SKIATHOS X

by 29Palms Scenery Design

Contents

01. Introduction

The name „Skiathos" is derived from „skia" (greek for „shadow") and is named after the shadows of the countless trees covering the island of Skiathos.
Following „Mykonos X", „Skiathos X" is our second island project, taking you to the Northern Sporades of Greece.

The airport of the island is considered to be the „Greek St. Maarten" because of its spectacular approach.
The runway reaches the surrounding sea on both its ends and is in total only 1628m long. Bigger aircrafts like a Boeing 757-200 are forced to perform low approaches.
Although there are plenty of signs warning about the danger of the jetblasts of starting airplanes, some people still prefer to remain there for the „buzz" of the jet engines blast.

The entire island has been realistcly recreated based on many references from the real island.
There are over 250.000 custom-made and hand-placed Autogen-objects covering over 100km² of high-resolution satelite imagery(0.3-05m/px).
In addition there are many animations such as swarms of seagulls, soundeffects and high-resolution textures.
You may fly low over the tourists, visit the final approach or go to discover the island - this scenery offers everything in an extraordinary level of detail.

02. Credits

Concept:	Lars Pinkenburg (29Palms) Martin Pahnev (29Palms)
Programming / Modeling:	Lars Pinkenburg (29Palms) Martin Pahnev (29Palms)
Project Supervision:	Raphael Jakob (Aerosoft)
Manual:	Lars Pinkenburg (29Palms) Martin Pahnev (29Palms) Kyprianos Biris
Information and Support:	Kyprianos Biris (private pilot PPL IFR and FS enthusiast)
Official Video:	Jeroen Doorman (Youtube: JerdooFlightX)
Windsock:	Arno Gerretsen (fsdeveloper.com) Jörg Dannenberg (flightport.de) Jon Patch (jonpatch.ca)
Special Thanks To:	Arno Gerretsen for his outstanding efforts behind the scenes of the flight simulation development. The beta testers for their patience, helpfulness and the lots of effort put into polishing this product.

29Palms
Scenery Design

aerosoft GMBH

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04. System Requirements

• Microsoft Flight Simulator X (SP2, Acceleration Pack or Gold Edition) or Lockheed Martin - Prepar3D
• Windows XP(SP2), Windows Vista or Windows 7 (with the newest Service Packs)
• 3.0 GHz processor (Dual-Core or Quad-Core processors are recommended)
• 2 GB RAM (4 GB are recommended)
• 3D graphics card with 512 MB
• .net Framework 3.5 or higher for running the Scenery Manager

05. Installation and Uninstallation

For the installation of the software package run the .exe-file you have downloaded and follow the instructions on your screen.
Make sure FSX / Prepar3d is not running.
For Windows 7 user it is necessary to run the setup as administrator:

Right-click on the .exe-file, properties, compatibility, check the box "Run as Administrator" and then press "Ok".

The installation process automatically adds the scenery to the scenery library.
Do not ever attempt to uninstall the product manually, always use the uninstaller in the software list.

06. FSX / Prepar3D Settings

The in red underlined settings are the minimum required for FSX for guaranteeing a correctly functioning add-on.
The same applies to Prepar3D.
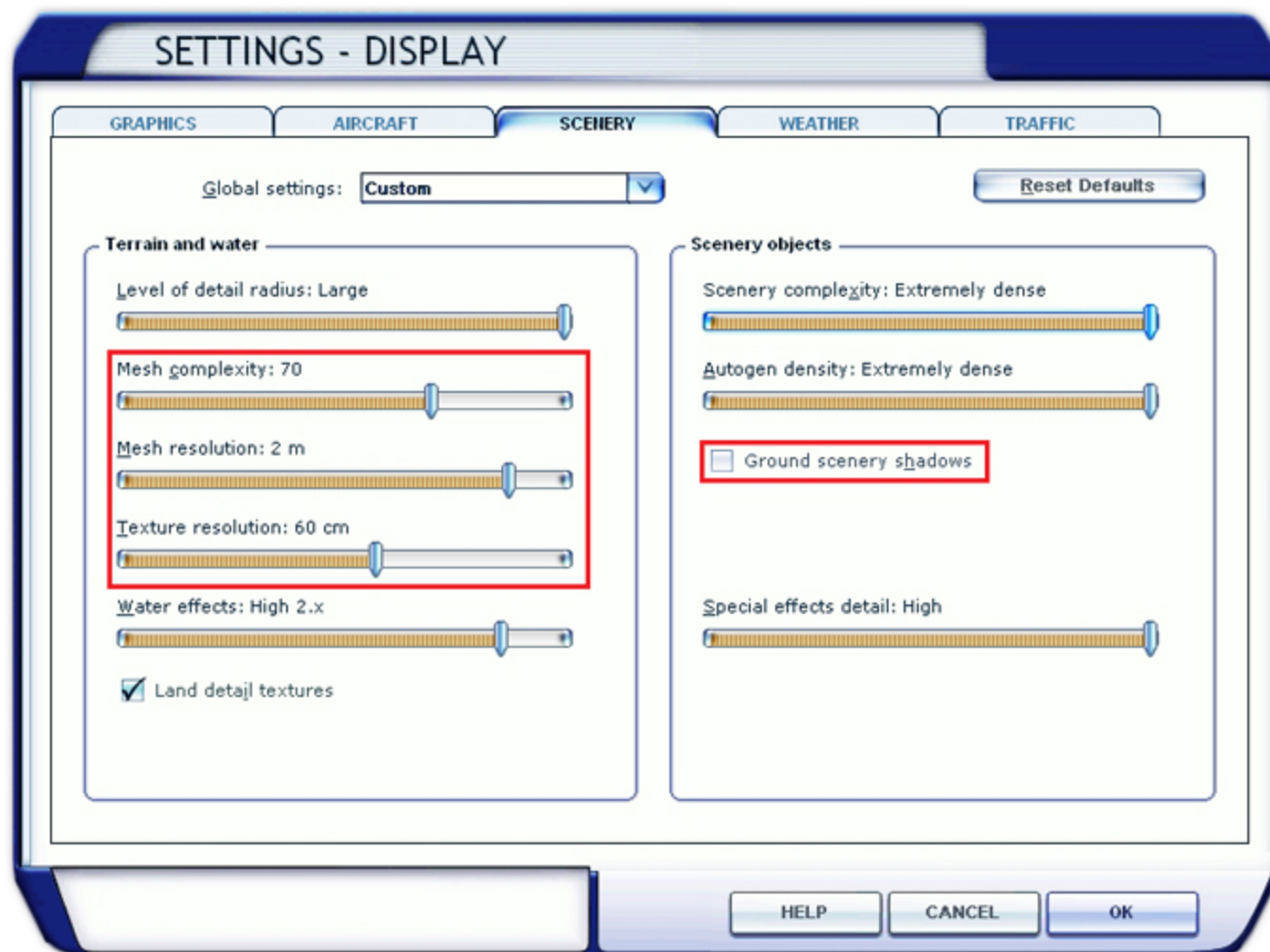
- The mesh is important for this scenery. Set the **mesh resolution** to at least 5m.
  1m is recommended.
- Set the **mesh complexity** to at least 70.
- Set the **texture resolution** to 60cm. 30cm are recommended to fully take advantage of the photoscenery's
  high quality.
- Uncheck **Ground scenery shadows**.

