



Viva!

# Southern Lights by Flight



*Witness the world's most remarkable natural lightshow  
The Southern Lights...Aurora Australis*



Witness the world's most remarkable natural lightshow

# The Southern Lights... Aurora Australis

Join Viva Expeditions and Aurora hunter and astrophysicist Dr Ian Griffin & a team of expert astronomers and fly into the night, to witness of the world's most magical natural phenomena. Take off onboard an Air New Zealand Dreamliner, you will head south over the Southern Ocean towards Antarctica, aiming for latitudes of 62 degrees south where the Aurora Australis is brightest.

We will take you far away from light pollution, high above the clouds and weather systems to see a magical and unforgettable display with uninterrupted view of the southern lights. Along the way you will see constellations, stars, and planets as you have never witnessed them before.

Throughout the flights you will receive a full inflight catering service in both business and economy classes. Expert astronomers will provide information on route about how an aurora is created, as well as pointing out their favourite night sky objects. They will instruct you on how to photograph an Aurora and we will have a photographer onboard to assist on how best to use your cameras.

Book with confidence knowing that should COVID cause the cancellation or delay of your flight your money will be refunded\*

*This is a unique opportunity, not to be missed!*

## TIMING

Date: ~~20 March 2021~~ **SOLD OUT**  
21 March 2021 **Next Date!**

Departs from Christchurch

The timing of this Aurora flight is no coincidence! It coincides perfectly with the Autumn equinox which will occur during the flight and which helps to maximise the chance the Aurora will be bright.

Thanks to a phenomenon called the Russell-McPherron effect, Auroras are known to be more frequent and brighter than usual in spring and autumn. Close to the equinoxes in March and September, the alignment of the interplanetary magnetic field and Earth's magnetic field is such that the two opposing fields can cancel each other out. This creates holes in Earth's magnetosphere through which particles from the solar wind can flow, giving rise to auroras when they interact with the atmosphere.

Another factor that needs to be considered when planning a flight to the southern auroral oval is the phase of the moon. Because bright moonlight would interfere with auroral visibility, we always time the flights close to new moon when the sky is dark.

## BOOK WITH CONFIDENCE

Should your 2021 season flight not be able to depart due to government restrictions with coronavirus, you can choose from either of the following:

1. Transfer to an alternative departure date at no extra cost.
2. Receive a full refund, excluding \$75 per person administration fee.
3. A 100% travel credit to use when booking another Viva New Zealand product.



## THE DREAMLINER

Air New Zealand's Boeing 787-9 Dreamliner is a revolutionary aircraft with a focus on cabin comfort. The Dreamliner is the perfect plane for this journey into the stars as it has windows which are 30% larger than any other Boeing wide bodied aircraft and 20% larger than the new Airbus aircraft. Also, the Dreamliner emits 20% less emissions than its nearest comparable aircraft in the same class, has the latest HEPA microbial air filters and a seat pitch of 33" in economy.



## WHAT TO EXPECT ONBOARD

Aboard our privately chartered state-of-the-art 787 Dreamliner, you will experience unparalleled viewing of the magical Aurora Australis. Enjoy Full Air New Zealand service – including premium drinks, delicious meals, and access to full inflight entertainment when outside the Aurora zone.

The duration of the flight is approximately 10 hours, and the Aurora can typically be seen after about two and a half hours flying – it's an experience like no other.

Viewing of the Aurora is an exciting experience, but it is important to note that there is a difference between viewing the Aurora with the naked eye versus what the camera captures. Striking images and videos of the Aurora that you may have seen are captured thanks to the extreme sensitivity of modern digital cameras. To help guests we will have a professional photographer onboard who can assist you in getting the best possible results.

If you are an avid photographer or astronomer, we highly recommend you choose a premium seat or book a full row in economy to guarantee window access throughout the duration of the flight.

Guests should be aware that once in the Aurora zone the cabin lights will be turned off to enable best viewing.

## TOUR INCLUSIONS

Choose your seating options from Business Premier Plus, Business Premier, Premium Economy, SkyCouch, Economy No Wing, Economy Wing and Economy Limited View.

All seating classes will experience and an unforgettable round-trip including:

- Two full-service Air New Zealand meals plus in-flight snacks.
- Celebrate your adventure with champagne, wine, beer, spirits, and soft drinks as you enjoy a full bar service onboard.
- Choose your viewing on the state-of-the-art entertainment system when outside of the Aurora Zone.
- Learn about the Aurora, how it is formed and how best to capture it on your cameras with an expert team of Astronomers & Photographers onboard.

