

POLAR ADVENTURES

Schiffs- und Flug- Expeditionen
in Arktis und Antarktis



Luftschiff-Expeditionen zum Nordpol OCEANSKY CRUISES

ex Longyearbyen / Spitzbergen
voraussichtlich ab 2026

PIONEER THE FUTURE OF
SUSTAINABLE TRAVEL

EXPERIENCES BEYOND EXPECTATIONS

Join us on our journey to become
the first airship airline



OCEANSKY
THE CRUISES

OCEANSKY
THE CRUISES



PRE & POST OPTION
Svalbard Sea Cruise
12 DAYS / 11 NIGHTS (FOR 12 PAX)

Day 1 – AM Arrival to Longyearbyen, PM sightseeing

Day 2 – Sarkofagen permafrost hike (5 hrs) PM board the airship

Day 3 – North Pole Expedition by airship

Day 4 – AM disembark airship, PM embark M/V Kinfish (8 nights)

Day 5-11 – Sail along the abrupt Svalbard coastline amid islands, fjords and spectacular mountains. Wildlife observation, polar bears

Day 12– AM Depart Longyearbyen to Oslo (or optional extensions)

Hotel in Longyearbyen: Polfareren Hotel

Ship: M/V Kinfish (5 Twin cabins + 1 Quadruple cabin), 7 crew staff, 2 zodiaks

Price: 110,000 - 140,000 SEK per person in DBL occupancy

Approx. US\$13,300 – 16,900 per person

(The pre and post program price does not include the North Pole Expedition by airship)



PRE & POST OPTION High Arctic Adventure

7 DAYS / 6 NIGHTS (FOR 10-16 PAX)

Day 1 – AM Arrival to Longyearbyen, PM sightseeing

Day 2 – Sarkofagen permafrost hike (5hrs) PM board the airship

Day 3 – North Pole Expedition by airship

Day 4 – AM disembark airship, PM expedition boat safari Isfjorden

Day 5 – AM boat trip to Pyramiden & Nordenskiöld glacier

Day 6 – Full day Isfjorden & glaciers by kayak

Day 7 – AM Depart Longyearbyen to Oslo (or optional extensions)

Hotel in Longyearbyen: Polfareren Hotel

Price: 65,000 - 75,000 SEK per person in DBL occupancy

Approx. US\$7,900 – 9,000 per person

(The pre and post program price does not include the North Pole Expedition by airship)





High Arctic Adventure

7 days / 6 nights

OPTIONAL PRE AND POST PROGRAMS

Our optional pre- and post programs include **medical evacuation insurance** and allow for maximum **flexibility** in case of any delays of the airship expedition.



Svalbard Sea Cruise

12 days / 11 nights

RESERVATION DETAILS FOR AERONAUTS

Join our first season of expeditions to land on the North Pole in a modern airship and be part of history.

**CABIN
PRICE
(2 pax)**

240,000 USD*

*Based on 2,000,000 SEK

ADVENTURER

5% deposit

(travel guaranteed, escrowed with Kammarkollegiet)

•
45% 9 months prior to departure

•
50% 6 months prior to departure

•
Charters are **available on request**



FEBRUARY

MARCH

APRIL

MAY

JUNE

JULY

AUGUST

SEPTEMBER

OCTOBER

AVAILABILITY CALENDAR

DEPARTURE SCHEDULE

FEBRUARY

The Pioneer Maiden Expedition is scheduled on the 28th of February



Weekly departures from Svalbard

MARCH

| | | | | | | |
|----|----|----|----|----|----|----|
| 26 | 27 | 28 | 29 | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

JULY

| | | | | | | |
|----|----|----|----|----|----|----|
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| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |

APRIL

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| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | | | | | |

AUGUST

| | | | | | | |
|----|----|----|----|----|----|----|
| 29 | 30 | 31 | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | |

MAY

| | | | | | | |
|----|----|----|----|----|----|----|
| 29 | 30 | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | 1 | 2 |

SEPTEMBER

| | | | | | | |
|----|----|----|----|----|----|----|
| 26 | 27 | 28 | 29 | 30 | 31 | 1 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |

30

JUNE

| | | | | | | |
|----|----|----|----|----|----|----|
| 27 | 28 | 29 | 30 | 31 | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