SETTINGS - DISPLAY

GRAPHICS | AIRCRAFT | SCENERY | WEATHER | **TRAFFIC**

Global settings: **Custom** | Reset Defaults

Aviation traffic

Airline traffic density (%): 100

General aviation traffic density (%): 50

Airport vehicle density: None

Aircraft labels

☐ Show aircraft labels

☐ User aircraft   ☐ Tail number
☑ Manufacturer   ☑ Distance
☑ Model   ☑ Altitude

Label color: Cycle rate:
Light Blue   1   seconds

Land and sea traffic

Road vehicles (%): 20   Ships and ferries (%): 0   Leisure boats (%): 20

HELP | CANCEL | OK

- Set **Airport vehicle density** to None to avoid troubles with the Airport Enhancement Services (AES).

- Set the **Road vehicles** to 20% for a realistic vehicle density around the airport.

- Set the **Ships and ferries** to 0% for optimal performance.

07. Overview

The following image gives an overview of the scenery including the entire island of Skiathos and the „Alexandros Papadiamantis" airport.
This scenery covers an area of 100km² with autogen, high resolution satellite imagery (0.3-0.5m/px) and a complex terrain mesh.

Skiathos Airport

Name: Alexandros Papadiamantis
ICAO: LGSK
Altitude: 16m

Arkos

Aspronisos

Tsougria

Tsougriaki

Maragos

Trypiti
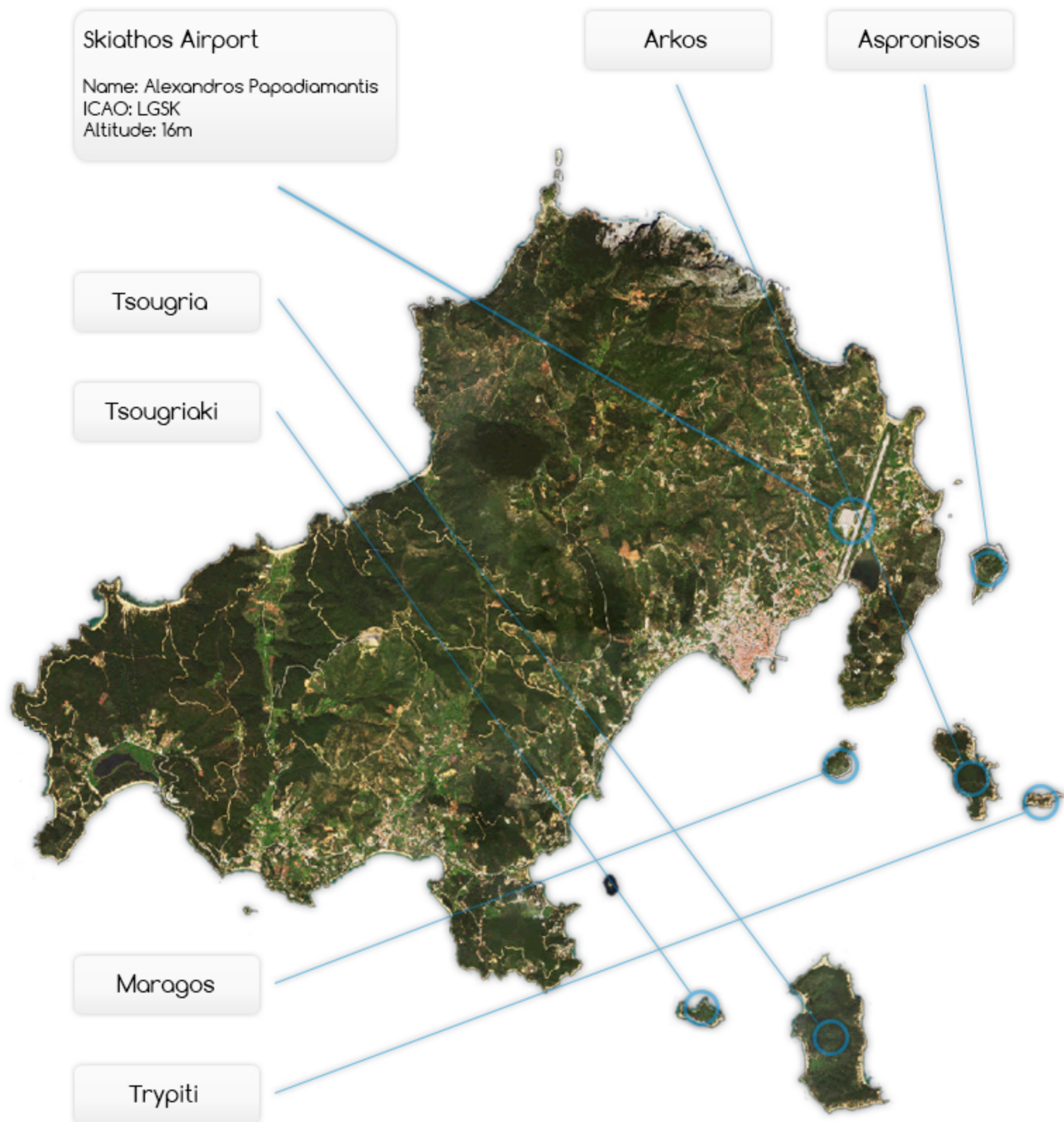
08. The Airport: General Information

