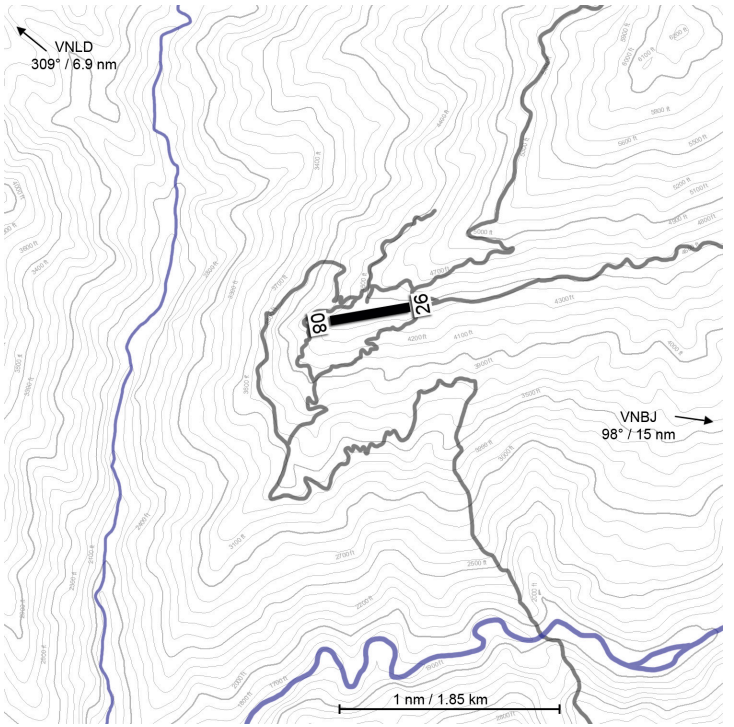
Type of surface	Bitumen
Runway dimensions	516 x 30 meters 1.93% upslope from rwy 26
Runway designation	26/08
Apron	1 bitumen apron north of rwy. Parking capacity for 3 small aircraft.
PAPI	- not available -

Source of some information: http://www.caanepal.gov.np/wp-content/uploads/2016/03/LAMIDANDA-AIRPORT.pdf

VNKD Man Maya Khanidanda

An airport serving the local mountain villages.

The runway has been paved in 2016. Due to quality issues severe erosion problems have been reported.



VNKD Man Maya Khanidanda – General Information:

Name	Man Maya Khanidanda
ICAO code	VNKD
IATA code	KDN
Coordinates	N 27.10.5 E 86.46.1

Elevation	1348 m / 4423 ft
Operational	Yes
Operation hours	Jan, Feb, Nov, Dec: 06:45-12:30 local time Mar, Apr, Sep, Oct: 06:15-12:30 local time May, Jun, Jul, Aug: 06:00-12:30 local time
Start of operations:	2006
Servicability:	All weather
Fuel	- not available -
Rescue and fire fighting services	- not available -
Navigation	- not available -
Coms	HF SSB: unknown VHF: 122.5 (not applicable for Aerofly FS2)
Metereological info	Yes (tower observation)
Services	AFIS VFR
Ground transportation	- unknown -
Type of aircraft	L410, DHC6, Y12, C208

Runway:

Type of surface	Bitumen
Runway dimensions	590 x 20 meters 5.01% upslope from rwy 08
Runway designation	26/08
Apron	1 bitumen apron north of rwy. Parking for 3 small aircraft.
PAPI	- not available -

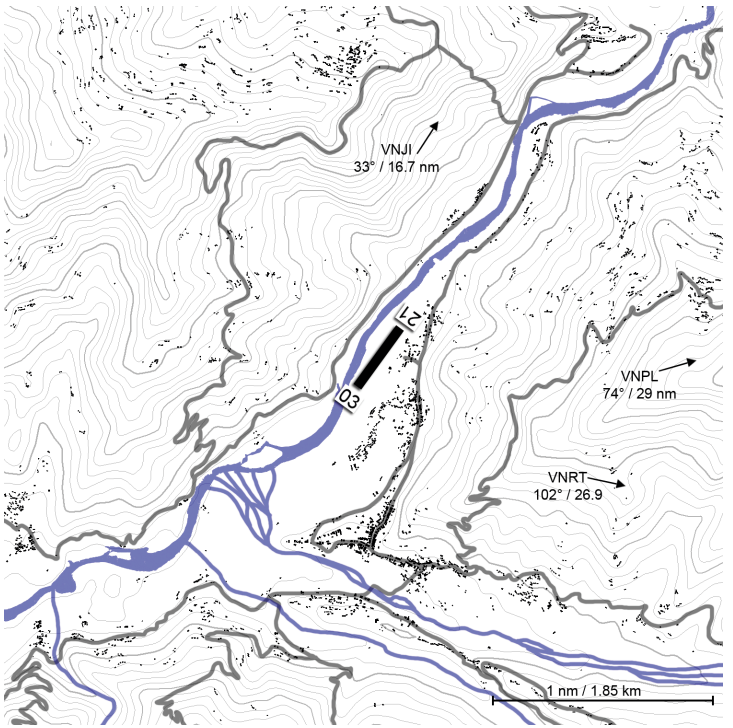
Source of some information: http://www.caanepal.gov.np/wp-content/uploads/2016/03/KHANIDANDA-AIRPORT.pdf