OCTOBER

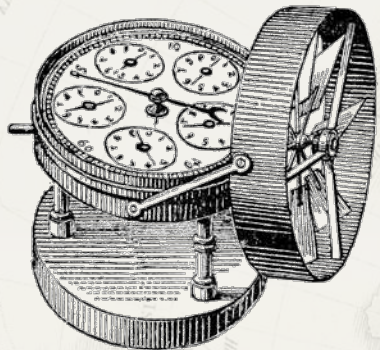
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|----|----|----|----|----|----|----|
| 30 | 1 | 2 | 3 | 4 | 5 | 6 |
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| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 | | | |

BOOK YOUR PREFERRED DEPARTURE

 PIONEER
BY INVITATION ONLY

 ADVENTURER
LIMITED AVAILABILITY

 FULLY BOOKED
WAITING LIST



THE SVALBARD SEASON

Best time to see Northern Lights are in the spring and fall. Best opportunity to spot wildlife during cruise is in the lighter summer season.

| | MARCH | APRIL | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER |
|------------------------------------|--------|---------|---------|-------|-------|---------|-----------|---------|
| Day time average max temperature | -13°C | -9°C | -3°C | -3°C | 7°C | 6°C | 1°C | -4°C |
| Night time average max temperature | -20°C | -16°C | -7°C | -1°C | 3°C | 2°C | -3°C | -9°C |
| Average amount of precipitation | 29 mm | 16 mm | 13 mm | 18 mm | 24 mm | 30 mm | 25 mm | 25 mm |
| Average number of daylight hours | 3h 17m | 15h 30m | 23h 12m | 24h | 24h | 19h 46m | 7h 18m | 2h 31m |

NORTH POLE EXPEDITION SCHEDULE



DAY 1

16:00 Transfer from the Hotel in Svalbard to the Airship

18:00 Evening take-off from Longyearbyen

20:00 Airborne cocktail, dinner and introduction*

DAY 2

07:00 Airborne polar breakfast

09:00 Landing on the North Pole

10:00 Arctic expedition leader instruction, security brief and outdoor activities

12:00 Polar Lunch in the snow

15:00 Afternoon take-off from the North Pole

15:00 Panoramic Arctic sightseeing

19:00 and wildlife spotting

19:00 Airborne dinner, selected and prepared by our chef

21:00 Evening cocktail and Arctic expedition lecture

DAY 3

06:00 Landing in Longyearbyen, Svalbard

07:00 Breakfast on-board and debrief*
Disembark the Airship and transfer back to the hotel

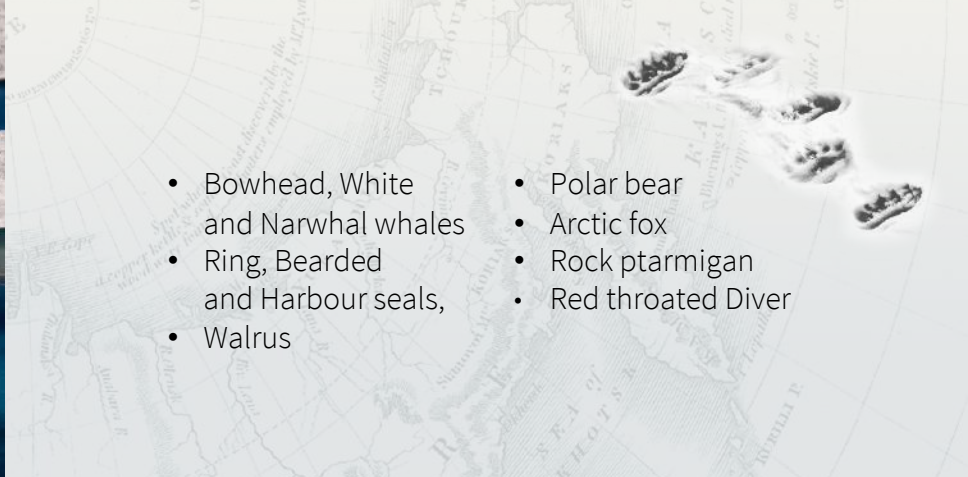
ARCTIC PHENOMENA

The Nordic offers
mysterious atmospheric
phenomena that only occur
above certain latitudes.



The tilt of the earth's axis and the
magnetic field going through the core of
our planet, are the root causes of these
beautiful and spectacular displays of
nature.

WILDLIFE



- Bowhead, White and Narwhal whales
- Ring, Bearded and Harbour seals,
- Walrus
- Polar bear
- Arctic fox
- Rock ptarmigan
- Red throated Diver



EXPEDITION LEADER

Robert Swan

the first man in history to walk
both the **North** and South Poles

ROYAL
HOSPITALITY



CHEF

Jesper Vollmer

Former **head chef** for the Danish Royal Family
and **Michelin star** restaurants.