The airport of Skiathos LGSK / JSI has some unique features on its own.

The north-south oriented runway is situated in a "funnel" between the main mountain to the west and a nearby hill to the east, both of which make the airport almost invisible if you fly at low (traffic pattern) altitude abeam it.

The northern part of the runway is so close between the two terrain masses that it is literally "carved in" between the hills and by the north end it drops steeply in to the shore where one more sandy beach for swimmers exists.

The southern part of the runway is so close to the sea shore that only a perimeter road crosses before the shoreline. Because the runway's south threshold is just "behind the fence" at road level and no obstructions exists before it and the shore (even nearby anchored ships are not allowed in the extended centreline), this spot attracts many people to get the "buzz" of the jet engines blast just like St. Maarten (TNCM) in the Netherland Antilles.

This honoured Skiathos airport the name of "The Greek St. Maarten" by aviation spotters.

Right by the unofficial "spectators' area" there is a coffee shop an old windmill converted to fish tavern including jet blast warning signs and traffic lights (when aircraft approach or depart) that no one respects however.

An YouTube search for Skiathos air traffic will reveal what happens there in summer.

The runway has an upward slope from south to north with a difference of 46ft elevation in 1,628m (5,341ft) length starting from sea level.

The terrain around it causes local wind effects some times where in the south end you may get southerly wind and in the north end you may get opposite northerly wind just like in Gibraltar (LXGB).

The approach to the southerly runway 20 is a simple one without tricks except of the last part, the landing deceleration on a downhill runway. Heavy loaded jets have to stop in a mere 1,630 meters of runway which is level for the first 427m and then slopes down 1.23% (0.7 degrees) for the next 1,059m to the end. The PAPI lights for runway 20 are set to the standard 3.00 degrees pitch. On wind calm days runway 20 is the preferred one for departures due to the downhill slope.

Most often runway 02 is in use for approach due to northerly prevailing wind or simply due to its uphill slope.

The approach to the northerly runway 02 gets the aircraft in the funnel mentioned above in the last two miles of the approach. On the west the mountain of the airport and the hill of the main town and on the east the other hill "home in" the aircraft while the aircraft passes right by the picturesque town's shore in the bay with the night clubs on the left side seconds before touchdown.

On short final the aircraft passes above dozens of anchored boats of all sizes and the scenic shore full of shipyards where all the islands fishing boats are maintained.