## ABOUT IAN

Dr Ian Griffin is an astronomer who has been Director of the Otago Museum since 2013. Originally from the UK, after falling in love with the clear dark skies of the Otago Peninsula he became a NZ citizen in 2018. A self-described aurora fanatic, Ian has led two successful Air NZ charter flights into the southern auroral zone. The first in March 2017 was an 8-hour flight on a Boeing 767 out of Dunedin, whilst the second flew on a Dreamliner from Christchurch in March 2018. On both flights' passengers enjoyed more than three hours of Auroral displays as the aircraft flew thousands of kilometres south of New Zealand. Ian has also photographed the southern lights during five flights on NASA's SOFIA Observatory.

*"I'm really excited about this charter flight. Flying into the southern auroral zone is a wonderful experience, and you never know quite what you are going to see.*

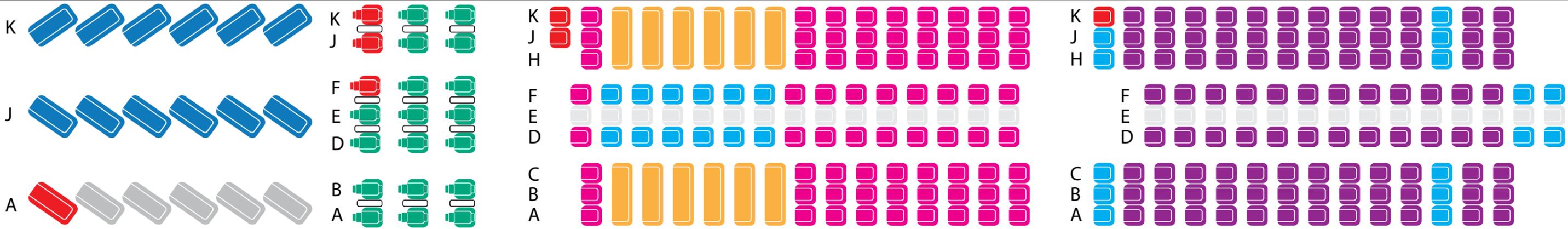
*As I said on my return from the first flight, we've travelled two thirds of the way to the south pole, seen an incredible display of the southern lights, got lovely pictures, and we are home in time for breakfast"*

*Dr. Ian Griffin*



# SEATING PLAN

■ Reserved ■ Empty seat



## BUSINESS PREMIER PLUS CLASS

Price per seat:  
**NZD\$6,995**

Admire wide views of the Aurora Australis in utmost comfort in Business Premier Plus seats with full international business class service. All seats are window seats which means everyone will have unobstructed views of the Aurora Australis.

In Business Premier Plus, you will enjoy a super soft leather seat that transforms into a luxurious lie-flat bed, with a memory foam mattress, two full-size pillows and a cosy duvet. There is also an ottoman footrest that doubles as guest seating. And all lie-flat beds have direct aisle access.

No seat swap in this class.

## BUSINESS PREMIER CLASS

Price per seat:  
**NZD\$5,995**

Enjoy the same wonderful seating and service as Business Premier Plus customers. The difference is the seats are either a window or aisle seat.

Seats will be exchanged during the journey. Firstly, once we enter the Aurora Zone, there will be a quick 20 minute swap to allow everyone their first exciting views of the Aurora. After that, the remaining time in the Aurora zone will be halved meaning each passenger will have a window seat or an aisle seat for the entire flight.

Alternatively the seats can be purchased in pairs and passengers can swap seats as they wish throughout the journey.

Seat swap:



## PREMIUM ECONOMY CLASS

Price per seat:  
**NZD\$3,995**

Make yourself at home in a luxuriously soft and roomy leather armchair with generous armrests, a leg rest and extendable foot support. Relax and enjoy Air New Zealand's famous Kiwi cuisine, while you enjoy magnificent views of the Aurora through large windows.

The window and the adjacent aisle seats will be exchanged during the journey. Firstly, once we enter the Aurora Zone, there will be a quick 20 minute swap to allow everyone their first exciting views of the Aurora. After that, the remaining time in the Aurora zone will be halved meaning each passenger will have a window seat or the seat next to a window seat for half of the flight and an aisle seat or adjacent for the other half of the flight.