INSIDE THE GRAF ZEPPELIN LZ-127 1928-1937



INTERIORS



INITIAL INTERIOR DESIGN BY HAV



Design Q

AIRLANDER



Design Q

AIRLANDER

Airlander

THE WORLD'S LARGEST
FLYING VEHICLE

ONE OF OUR AIRSHIP
OPTIONS

16 AERONAUTS PER FLIGHT



8 DOUBLE BED CABINS



7 CREW MEMBERS



Airlander

THE WORLD'S LARGEST
FLYING VEHICLE

ONE OF OUR AIRSHIP
OPTIONS



Flight
Deck

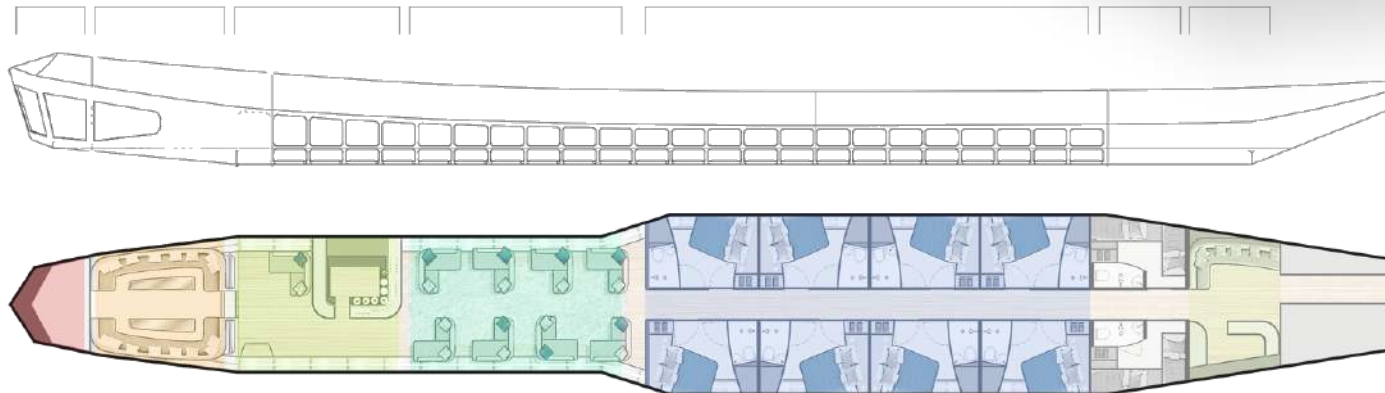
Belvedere
Restaurant

Altitude
Bar

Infinity
Lounge

Horizon
Cabins

Queue



≡ G O N D O L A F L O O R P L A N ≡

The explorers Amundsen and Nobile were first to fly in an airship over the North Pole in 1926

WHY ARE WE GOING TO THE NORTH POLE?



The North Pole is **ground zero** for climate change.

Hard to reach by any transportation mode.

Proof of concept.

Never been done before.

Bucket list destination.

Luxury travel industry can drive the change.

OCEANSKY
CRUISES

ON TRACK TOWARDS OUR FIRST SEASON

2024 OR 2025

OceanSky Cruises is securing production slots with the most proficient large-scale airship manufacturers in the world including HAV, Lockheed Martin, LTA Research, Exploration and Atlas Airships in our mission to fly the first proficient large-scale Airship in modern times to the North Pole. We are in a leading position to transform an entire industry with the vision to also offer airship **passenger transport and cargo routes** in the years to come.