For various reasons of approach safety criteria the PAPI lights of runway 02 are set to 3.30 degrees making the final approach steeper than usual and hence, with the first 1,628m of the runway sloping upwards 0.7 degrees, effectively this is a 4.0 degrees approach relative to the runway surface on touch down. This produces greater challenge in proper touch down but pays back in the stronger deceleration due to runway uphill slope.
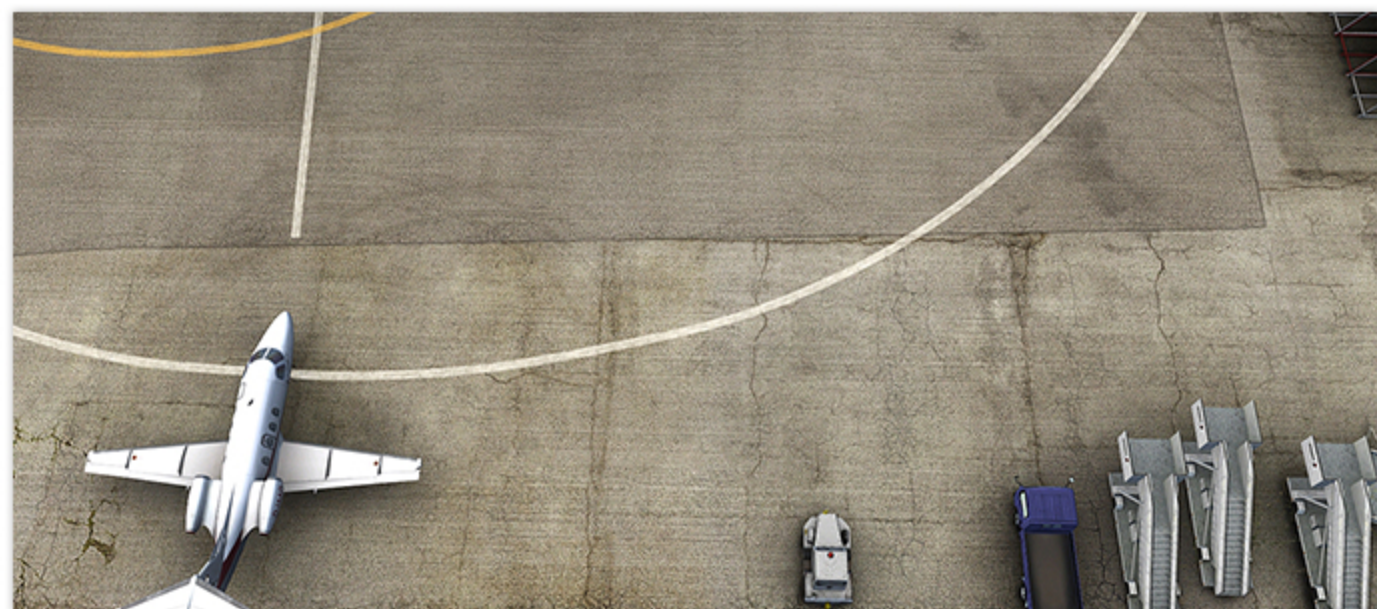
At night, apart from the city lights on the west, what makes the approach to runway 02 even more scenic are the dozens of red hazard lights which exist atop every single hill peak, highest building or highest structure in the area of the bay for pilots to avoid. It is a multitude of red hazard beacon lights which make the scene second to none when it comes to night illumination.

Visual Downwind legs can only be EAST of the airport due to terrain on the west but even on the east downwind legs, pilots unfamiliar with the airport can easily loose sight of it due to the eastern hill right next to the airport.

The IFR approaches for both runways initiate from Skopelos island SKP VOR (113.40 Mhz) to the east where, the outbound leg is a VOR radial whilst, the inbound leg to final approach is defined by a bearing to Skiathos SKC (326 Khz) NDB. Its antenna next to the airport car park produces a signal strong enough just for an aircraft flying in the immediate vicinity of the airport to receive it.

The airport apron officially has 2 parking spots for mid size jets (B738, B752, A320) and a gap at the north end for 3 general aviation aircraft.
The jet traffic at the airport is mainly Greece based Dash 8 from Olympic Airlines, and A320 from Aegean Airlines and the rest from abroad are many charter jets coming from mainland Europe during summer period.
For capacity reasons CAA squeezes in 3 mid size jets at the apron which involves careful (arrival/departure times) operations planning since the forward one blocks the ones behind from taxiing out. There have been cases during the busy summer months when the apron is used at full capacity and a delayed departure due to unforeseen events causes havoc. The (4th) jet has been waiting on the runway with engines running until one departs. In worst cases there have been flights diverted to Skiathos' alternate Thessaloniki Makedonia airport (LGTS) simply due to lack of apron space from unforeseen events. They land in Thessaloniki wait some half hour and then depart again for the short flight to Skiathos after a big hassle of disembarking, refuelling and re-embarking passengers.

Helicopter was the only way to access Skiathos until 1972 when the airport was built. Until then, the Onassis, who owned Olympic Airways in its golden era, had scheduled passenger helicopter flights from Athens to Skiathos with the Sud SA-321F Super Frelon (Link).
The helicopter was landing in the circular concrete helipad, still seen today in Platanias area of south Skiathos shore (see Google maps "Platanias, Sporades, Greece"). The helipad is clearly visible in this high resolution photoscenery.
The helipad was placed there since it was close to the vacation house of an Onassis relative.

Nowadays there is intense private helicopter traffic in Skiathos for visitors who own them or can afford renting them. Due to the airport apron space mentioned above, in summer months it is almost not possible to accommodate them apart from a quick refuelling stop if needed. So what private helicopters do to operate from Skiathos is to use "suitable fields" the owners of which or nearby residents have no objection to helicopter noise.
One site used is the parking lot of the warehouse right next to the airport fence by the lake, east abeam of runway 02 touch down zone. Less frequent they land at the parking lot / field behind Kanapitsa south beach (Plaza Hotel – see Google maps).

09. The Airport: Technical Information

ICAO:	LGSK
Latitude:	N39°10.65'
Longitude:	E23°30.22'
Elevation:	54 feet / 16meters
Magnetic Variation:	003° E
Fuel:	Jet A1
Runway 16/34:	5151 x 98 feet / 1628 x 30 meters; Asphalt
Tower:	123.25
Approach:	126.05
VOR/DME:	113.400 (SKP)

10. The Island: General Information

Skiathos, part of the Sporades islands complex in north central Aegean Sea, Greece, has some unique features amongst other Greek Islands.

The rest of Sporades like Skopelos and Alonissos are even nicer and quieter but harder to get to since they have no airport connection like Skiathos.