VNRC Ramechhap

An airport serving the local towns and villages.

The runway was paved in 2017.

At “only” 1627ft it is the airport with the lowest elevation in this scenery package.



VNRC Ramechhap – General Information:

Name	Ramechhap
ICAO code	VNRC
IATA code	RCH

Coordinates	N 27.23.3 E 86.03.4
Elevation	496 m / 1627 ft
Operational	Yes
Operation hours	Jan, Feb, Nov, Dec: 06:45-12:30 local time Mar, Apr, Sep, Oct: 06:15-12:30 local time May, Jun, Jul, Aug: 06:00-12:30 local time
Start of operations:	1979
Servicability:	All weather
Fuel	yes
Rescue and fire fighting services	- not available -
Navigation	- not available -
Coms	HF SSB: unknown VHF: 122.5 (not applicable for Aerofly FS2)
Metereological info	Yes (tower observation)
Services	AFIS VFR
Ground transportation	Jeep, Van
Type of aircraft	D228, DHC6, L410, Y12, C208

Runway:

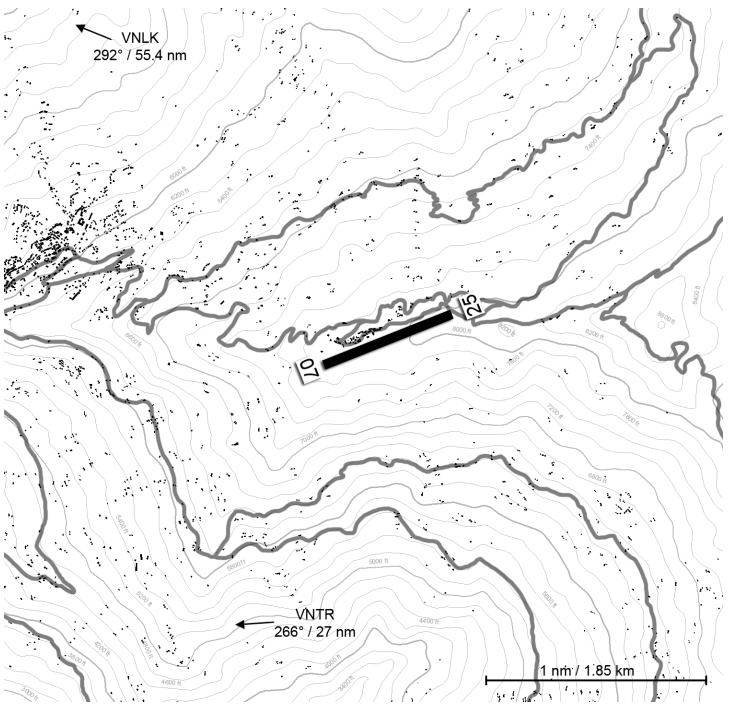
Type of surface	Bitumen
Runway dimensions	530 x 20 meters slightly sloped
Runway designation	21/03
Apron	1 bitumen apron east of rwy. Parking capacity for 3 small aircraft.
PAPI	- not available -

Source of some information: http://www.caanepal.gov.np/wp-content/uploads/2016/03/RAMECHHAP-AIRPORT.pdf

VNTJ Taplejung (Suketar)

An airport serving the local mountain villages with scheduled passenger flights. The runway has been paved in 2016.

It is by far the easternmost airport in this package. To the east one can see Mount Kanchenjunga on the border to India, which is the word's 3rd highest mountain.