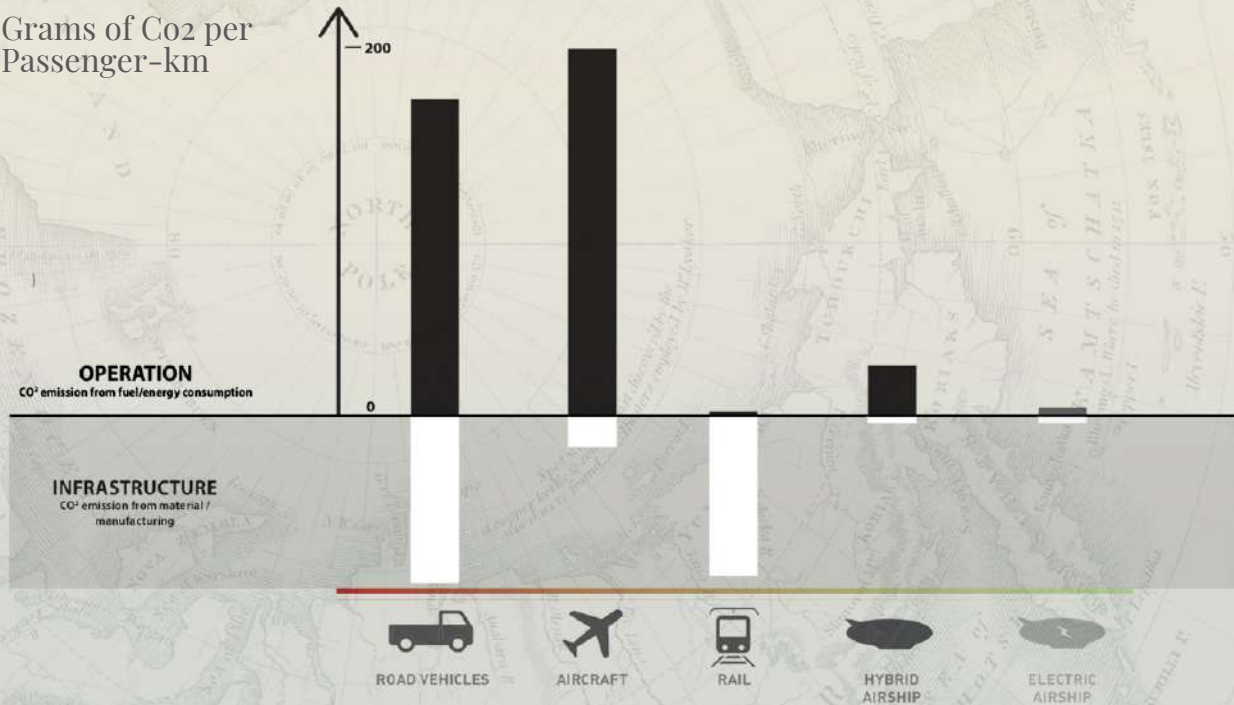


SUSTAINABLE TRAVEL IS POSSIBLE

Engine Power
(energy per time unit)