The Sporades group of islands are a yacht cruise paradise because of the remote bays protected by weather and the close distance of the islands between them. Most of the rental yacht tours initiate from Skiathos.

Skiathos is not a "dry rock & windy" island as most of southern Aegean Sea islands.

The climate from Skiathos and northwards becomes more wet after autumn and hence it has more vegetation.

It is a small island comprised of one main mountain popping up from sea, some surrounding hills to its footings and a lively coastline which creates many bays and beaches with golden sand.

The combination of terrain full of vegetation (pine or olive trees) dropping down to sandy beaches makes it an unique setting for relaxed vacations close to unharmed nature.

The tourism infrastructure is quite well organized in Skiathos with hotels which fit all appetites.

The island has no villages scattered but rather one main town where all things are happening and away from it exist only private or rental villas and hotel resorts, all within close distance.

The south and eastern part is mostly developed and the north and western areas are almost not inhabited at all and have only some wonderful remote beaches on the shore.

The main town of Skiathos built on a shoreline steep rising hill has a great history from fishermen and sailors of the great seas but nowadays focuses mainly on local fishing or tourism activities.

Its (non) traditional architecture is not protected by law like other Greek islands in the south and hence in the densely populated centre you spot "ad hoc" architecture from locals.

The most picturesque part of the town is the shore with the promenade of coffee shops, restaurants and night clubs.

The town's south shore is the calm "old port" which comprises mostly of traditional fishing boats and day guided tour boats in front of fish taverns and bars.

The east shore is the town's main port for ferry boats, rental yachts and any visiting boat activity.

This is where the daily car and passenger ferry boats anchor to off load passengers and cars to the island.

All the shops, travel and car rental agents are situated in the eastern shore.

Further up north on the east shore, outside the city towards the airport, on the coastal road, one finds the vivid night clubs.

East and close to the island one can reach with a short boat ride majestic islets with primitive sandy beaches like Tsougria where a local bar with music and a fridge (on generator) and food on charcoal, can make you forget that you are still in Europe.

11. The Scenery Manager

To ensure an optimal performance on slower machines we have included an application to control and tweak settings.

To run the Scenery Manager you need .net Framework 3.5 or higher installed on your machine.
You can find the application in the following folder: "[FSX dir][Prepar3D dir]/Aerosoft/29Palms - Skiathos X".
Do not move the Scenery Manager out the default directory, you can make a shortcut instead.
Changes are being applied instantly.

Make sure FSX/Prepar3D is closed while running the Scenery Manager!

- The buttons above the main settings lead to our websites, the manual and the support
- **Animations:** The scenery package includes many animations. This option lets you deactivate them manually.
- **HD Texture:** Use this to switch between two levels of high-resolution textures. Please note that must have TEXTURE_MAX_LOAD set to 2048 or higher (4096) inside the FSX configuration file „fsx.cfg". This setting has been implemented into the settings menu of Prepar3D and must not be adjusted manually.
- **3D Grass:** The green areas around the runways and the apron are covered with 3D grass. Turn this option off or use a lower density if you are experiencing problems with the performance.
- **Static Objects:** This option lets you control the static objects manually. „Surrounding Cars" affects the static vehicles in the area around the airport, „3D People" affects all static models of people and „Miscellaneous" affects smaller objects such as baggage, cones, ladders and power supply lines.
- **HQ Terrain Features:** This option enables realistic terrain elements like the trench next to he apron.
  For proper display of the features mesh resolution must be set to 1m.
- **RWY02 Dust Effect:** This option enables the effect of the jetblast swirling up dust at the end of Runway 02. Due to limitations caused by FSX/Prepar3D this effect is also visible when rolling towards the turning point of the runway.
- **Sound Effects:** This option enables realistic environment sounds like vents, seagulls and the sound of the sea.
- **UTX:** Enable this option if you have "Ultimate Terrain Europe X" or "GRcoastlines" installed.

12. AI-Traffic Add-Ons

Skiathos X ist mit allen gängigen AI-Traffic Add-Ons kompatibel. Auch ist es nicht erforderlich den Schattenwurf von Flugzeugen abzuschalten, sollten Sie „World of AI" nutzen. Eine Vielzahl von Add-Ons erfordert dies.

13. Charts

This package contains all charts for the Airport of Skiathos.
You can find them in the following folder:

"[FSX][Prepar3D]/Aerosoft/29Palms - Skiathos X/Docs/Charts"

Source: © Greece CAA AIP www.hcaa.gr; charts are publicly available.

14. F.A.Q.

Q: Is this add-on compatible with DX10? (FSX)
A: Like most of the scenery add-ons Skiathos X is not comatible with DX10.

Q: Is this add-on compatible with UTX, GEX, GRcoastlines and FS Global?
A: There should not be any problems with those add-ons. Skiathos X is placed above all kinds of landclass and mesh
   add-ons in general.

Q: I am experiencing problems with the airport lightning and effects on different times of the day. Is this normal?
A: This is a known FSX issue and is not caused by this add-on. Simply reload the scenery or open the scenery library and
   exit it again with „ok".

Q: I am experiencing problems with the transparency of the vegetation and the fences. What is the cause for this?
A: Unfortunatlly the FSX game engine is not well suited for transparency effects. The only work-around in this case is
   implementing a custom script which however decreases the overall performance dramaticly.

Q: The jetblast effect appears when taxiing to runway 02. What is the cause for this?
A: FSX is quite limited when it comes down to effects. The only way to control the effect is by determining the distance
   between the aircraft and the effect itself. An additional directional definition is not possible. This issue has been
   revised by us thoroughly, there is no solution currently. This is why the effect is turned off by default. If a solution is
   found we will implement it in a future patch.