VNTJ Taplejung – General Information:

Name	Taplejung (Suketar)
ICAO code	VNTJ
IATA code	TPJ

Coordinates	N 27.21.0 E 87.41.4
Elevation	2426 m / 7959 ft
Operational	Yes
Operation hours	Jan, Feb, Nov, Dec: 06:45-12:30 local time Mar, Apr, Sep, Oct: 06:15-12:30 local time May, Jun, Jul, Aug: 06:00-12:30 local time
Start of operations:	1976
Servicability:	Seasonal
Fuel	- not available -
Rescue and fire fighting services	- not available -
Navigation	- not available -
Coms	HF SSB: unknown VHF: 122.5 (not applicable for Aerofly FS2)
Metereological info	Yes (tower observation)
Services	AFIS VFR
Ground transportation	- unknown -
Type of aircraft	D228, DHC6, L410, Y12, C208

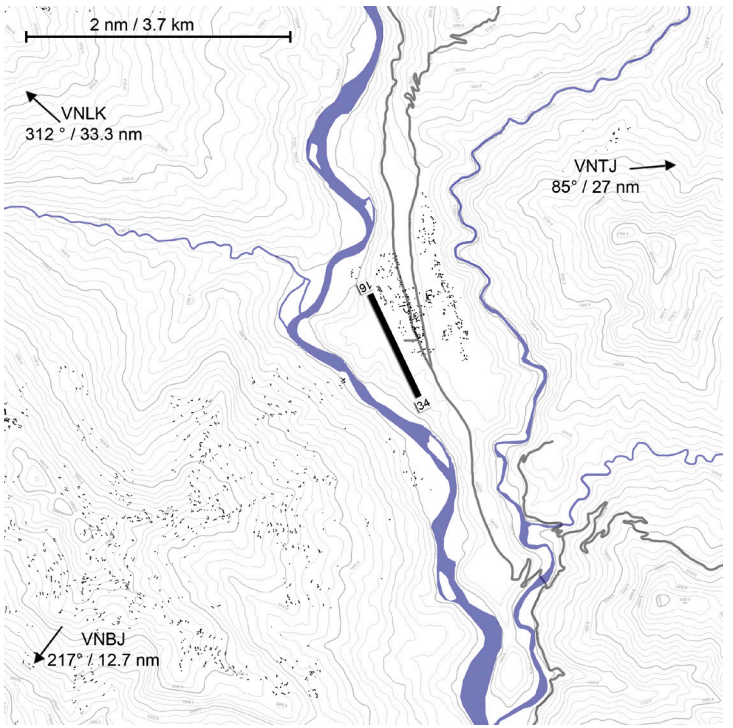
Runway:

Type of surface	Bitumen
Runway dimensions	700 x 20 meters 3.98% upslope from rwy 07
Runway designation	25/07
Apron	1 bitumen apron north of rwy. Parking capacity for 3 small aircraft.
PAPI	- not available -

Source of some information: http://www.caanepal.gov.np/wp-content/uploads/2016/03/TAPLEJUNG-AIRPORT.pdf

VNTR Tumlingtar

An airport serving the local mountain villages with scheduled passenger flights. It is the largest and only Nepalese airport in this package that doesn't require aircraft with STOL capabilities.



VNTR Tumlingtar – General Information:

Name	Tumlingtar
ICAO code	VNTR
IATA code	TMI
Coordinates	N 27.19.0 E 87.11.4

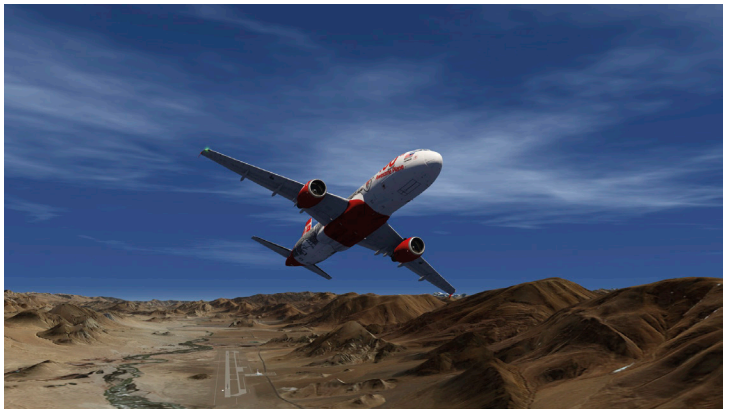
Elevation	399.5 m / 1311 ft
Operational	Yes
Operation hours	Nov - Jan: 10:00-16:00 local time Feb - Oct: 10:00-17:00 local time
Start of operations:	1972
Servicability:	All weather
Fuel	- not available -
Rescue and fire fighting services	- not available -
Navigation	- not available -
Coms	HF SSB: unknown VHF: 123.95 (not applicable for Aerofly FS2)
Metereological info	Yes (tower observation)
Services	AFIS VFR
Ground transportation	Jeep, Van
Type of aircraft	JS41, B190, D228, L410, DHC6, Y12, C208