Grams of CO₂ per Passenger-km



ROAD VEHICLES



AIRCRAFT



RAIL



HYBRID AIRSHIP



ELECTRIC AIRSHIP

THE FUTURE OF SUSTAINABLE AVIATION

1
Non-flammable
helium gas
for lift.

2
Can **fly non-stop**
for several days,
to **remote places**.

3
No airports
needed. **Land**
almost **anywhere**,
even on water.

4
Same **safety**
standards
as a commercial
airplane.

5
Fly **low** and **slow**:
From a few
hundred feet up to
10,000 feet
(3,000m) with
average speed of
111 km/h.

6
Fly in **comfort**:
Airships land at
less than 20km/h,
the speed of a bicycle.

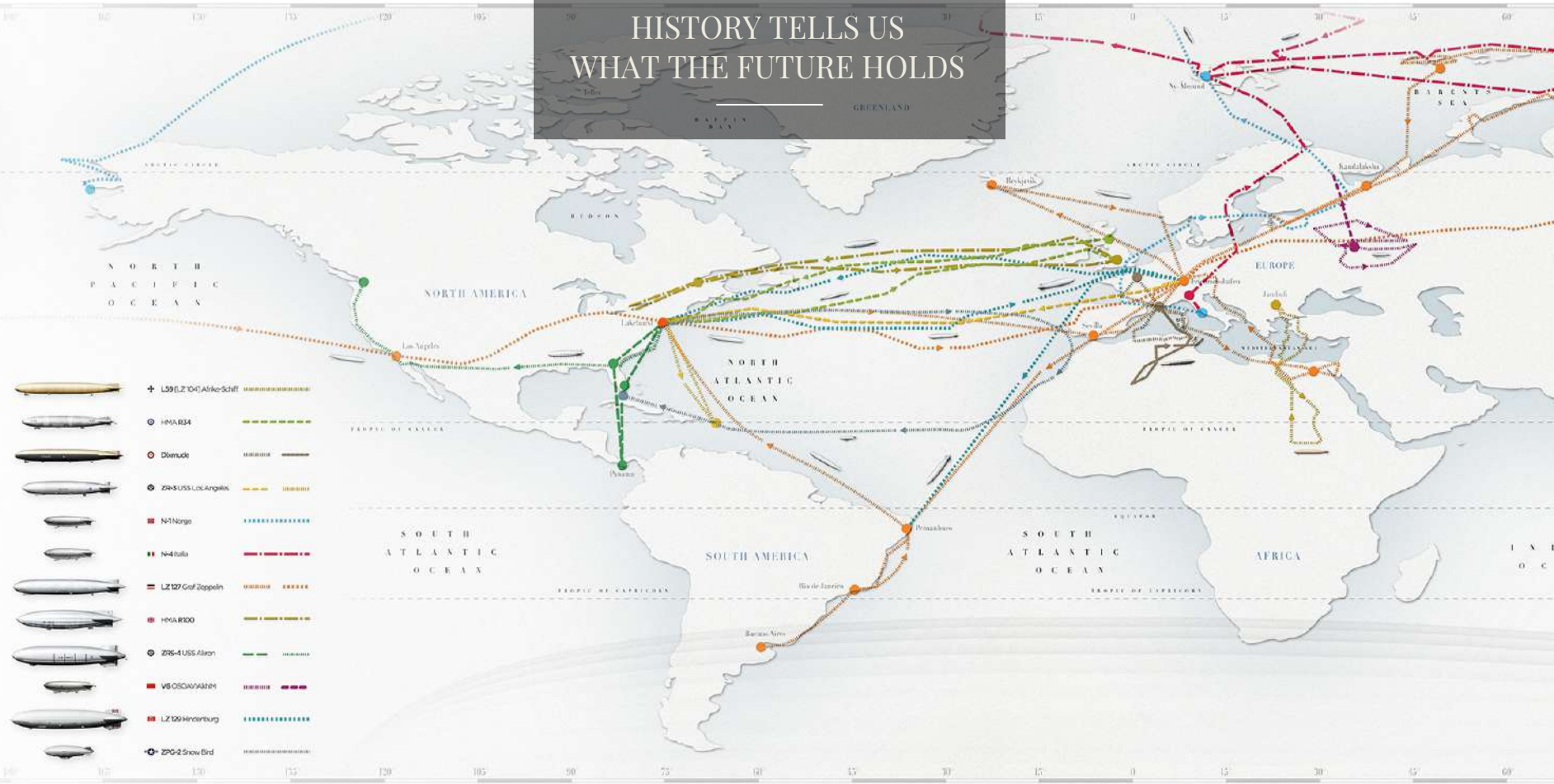
7
Non-pressurized
cabins allow for
oversized windows
with incredible
panoramic views

8
Rip-proof Kevlar
reinforced skin
developed from
space industry

9
Powerful and
independent engines
are expected to be
fully electric by 2030.

10
75% less energy
used compared to
airplanes of similar
capacity.

HISTORY TELLS US WHAT THE FUTURE HOLDS





OCEANSKY
CRUISES

Practical Information



Our North Pole Expedition is a 48-hour long journey taking off and returning from Longyearbyen, Svalbard. Our airships are equipped with 8 cabins, where we welcome up to 16 passengers per departure for a fully inclusive experience from the moment one steps on board. We have also curated optional pre- and post-expedition programmes that are available for adventurers that would like to extend their excursion on Svalbard.

The cost per cabin which accommodates 2 passengers starts at **2,000,000 SEK***.

First season availability:

The demand for our North Pole Expedition has exceeded our best expectations and we are now only accepting requests for interest on a waiting list mode for our Adventurer departures. However, we still have limited availability in our Pioneer programme which also secures your place within the first departures while also giving you the opportunity to invest in us.

Cabins for our North Pole Expedition start at 2.000.000 SEK (~\$200,000 USD) and departure dates are subject to the manufacturers' calendar.

Pioneer departures (March-April): Through invitation only

Adventurer departures (May-October): Waiting list

Departure date subject to manufacturers' calendar.

*approximately **\$200,000 USD**, but is variable per the exchange rate at the times of payment.

What is the difference between Adventurer and Pioneer departures?

Adventurer departures operate weekly from May through October and include one cabin that accommodates 2 people priced from 2Million SEK (approx. \$200,000 USD). We require a 5% non-refundable deposit at the time of booking. Travel no later than 2026 or full deposit refund. *Due to high demand, availability for these departures has been held, however, a waitlist is available for those interested.*

Pioneer departures operate weekly from March through April and are part of our Pioneer programme comprising of the first 100 aeronauts on departures 1-9. It requires a non-refundable payment in full and you will receive an equivalent amount of company shares in OceanSky Cruises AB starting from 2Million SEK (approx. \$200,000 USD). Pioneer investments are non-refundable and the programme is by invitation only. If you are interested to learn more, please reach us through our contact form.

North Pole Expedition FAQ

When is the first flight?

A question we receive often is: when do we fly? We understand the excitement to know how far away we are from the reality of commercial large-scale airship operations but the answer is not yet clearly within reach.