15. Support

The support for this add-on is provided by Aerosoft.
Please contact them via the following link:

forum.aerosoft.com

In addition to that you almost instantly receive help there from other users.
However, if you want to contact us personally you can do so by sending us an e-mail via our Scenery Manager by clicking on the support button.

16. External Links

Stay tuned about upcoming projects, news and updates on our facebook page:

facebook.com/29PalmsSceneryDesign

You may also take a look at the photo album of Skiathos by Kyprianos Biris to get a real impression about the island. These photos were used as reference material in the design process of this scenery.

hellasga.com

17. Attachment: Flight Schedules

You will find real flight schedules attached. Provided by Mimis Simos (Skiathos ATC) and George Iliopoulos (airport authority).

PERIOD FROM 31/03/2013 TO:26/10/2013

ARRIVAL FLT. NUM		DEPART. FLT. NUM		PERIOD OF OPERATION		DAYS OF OPERATION	A/C TYPE	ARR. FROM	ARR. TIME GMT	DEP. TIME GMT	DEP. TO
				FROM	TO						
OA	68	OA	69	21-Oct	21-Oct	1000000	DH4	ATH	0320	0345	ATH
OA	68	OA	69	1-Apr	15-Apr	1030000	DH4	ATH	0330	0355	ATH
OA	68	OA	69	22-Apr	22-Apr	1000000	DH4	ATH	0330	0355	ATH
OA	68	OA	69	6-May	14-Oct	1000000	DH4	ATH	0330	0355	ATH
JU	5664	JU	5665	24-Jun	26-Aug	1000000	733	BEG	0505	0555	BEG
JU	5164	JU	5165	1-Jul	2-Sep	1000000	733	BEG	0530	0620	BEG
BV	2424	BV	2425	18-Jul	30-Aug	1234500	733	FCO	0625	0700	FCO
OA	68	OA	69	29-Apr	29-Apr	1000000	DH4	ATH	0730	0755	ATH
HV	222	HV	222	29-Apr	30-Sep	1000000	73W	JKH	0800	0845	AMS
HV	222	HV	222	7-Oct	7-Oct	1000000	73W	JKH	0800	0845	AMS
AY	1775	AY	1776	17-Jun	17-Jun	1000000	320	HEL	0815	0915	HEL
AY	1775	AY	1776	24-Jun	15-Jul	1000000	320	HEL	0815	0915	HEL
AY	1775	AY	1776	22-Jul	29-Jul	1000000	320	HEL	0815	0915	HEL
AY	1775	AY	1776	5-Aug	5-Aug	1000000	320	HEL	0815	0915	HEL
SK	7319	SK	7320	24-Jun	12-Aug	1000000	73G	SVG	0940	1040	SVG
VOE	5020	VOE	5021	24-Jun	15-Jul	1000000	717	VCE	1000	1025	VCE
VOE	5020	VOE	5021	22-Jul	2-Sep	1000000	717	VCE	1000	1025	VCE
A3	4501	A3	4502	29-Apr	7-Oct	1000000	320	LED	1115	1215	LED
QS	2318	QS	2319	11-Jun	24-Sep	0200000	73G	PRG	0515	0615	KVA
BV	2424	BV	2425	18-Jul	30-Aug	1234500	733	FCO	0625	0700	FCO
HV	1527	HV	1528	7-May	14-May	0200000	73H	AMS	0715	0800	MJT
HV	1947	HV	1948	21-May	28-May	0200000	73H	AMS	0715	0800	SMI
HV	1947	HV	1948	4-Jun	4-Jun	0200000	73H	AMS	0715	0800	KVA
HV	1947	HV	1948	11-Jun	2-Jul	0200000	73H	AMS	0715	0800	SMI
HV	1947	HV	1948	9-Jul	1-Oct	0200000	73H	AMS	0715	0800	KVA
DK	495	DK	496	4-Jun	25-Jun	0200000	320	CPH	0800	0900	KVA
DK	495	DK	496	2-Jul	17-Sep	0200000	321	CPH	0800	0900	KVA
DK	495	DK	8496	28-May	28-May	0200000	320	CPH	0800	0900	CPH
DK	8495	DK	496	24-Sep	24-Sep	0200000	321	CPH	0800	0900	KVA
DK	893	DK	8894	21-May	21-May	0200000	321	OSL	0830	0920	OSL
DK	8893	DK	894	24-Sep	24-Sep	0200000	321	OSL	0830	0930	KVA
DK	893	DK	894	28-May	17-Sep	0200000	321	OSL	0830	0930	KVA
TOM	4242	TOM	4243	14-May	17-Sep	0200000	75W	LGW	0900	1000	LGW
HG	3488	HG	3489	21-May	8-Oct	0200000	320	VIE	1105	1205	VIE
TOM	2200	TOM	2201	14-May	24-Sep	0200000	75W	MAN	1200	1300	MAN
OA	68	OA	69	2-Apr	22-Oct	0200000	DH4	ATH	1845	1910	ATH
OA	68	OA	69	23-Oct	23-Oct	0030000	DH4	ATH	0320	0345	ATH
OA	68	OA	69	1-Apr	15-Apr	1030000	DH4	ATH	0330	0355	ATH
OA	68	OA	69	1-May	3-Jul	0030000	DH4	ATH	0330	0355	ATH
OA	68	OA	69	10-Jul	10-Jul	0030000	319	ATH	0330	0355	ATH
OA	68	OA	69	17-Jul	16-Oct	0030000	DH4	ATH	0330	0355	ATH
OA	68	OA	69	17-Apr	17-Apr	0030000	DH8	ATH	0420	0440	ATH
JU	5264	JU	5265	3-Jul	4-Sep	0030000	733	BEG	0425	0515	BEG
OA	68	OA	69	24-Apr	24-Apr	0030000	DH4	ATH	0555	0620	ATH
CY	7636	CY	7637	10-Jul	21-Aug	0030000	320	LCA	0555	0645	LCA
BV	2424	BV	2425	18-Jul	30-Aug	1234500	733	FCO	0625	0700	FCO
TCX	2486	TCX	2487	8-May	2-Oct	0030000	752	MAN	0840	0940	MAN
TCX	7418	TCX	741P	28-Aug	28-Aug	0030000	320	BRS	0945	1030	DLM
TCX	7418	TCX	7419	22-May	22-May	0030000	320	BRS	0945	1035	BRS
TCX	7418	TCX	7419	29-May	10-Jul	0030000	320	BRS	0945	1040	KVA