Note: Seat "J" does not swap.

Row of 3 seats: NZD\$11985  
Row of 4 seats: NZD\$15980



## ECONOMY SKYCOUCH

Price per 2 person SkyCouch:  
**NZD\$6580** (NZD\$3290 pp)

These are a row of three Economy seats that can change into a couch after take-off. Each row is shared between two people. The seats are the same as Economy, except you have a special footrest on each seat. You can lift them halfway up to make a footrest, or all the way up to create a large couch space. Enjoy wonderful views of the Aurora and as well as the benefit of being able to spread out and relax throughout your journey as well as a full economy meal service for dinner and breakfast.

No seat swap in this class.

## ECONOMY CLASS NO WING

Price per seat:  
**NZD\$2,145**

These economy seats have unobstructed views from the windows. All economy customers will enjoy a full meal service for dinner and breakfast.

The window and the adjacent aisle seats will be exchanged during the journey. Firstly, once we enter the Aurora Zone, there will be a quick 20 minute swap to allow everyone their first exciting views of the Aurora. After that, the remaining time in the Aurora zone will be halved meaning each passenger will have a window seat or the seat next to a window seat for half of the flight and an aisle seat or adjacent for the other half of the flight.

Row of 4 seats: NZD\$8580

Seat swap:



## ECONOMY CLASS WING

Price per seat:  
**NZD\$1,945**

These economy seats are over the wing. This does obstruct views of the night sky however many photographers like the wing as it gives great perspective in images and video. All economy customers will enjoy a full meal service for dinner and breakfast.

The window and the adjacent aisle seats will be exchanged during the journey. Firstly, once we enter the Aurora Zone, there will be a quick 20-minute swap to allow everyone their first exciting views of the Aurora. After that, the remaining time in the Aurora zone will be halved meaning each passenger will have a window seat or the seat next to a window seat for half of the flight and an aisle seat or adjacent for the other half of the flight.

Row of 4 seats: NZD\$7780

Seat swap:



## ECONOMY CLASS LIMITED VIEW

Price per seat:  
**NZD\$1,195**

Limited View seats do not have direct access to a window, or have only partial window access. Passengers are free to stand in the aisles and common areas to enjoy the views of Aurora Australis. Passengers will enjoy Air New Zealand's International service. All economy customers will enjoy a full meal service for dinner and breakfast.

No seat swap in this class.



## FAQs

### What is the probability of seeing an Aurora?

As we are in Nature's hands we cannot guarantee a sighting, but there is a very high chance of encountering the stunning beauty of the Southern Lights in a magnificent, unforgettable display.

### How long will we see the Aurora for?

As you will appreciate, the Aurora is a natural phenomenon, so this can never be guaranteed. However, on previous two charter flights, passengers enjoyed between 4 and 6 hours of viewing.

### How does the seat swap work?

Once we start to view the aurora, you will have 20 minutes viewing from the seat you are in, then you will swap with your designated seat swap companion for a further 20 minutes (please see the seating map for more details). Then we will continue swapping in this manner for intervals of 40 minutes. Note if you are seated in Business Premier Plus, or have purchased a block of 4 seats in economy, then you do not need to swap. All passengers must return to their allocated seat as per their boarding pass prior to landing.

### Where will we fly?

Departing from Christchurch, we will head south towards Antarctica, aiming for latitudes of 62 degrees south, our ultimate flight path will depend on where we find the Aurora. Check out this previous flight path:



### What is the Russell-McPherron effect?

Thanks to a phenomenon called the Russell-McPherron effect, auroras are known to be more frequent and brighter than usual in spring and autumn. Russell and McPherron were two geophysicists at the University of California who, in an elegant paper in 1973, explained why this happens.

Close to the equinoxes in March and September, the alignment of the interplanetary magnetic field and Earth's magnetic field is such that the two opposing fields can cancel each other out.

This creates holes in Earth's magnetosphere through which particles from the solar wind can flow, giving rise to auroras when they interact with the atmosphere.