The airship developers have tried to estimate launch dates, and OceanSky Cruises has relayed their estimations. However, timelines have shifted due to the realities of production. We, as operators, have great compassion for how hard it is to estimate the successful launch of a technology that has not existed for almost 100 years. However, the effort of the industry has been showing tremendous progress. Upwards of 1,000 people are currently employed in the large-scale airship industry and hundreds of millions of dollars are spent to launch this technology back to the skies. Bringing to life a new mode of transportation that is clean and efficient, is no small feat! The leaps and bounds made thus far have been in part thanks to our aeronauts, who generate a high-value demand for airship services.

OceanSky Cruises' mission is to bring the first commercially available airship to the North Pole, proficient enough to host a great adventure for our pioneering aeronauts, a mission that has been accepted and encouraged by the industry and by the market.

How long is the flight?

We will be in the air for approximately 19 hours for each leg of the journey. The overall itinerary is planned for 48 hours, including an hour-long briefing and debriefing before take-off and return.

Will I see the Aurora Borealis?

If you haven't seen the Aurora Borealis yet, it will be an awe-inspiring experience. Unfortunately, we aren't able to promise that you will see them, but we can give some suggestions that will raise the chances.

The Aurora Borealis is a year-round phenomenon, however, the lights only become visible against a dark sky, so it is important that you travel when there is darkness, as well. Our season is mostly aligned with the summer months when the sun doesn't set at all, so we suggest planning for the very first or very last weeks of our season.

Where is Svalbard? How do I get there?

Svalbard is an archipelago in the middle of the Arctic Ocean located approximately 700km from mainland Norway. It is known originally as a place for mining settlements but has since become a popular destination for its unique wildlife.

Getting to Svalbard is simple with daily flights arriving at the Svalbard Airport in Longyearbyen from Oslo and/or Tromsø through SAS and Norwegian airlines. If you find that you need assistance with your flight booking, reach out to us and we will be happy to assist.

Could the flight be delayed? Why?

Yes, it is possible that our flight could be delayed due to weather conditions including storms, wind, and ice. The weather in the Arctic can be unpredictable and the safety of our passengers is more important than an on-time departure.

However, with that being said, we do not expect more deviations than one would experience on a regular flight within Europe. Our airships are sturdy vehicles that can withstand heavy winds both on the ground and airborne.

How cold is it at the North Pole?

The North Pole is understandably very cold, but surprisingly not as frigid as it can be in other interior Arctic regions. During our flight season in the summer, one can expect the temperature will hover around 0°C (32°F). The temperature sinks in the winter to about

-40°C (-40°F), but the North Pole is a very dark and lonely place then. We don't recommend a trip at that time.

If you want to keep up to date with the weather, we recommend this source: YR.no

How do I sign up to the North Pole Expedition?

We're very excited that you want to join us on board! To start the process, fill out the form on the [contact page](#) and someone from our sales team will reach out to you with information about the booking process.

Have you been directed to us through an agency? You can also work with them to secure your cabin on board.

What level of accommodation and service can I expect on board?

You can expect a similar level of space, comfort, and service as you would have on a luxury yacht. You will have a private cabin with an ensuite bathroom, ample common areas, large panoramic windows, and an exquisite dining experience on board.

How long will I be at North Pole?

Our time at the destination will be about six hours. We will land on the North Pole at approximately 9:00 in the morning and we will depart again at 15:00.

How many crew members are on board?

We always fly with a double pilot crew in addition to attending staff, a chef, and an expedition leader. A total of 8 members, 4 of which are pilots.

How many cabins does the airship have?

There are 8 double cabins on board, fully equipped with large panoramic windows, a private bathroom, and a small wardrobe. All cabins are 10 sqm and similarly equipped.

Travelling by airship

Is it safe?

Yes!

OceanSky Cruises is subject to the same regulations that all the operating commercial airlines are, and the aviation industry is the safest and most regulated in the world.

Perhaps a few facts to ease the wary mind:

We will take off and land at approximately 20kts/37kph/23mph. This is comparable to the speed that most bicyclers travel.

The coating is constructed from a double layer of Kevlar, the same material bulletproof vests are made of.

The lifting gas used is helium, which is not flammable.

Our ships have engines but dissimilar airplanes, in the unlikely case of total engine failure, we will still float.

What is the speed and altitude?

We will be cruising at airspeeds between 20kts (37km/h) and 60kts (110km/h), but the average cruise speed is calculated to be around 50kts (91km/h). We will take it slow and easy, for a soft, quiet, and smooth flight with the opportunity to take in the scenic views.