TCX	7418	TCX	7419	4-Sep	2-Oct	0030000	320	BRS	0945	1040	KVA
TCX	1142	TCX	1143	17-Jul	21-Aug	0030000	752	LGW	0945	1045	LGW
TCX	1142	TCX	1143	22-May	10-Jul	0030000	752	LGW	1055	1155	LGW
TCX	1142	TCX	1143	28-Aug	2-Oct	0030000	752	LGW	1055	1155	LGW
IG	8120	IG	2121	4-Sep	4-Sep	0030000	73W	NAP	1140	1220	NAP
TCX	751P	TCX	7519	17-Jul	17-Jul	0030000	320	DLM	1210	1300	KVA
IG	2120	IG	2121	7-Aug	7-Aug	0030000	73W	NAP	1815	1905	NAP
IG	2120	IG	2121	14-Aug	14-Aug	0030000	73W	NAP	1815	1905	NAP
IG	2120	IG	2121	21-Aug	28-Aug	0030000	73W	NAP	1815	1905	NAP
IG	2120	IG	8121	31-Jul	31-Jul	0030000	73W	NAP	1815	1905	NAP
JU	5664	JU	5665	13-Jun	5-Sep	0004000	733	BEG	0505	0555	BEG
JU	5164	JU	5165	11-Jul	12-Sep	0004000	733	BEG	0520	0610	BEG
VOE	1452	VOE	1453	25-Jul	25-Jul	0004000	717	VCE	0535	0600	VCE
VOE	1452	VOE	1453	1-Aug	29-Aug	0004000	717	VCE	0535	0600	VCE
VOE	1452	VOE	1453	5-Sep	5-Sep	0004000	717	VCE	0555	0620	VCE
DE	4178	DE	4179	23-May	23-May	0004000	320	MUC	0605	0735	MUC
DE	4178	DE	4179	30-May	26-Sep	0004000	320	MUC	0605	0735	MUC
DE	4178	DE	4179	3-Oct	3-Oct	0004000	320	MUC	0605	0735	MUC
BV	2424	BV	2425	18-Jul	30-Aug	1234500	733	FCO	0625	0700	FCO
7M	4741	7M	4741	18-Jul	5-Sep	0004000	733	BRI	0730	0820	JTR
OA	68	OA	69	4-Apr	24-Oct	0004000	DH4	ATH	1845	1910	ATH
QS	2318	QS	2319	21-Jun	13-Sep	0000500	73G	PRG	0515	0615	KVA
JU	5164	JU	5165	21-Jun	21-Jun	0000500	733	BEG	0530	0615	BEG
BV	2424	BV	2425	18-Jul	30-Aug	1234500	733	FCO	0625	0700	FCO
ST	2610	ST	2611	24-May	31-May	0000500	319	LGW	0830	0910	VOL
ST	2610	ST	2611	7-Jun	28-Jun	0000500	319	LGW	0830	0910	VOL
ST	2610	ST	2611	5-Jul	26-Jul	0000500	319	LGW	0830	0910	VOL
ST	2610	ST	2611	2-Aug	30-Aug	0000500	319	LGW	0830	0910	VOL
ST	2610	ST	2611	6-Sep	27-Sep	0000500	319	LGW	0830	0910	VOL
ST	2610	ST	2611	4-Oct	11-Oct	0000500	319	LGW	0830	0910	VOL
TCX	6156	TCX	6157	31-May	27-Sep	0000500	752	NCL	0830	0930	NCL
TCX	6156	TCX	615F	24-May	24-May	0000500	752	NCL	0830	0930	NCL
ST	4638	ST	4639	19-Jul	27-Sep	0000500	319	MAN	0915	1000	MAN
TOM	7534	TOM	7535	3-May	3-May	0000500	75W	BHX	0940	1040	BHX
TOM	7534	TOM	7535	10-May	27-Sep	0000500	75W	BHX	0940	1040	BHX
P7	353	P7	353	3-May	3-May	0000500	733	LGW	1010	1100	VOL
P7	353	P7	354	24-May	4-Oct	0000500	320	LGW	1010	1100	VOL
ST	4638	ST	4639	10-May	12-Jul	0000500	319	MAN	1045	1130	MAN
ST	4638	ST	4639	4-Oct	11-Oct	0000500	319	MAN	1045	1130	MAN
TOM	2526	TOM	2527	3-May	3-May	0000500	75W	MAN	1100	1200	MAN
TOM	2526	TOM	2527	10-May	27-Sep	0000500	75W	MAN	1100	1200	MAN
TCX	5004	TCX	500F	24-May	24-May	0000500	321	EMA	1145	1235	EMA
TCX	5004	TCX	5005	31-May	27-Sep	0000500	321	EMA	1145	1245	KVA
MON	026P	MON	7027	4-Oct	4-Oct	0000500	752	MAN	1205	1305	VOL
MON	7026	MON	7027	10-May	27-Sep	0000500	752	MAN	1205	1305	VOL
JN	2516	JN	2517	17-May	25-Oct	0000500	320	LGW	1250	1340	SKG
MON	7835	MON	7835	10-May	10-May	0000500	752	VOL	1315	1405	LGW
MON	7835	MON	7835	17-May	4-Oct	0000500	752	VOL	1315	1405	LGW
VOE	5020	VOE	5021	21-Jun	12-Jul	0000500	717	VCE	1345	1415	VCE
VOE	5020	VOE	5021	19-Jul	6-Sep	0000500	717	VCE	1345	1415	VCE
P7	651	P7	652	14-Jun	4-Oct	0000500	320	BHX	1415	1515	SKG
TOM	4558	TOM	4559	3-May	3-May	0000500	75W	LGW	1445	1545	LGW
TOM	4558	TOM	4559	10-May	27-Sep	0000500	75W	LGW	1445	1545	LGW
ESG	651	ESG	652	10-May	4-Oct	0000500	320	LGW	1515	1605	SKG
OA	68	OA	69	5-Apr	25-Oct	0000500	DH4	ATH	1845	1910	ATH
OS	9087	OS	9088	25-May	28-Sep	0000060	320	VIE	0600	0645	VIE
SK	7601	SK	7602	18-May	28-Sep	0000060	73W	ARN	0730	0830	ARN
SK	7463	SK	7464	18-May	12-Oct	0000060	73G	OSL	0810	0910	OSL