### What if there is bad weather?

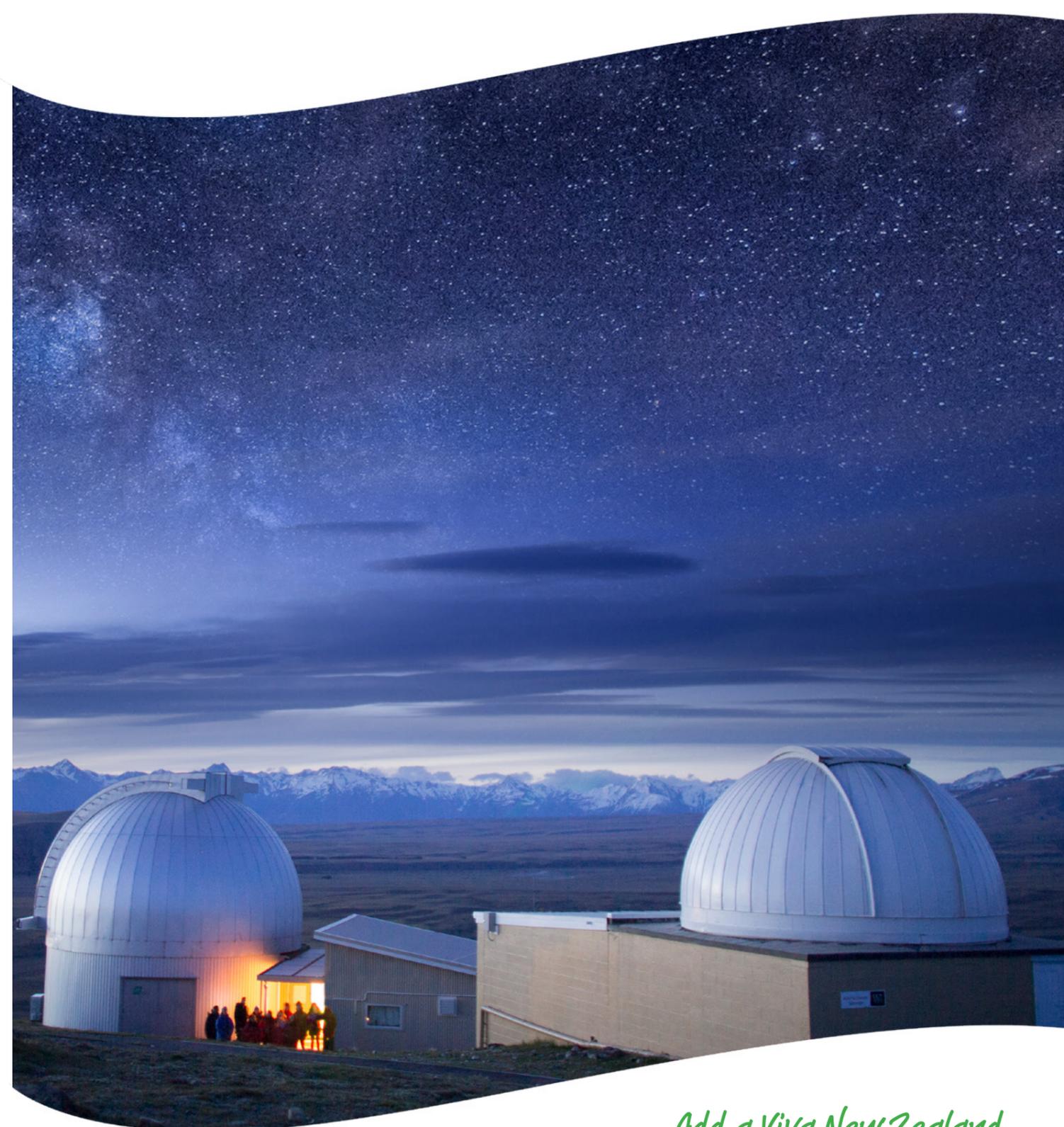
As we fly above the clouds and the weather systems and due to the great navigational ability of the Dreamliner sightings of the Aurora should not be affected by weather.

### How are the Aurora colours going to look like?

The Aurora Australis photographs in this brochure have been taken during previous flights from New Zealand. The naked eye will see them clearly; although modern digital cameras have greater sensitivity and can capture more colours and greater contrast.