We will be flying at a lower altitude than a typical commercial plane, around 6,000ft (1,830m). We are able to climb up to 10,000ft (3,048m), but the experience will be better as we cruise low and slow. The lower the better, perhaps even as low as 300 feet! You will have a view over the terrain as if you are on the 25th floor of a high-rise building.

What happens when there is cloudy weather?

Airships can easily change altitudes during flight to find more favorable winds and visibility for a positive and safe flight experience. If the cloud base is low, we will decide to either go beneath it or above. The pilot's decision will be according to terrain, winds, and, passenger visibility.

We can also fly through the clouds, but that would impede passengers' visibility so we'd likely choose to avoid that of course. On a safety note, airships fly (as airplanes) with the latest state-of-the-art technology, weather radars, and pilot flight control systems to manoeuvre through the skies in the safest way.

Booking Conditions

What is the difference between Adventurer and Pioneer departures?

Adventurer departures operate weekly from May through October and include one cabin that accommodates 2 people priced from 2Million SEK (approx. \$200,000 USD). We require a 5% non-refundable deposit at the time of booking. Travel no later than 2026 or full deposit refund. *Due to high demand, availability for these departures has been held, however, a waitlist is available for those interested.*

Pioneer departures operate weekly from March through April and are part of our Pioneer programme comprising of the first 100 aeronauts on departures 1-9. It requires a non-refundable payment in full and you will receive an equivalent amount of company shares in OceanSky Cruises AB starting from 2Million SEK (approx. \$200,000 USD). Pioneer investments are non-refundable and the programme is by invitation only. If you are interested to learn more, please reach us through our contact form.

What is the Pioneer programme?

The Pioneer programme is designed for individuals who believe in the future of airships as much as we do. By being part of the programme, you will be one among the first 100 aeronauts to fly with OceanSky Cruises to the North Pole. It requires a non-refundable payment in full and you will receive an equivalent amount of company shares in OceanSky Cruises AB starting from 2 Million SEK (approx. \$200,000 USD). Pioneer investments are non-refundable and by invitation only. If you are interested to learn more, please reach us through our contact form.

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How does the waitlist for Adventurer departures work?

We have entered a waitlist mode for our remaining Adventurer departures in order to ensure global access to the remaining inventory. By joining the waitlist, you will be informed before the general public when we release the final cabins of our first season. Joining the waitlist is non-binding.

Can I travel solo? Do you have single supplements?

Yes, you can travel alone in the cabin, however, the price is fixed per cabin.

Can we fit more than 2 people in a cabin?

No, unfortunately, 2 people is the maximum capacity.

Am I insured?

OceanSky Cruises, like all other commercial aviation operators, has insurance for passengers while flying. Though, while we are exploring the remote and wild terrain of our destinations, we require our travelers to secure their own emergency medical evacuation insurance.

This insurance should include at least US\$150.000 in medical evacuation coverage and proof of insurance will be required before departure.

Thank you for understanding that our policy exists solely in the interest of our travelers' safety.

We also strongly recommend purchasing comprehensive travel insurance, though it is not required. These plans may cover everything from medical treatment to trip cancellations as well as delays and lost luggage.

Are there any age requirements?

The minimum age for booking is 18.

Generally, our expeditions are geared toward adults, though there will be a few selected family-friendly departures that allow children, 11 years or older, to join. Our sales team will send more information on those departures upon request.

What is included and excluded from the price?

Included: roundtrip transfer in a snowmobile between your hotel in Longyearbyen and the airship, 2 nights onboard the airship in your private cabin, services of a professional expedition leader and crew

on board, meals, beverages (alcoholic and non-alcoholic), activities and guided excursions and related equipment.

Not included: flights to/from Longyearbyen, accommodation in Svalbard, airport arrival and departure taxes, passport and visa fees, travel insurance, medical evacuation insurance, personal items, optional activities outside the main North Pole Expedition program (pre and post programs, additional ground services in and around Svalbard), gratuities

How do payments work?

We have a multi-step payment process that will be outlined in more detail when you begin your reservation process. In short, we require an upfront deposit, with two more payments scheduled before departure.

Sustainability and Technology

Are airships more ecologically sustainable than conventional airplanes?

Yes!

Ecological sustainability by definition means you can keep doing what you are doing in perpetuity, without depleting any natural resources. At OceanSky Cruises we believe that lighter-than-air technology holds that potential.