Runway:

Type of surface	Bitumen
Runway dimensions	1220 x 30 meters 0.91% upslope from rwy 34
Runway designation	16/34
Apron	1 bitumen apron east of rwy. Parking for 3 small aircraft.
PAPI	no

Source of some information: http://www.caanepal.gov.np/wp-content/uploads/2016/03/TUMLINGTAR-AIRPORT.pdf

ZUTG Tingri



Just recently the People's Republic of China has announced to build 3 more airports in the Autonomous Province of Tibet. One of them is the airport of Tingri (or Dingri) estimated to be build just about 60 kilometers north of Mount Everest.

This airport will likely be a deal changer for tourism in the region. It's immense runway will allow airliners to land rather close to Mount Everest. A road from here leads to the Chinese/Tibetan Mount Everest Base Camp.

Some combined information:

- It's just about 65 kilometers north of Mount Everest (Chinese/Tibetan Mount Everest base camp is accessible by road from there).
- At a whopping altitude of 4320 meters / 14100 ft, it will probably be at the top 3 of world's highest airports. Great for bringing larger jets to their limits - you will need quite a bit of that long runway for takeoff.
- It will be the first and only airport in the area supporting larger jets - great for heavy iron sightseeing flights to Mt Everest! Most aircraft capable to land in Lukla will not be able to get up to that altitude!

- Runway of 4500 x 45 meters with parallel taxiway.
- Note that the exact location, layout and technical details of the airport are only approximate until construction is finished.

For more information about high altitude operations, check out the following operations manual available for Aerosoft's Airbus add-ons:

https://forum.aerosoft.com/index.php?/topic/140129-hight-altitude-airport-operations-on-airport-with-an-elevation-of-9200ft-or-above/

Technical Advice

Flight Routes To Lukla

For real world flight routes to Lukla, check out the KMZ file for Google Earth™ that comes with this scenery. You will find it as an entry in your Windows Start menu.

After opening the KMZ file, activate the display of flight routes in the file's subfolders in Google Earth™ (flight routes are not visible by default).

You can right click those waypoints on the map. Then click properties. After that you can note the individual waypoints names and their coordinates to be put into a FMC / GPS / flight planner if you use one.

3rd Party Add-on Sceneries

Kathmandu

This product focuses on the immediate Mount Everest region, which is still a large 200x200 km area. Kathmandu, the main airport for flights to and from Lukla, is not included in Aerofly FS2.

You can however download a freeware package for the airport that will add a few objects and the airport's ground layout:

http://www.fscloudport.com/icao/VNKT.htm

As this package doesn't touch the scenery borders of "Lukla – Mount Everest - Extreme", it will be compatible. Same applies for all other sceneries that are not within coverage range.

Incompatible Sceneries

Please note that all other airports published on FSCloudport, that are within the "Lukla – Mount Everest - Extreme" coverage area (see maps) are not compatible. Please remove their filesets to avoid duplicates (in case you installed them previously). Those airports include:

http://www.fscloudport.com/icao/VNJI.htm

http://www.fscloudport.com/icao/VNSB.htm

http://www.fscloudport.com/icao/VNLK.htm

http://www.fscloudport.com/icao/VNRT.htm

http://www.fscloudport.com/icao/VNPL.htm

http://www.fscloudport.com/icao/VNBJ.htm

http://www.fscloudport.com/icao/VNTR.htm

http://www.fscloudport.com/icao/VNTJ.htm

Folder Structure

Because we are often asked what files do exactly what, we decided to document the files in some detail. Please note that we only advice experienced users to use this information and we do not support any editing of these files.