SK	7383	SK	7384	1-Jun	5-Oct	0000060	738	OSL	0840	0940	OSL
SK	7711	SK	7712	18-May	21-Sep	0000060	319	CPH	1000	1100	CPH
SK	7929	SK	7930	25-May	28-Sep	0000060	73W	ARN	1030	1130	ARN
SK	7915	SK	7916	25-May	14-Sep	0000060	736	GOT	1115	1215	GOT
VOE	5020	VOE	5021	22-Jun	13-Jul	0000060	717	VCE	1220	1250	VCE
VOE	5020	VOE	5021	20-Jul	7-Sep	0000060	717	VCE	1220	1250	VCE
RO	5311	RO	5312	1-Jun	8-Jun	0000060	318	OTP	1240	1330	OTP
RO	5311	RO	5312	14-Sep	21-Sep	0000060	318	OTP	1240	1330	OTP
RO	5311	RO	5314	15-Jun	7-Sep	0000060	318	OTP	1240	1330	CLJ
OA	68	OA	69	6-Apr	20-Apr	0000060	DH8	ATH	1615	1635	ATH
OA	68	OA	69	27-Apr	27-Apr	0000060	DH8	ATH	1615	1635	ATH
OA	68	OA	69	4-May	26-Oct	0000060	DH8	ATH	1615	1640	ATH
RO	5313	RO	5312	15-Jun	7-Sep	0000060	318	CLJ	1710	1800	OTP
JP	216	JP	217	15-Jun	14-Sep	0000060	319	JKH	1740	1825	LJU
JU	5164	JU	5165	22-Sep	22-Sep	0000007	733	BEG	0505	0555	BEG
JU	5264	JU	5265	23-Jun	15-Sep	0000007	733	BEG	0505	0555	BEG
JU	5664	JU	5665	15-Sep	15-Sep	0000007	733	BEG	0505	0555	BEG
AZ	8412	AZ	8411	7-Jul	8-Sep	0000007	320	FCO	0600	0650	FCO
IG	2106	IG	2107	2-Jun	9-Jun	0000007	738	MXP	0615	0705	MXP
IG	2106	IG	2107	15-Sep	22-Sep	0000007	738	MXP	0615	0705	MXP
VOE	1452	VOE	1453	21-Jul	8-Sep	0000007	717	VCE	0640	0705	VCE
IG	2106	IG	2109	16-Jun	8-Sep	0000007	738	MXP	0700	0745	VRN
HG	2752	HG	2752	9-Jun	15-Sep	0000007	319	GRZ	0815	0905	JTR
AZ	8942	AZ	8943	4-Aug	1-Sep	0000007	320	MXP	0930	1020	MXP
HG	2752	HG	2752	2-Jun	2-Jun	0000007	319	GRZ	0945	1035	JTR
CY	7636	CY	7637	7-Jul	25-Aug	0000007	320	LCA	1050	1140	LCA
IG	2108	IG	2107	16-Jun	8-Sep	0000007	738	VRN	1215	1305	MXP
AZ	8570	AZ	8571	4-Aug	1-Sep	0000007	320	MXP	1635	1725	MXP
AZ	8490	AZ	8491	4-Aug	1-Sep	0000007	320	MXP	1655	1745	MXP
OA	68	OA	69	31-Mar	20-Oct	0000007	DH4	ATH	1845	1910	ATH