A hybrid aircraft uses a fraction of the energy of an airplane. Let's make a real-life comparison, say the historical airship, Macon, and a Boeing 747 Jumbojet, which are similar in payload size. The Macon required about 17% of what the Boeing needs to cover a similar distance. That means an 83% reduction in carbon emissions with modern fuels. We easily see a near future where we can move completely away from fossil fuels with such a manageable energy requirement.

In addition to the reduction in emissions, airships have minimal infrastructure requirements and therefore less environmental impact as far as landmass.

Going to the North Pole with the largest flying vehicle ever built in modern times is a quest that will show the world what lighter-than-air technology can do for humanity and our transport needs.

Showing we can land without a footprint and fly with a minimal amount of energy consumption is the mission of the North Pole Expedition.

What about electric airplanes?

OceanSky Cruises supports all initiatives driving positive impact including innovation in electrical flight as well as expanding the use of biofuels.

Electrical flight does have many challenges to face in order to meet today's aviation demands. Batteries are capacity-limited and very heavy. Even with the most positive outlook on battery development, it may require years for electric planes to serve short- and mid-range routes. However as short-distance taxis, battery-driven flying vehicles can be a feasible solution.

Why not fly normally using biofuel (SAF)?

The technical answer is yes, but the true answer is no. Jet engines can run on biofuel, there are no big issues regarding the technical aspects.

The challenge with biofuel is volume. Biofuel needs to be fabricated and the current manufacturing capacity can only fulfill a fraction of the current consumption needs. We simply need to look for ways to reduce our oil requirements in addition to seeking energy alternatives.

Isn't there a helium shortage?

According to the US Geological Survey, there are at least 50 years of known helium reserves based on current consumption. One of our Airlander aircraft would account for just 0.0001% of the

available resources. Once the Airlander is filled it does not consume helium.

What is Lighter-Than-Air (LTA) technology? How does it work?

Lighter-Than-Air (LTA) is a technology that uses lifting gas, such as helium, to displace weight (the force of gravity pulling an object towards the ground). This means that the object encompassing a lifting gas becomes more or less weightless, or even positively buoyant, depending on the design.

An object that is neutrally buoyant in air does not have to produce lift to keep flying. This is what makes airships so efficient. This is similar to how a boat floats in the water and is explained by the principles of Archimedes.

Can airships fly on fossil-fuel alternatives?

Yes, and they will. This is one of the reasons why OceanSky sees airships as a solution to bring sustainable mobility and transport. Using hyper-efficient lighter-than-air technology aviation equipment is the first step to move away from fossil fuel dependency because a lower overall energy consumption means less fossil fuel being consumed on a global basis. It's actually the energy efficiency that is the most interesting in lighter-than-air technology, even if zero-emission is of importance as well. It is the low power requirement combined with the abundant space available that makes airships proficient in terms of choosing an energy carrier that is non-fossil, i.e. batteries (although not so interesting due to low energy density), liquid hydrogen, biofuel, and even solar cells looking further ahead. Airplanes (mid- and long-range), on the contrary, are stuck on fossil fuels for a long time ahead, because diesel oil is one of few energy carriers that can suffice a jet engine's power requirement and at the same time be reasonably chemically stable (non-explosive) in relation to its high energy density in both mass and volume.

What is the difference between hybrid- and buoyancy-controlled airships?

Modern airship design resolves these issues of not being able to land without infrastructure or ground crew and ground handling issues.

This is made possible through two main design directions, namely Hybrid or Buoyancy-controlled airships.

Hybrid airships are heavier than air. This means they need to create a little bit of lift in order to remain airborne. They are designed with a shape of an aerofoil to create the lift. The efficiency comes from only being slightly heavier than air, in comparison to an aircraft that are almost twice as heavy as the payload it carries.

The benefit from being slightly heavier than air is that pilots are in control of the manoeuvring of the airship without the need of ground equipment. Another benefit is that a hybrid airship sits still on the ground after landing, even if offloading passengers.

Buoyancy-controlled airships are a different story. They can control the buoyancy depending on which phase of flight it is – climb, cruise or descent. By controlling the buoyancy they can optimize efficiency as well as improve ground handling when on and offloading.

The way to control the buoyancy can be achieved by different technologies, for example:

- compression of the lifting gas
- temperature control
- ballast control

Both hybrid airships and buoyancy-controlled airships are by design given the revolutionary characteristic of reaching any part of the world that has a reasonable flat surface to land. This means that humanity will have access to not only the civilized part of the world but to any corner of the world within a few days reach.

OceanSky believes that this new ability comes with significant responsibilities for humanity, and we hope to foster a new era of conscious and responsible travel in order to preserve the untouched parts of our world. Our motto is to leave without a footprint.