Base folder will most likely be your:

My Documents\Aerofly FS 2\addons\scenery\

- aerosoft_lukla
  - elevation
    Detailed elevation data. This does not include runway slopes and immediate airport vicinities (those are stored in the individual airport folders).
  - images
    Base aerial/satellite imagery
  - places
    - helipads
      Start location/3D data for all helipads
    - lukla_landscape
      VFR scenery 3D models/terrain/placement
      Cultivation files (trees and buildings)
    - <ICAO-Code>_<airport name>
      Individual airport/3D/Terrain data and start locations for all airports

Known Issues (FAQ)

Q: Why are there long shadows caused by some buildings and rocks in low sunlight?

A: This is normal as shadows get "longer", the lower the sun is. What makes those shadows standing out so much in a mountainous terrain like here is that Aerofly FS2's graphics engine does not support terrain shadows yet.

In other words: While objects throw shadows, those big mountains don't. No matter how low the sun is at the sky. This makes those individual shadows stand out pretty much as long as you keep them active in your settings (which we personally prefer on our own systems because other than that they just look great in Aerofly FS2).

Same applies for grass which does not display shadows in the current simulator engine.

Q: The airport information mentions com frequencies. How to use those?

A: Com frequencies are not yet supported in Aerofly FS2.

Q: Why do the wind turbines and windsocks do not head into the wind?

A: Currently this is not supported by Aerofly FS2.

Q: The Robinson R-22 (default aircraft in Aerofly FS2) won't take off from my chosen location!

A: The Robinson R-22 is not suitable for high locations with thin air. You will have difficulties to fly it in and out Lukla and flying it from locations higher up than Namche Bazaar is simply impossible. You may be able to gain some ground clearance in Namche Bazaar but you carefully need to push the nose down to gain some forward speed and and a low climb rate.

Q: Why is there never snow / winter in Lukla?

A: Being close to the equator there is barely any seasonal change in the region in terms of snow cover. That's why we didn't invest time into seasonal textures but a larger scenery coverage area instead.

Q: When selecting approach positions at certain airports, I do find myself crashing into a ridge!

A: It is currently not possible to move or remove certain approach positions of runways in Aerofly FS2 as those are created automatically by the simulator without regards to the surrounding terrain. It is advised to use this feature with caution and to select approach positions only for runways that are described as suitable for landing in the airports chapter of this manual. If only one runway direction is described as suitable for landing you can almost be sure that the other one will have a ridge in between you and the airport along a straight approach path.

Q: Some cultivation buildings are partially hovering and sunken into the terrain!

A: Similarly to autogen buildings in FSX/P3D, cultivation buildings are placed at random reference points around their footprint. In steep terrain like the Himalayas this can cause some parts of some buildings to hover above the ground or disappear into terrain slopes. This is why we converted many buildings nearby airports and some helipads into actual 3D models instead of lower detail cultivation objects. While looking nicer of course, those are more difficult in regards to performance and development efforts.

Credits

Concept:	Sascha Normann
GIS:	Sascha Normann
Modeling/texturing:	Sascha Normann
Project Management:	Sascha Normann
Manual, documentation:	Sascha Normann

Core area base satellite imagery: Cartosat-1 ISRO/Antrix

10m/pix satellite imagery outside core coverage area and color information for core imagery: Copernicus Sentinel data 2018

Mount Everest area imagery: Sofian Moumene - Everest Mountain Range

(https://www.turbosquid.com/3d-models/range-everest-3d-1173462)

Phaplu and Rumjatar airport satellite imagery:

Rumjatar, 2017 © 21AT, Supplied by Earth-i Ltd. All Rights Reserved.

Phaplu, 2017 © 21AT, Supplied by Earth-i Ltd. All Rights Reserved.

Elevation data + manual edits: NASA Jet Propulsion Laboratory (JPL), 2014, NASA Shuttle Radar Topography Mission Global 1 arc second. Version 3. 26°N, 84°E to 28°N, 88°E NASA EOSDIS Land Processes DAAC, USGS Earth Resources Observation and Science (EROS) Center, Sioux Falls, South Dakota (https://lpdaac.usgs.gov), accessed January 4, 2018, at https://earthexplorer.usgs.gov/

Special thanks to Nishan Manandhar for providing detailed photos of Lukla and Phaplu airports as well as additional input, Lindsay Eaton for providing great aerial imagery of Phaplu airport.

Arno Gerretsen for his never ending dedication to the FS developer community, particularly for his great tool "scenproc" that helped adding millions and millions of objects to this scenery!

Martin Pahnev for some Lukla airport base models.

All betatesters involved who never give up reporting bugs until a product is perfect and ready for release!

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