### How can I book?

Please contact your preferred travel agent or Viva Expeditions.  
[www.vivaexpeditions.com](http://www.vivaexpeditions.com)



*Add a Viva New Zealand  
tailor-made tour pre or post flight.*

**Viva!**

For more ideas see:  
<https://vivaexpeditions.com/tours/new-zealand>

## AURORA AUSTRALIS FLIGHTS – TERMS AND CONDITIONS

Please carefully read these booking conditions. By making a booking you acknowledge that you have read, understand and you agree to be bound by these conditions which form an agreement between Viva Expeditions Ltd (NZBN 9429030377127) and yourself. If you make a booking on behalf of other participants, you guarantee that you have the authority to accept and do accept these Terms on behalf of the other participants in your party.

### Deposit and final payments

A non-refundable deposit per passenger is due at the time of booking equivalent to:

1. Economy class seats – NZD\$500.00 per person
  2. Premium Economy and Sky Couch – NZD\$750.00 per person
  3. Business class seats – NZD\$1000.00 per person
- Final payment of your booking balance is required eight weeks prior to your departure date.

### Fares:

All fares and charges are per person in New Zealand dollars, including GST

### Credit card administration fee

The client acknowledges that payment by the client by credit card will attract an administration fee and which the client agrees to pay to the company. Currently, the administration fee is 2% for any amount debited by Visa or Mastercard. American Express cards are not accepted. The administration fee will be debited to the client's credit card at the time of payment.

### Cancellation fees

Should your 2021 season flight not be able to depart due to government travel restrictions, you can choose from either of the following:

1. Transfer to an alternative departure date, if available, at no extra cost.
2. Receive a full refund, excluding \$75 per person administration fee.
3. A 100% travel credit to use when booking another Viva New Zealand tour.

Please note: If you are residing outside of New Zealand and book onto this flight, Viva Expeditions will not be responsible for any delay or disruption caused by COVID restrictions preventing you entering New Zealand or any delay or disruption caused by COVID restrictions within any country outside of New Zealand.

If you cancel, the following fees will apply;

1. Between confirmation and final payment: loss of deposit.

2. Between final payment and 28 days prior to departure – 50% of total price cancellation fee.
  3. Between 28 days and departure date – no refund
- Travel insurance is strongly recommended.

### Minimum numbers

Flight departures require minimum numbers to operate. If flights are cancelled due to insufficient numbers, then passengers will be refunded in full.

### Amendment/transfer

Your ticket can be transferred to another person up to 48 hours prior to departure if you are unable to fly due to having COVID-19 or are displaying any symptoms that would prevent them from being allowed to board the flight. An NZ\$150 name change service fee per change will apply. This same service fee will apply for change of class.

### Travel documents

Trip information and travel documents will be forwarded to you approximately 10 days prior to travel, providing full payment has been received.

### Seat numbers

Will not be confirmed in advance of the flight. They will be issued on your boarding pass at the departure airport.

**Passport identification** is required upon check-in. As this is a charter flight, a valid passport is required for check in (a driver's licence will not suffice).

### Disclaimer of liability

The company will use its best endeavours to ensure that its obligations pursuant to the contract with the client are satisfied. However, despite those best endeavours, it is not always possible for those obligations to be satisfied. Unless otherwise excluded or modified by law, the company hereby disclaims liability for any loss of or damage to the client, including loss of life or injury, and loss of or damage to any of the client's property; also delay; inconvenience; upset; disappointment; stress; frustration; or loss of employment or loss of holiday time; however such loss or damage may be caused. Unless such disclaimer shall be excluded or modified by law, the client warrants that he or she will not make or pursue any claim against the company in respect of any such loss or damage, however caused.

The client acknowledges that the provisions of above are reasonable and necessary for the business of the company having regard to a range of matters including but not limited to the following:

1. The tours or parts of them are supplied or undertaken by third party operators. Whilst the company has undertaken due diligence on the quality of the services offered by such third party operators, and

has been satisfied as to the adequacy of that quality, it cannot be responsible for any acts or omissions on their parts.

2. The client acknowledges that it is the client's responsibility to check-in on time for his or her flight at any airport. The company will not be responsible for any flights that are not taken by the client due to the client's late arrival at any airport.

The passenger will not be entitled to any refund if the passenger fails to follow the instruction of Viva Expeditions Ltd. or its representatives.

We reserve the right to alter or cancel any services you have purchased and inclusions may vary depending on weather, or other uncertainties, and are subject to change.

The photographs appearing in this brochure are representational only and are not a guarantee that everything will be exactly as depicted at the location upon arrival. It is important to note that photography and video content used is typically modern digital equipment and differs from what is seen with the naked eye.

Whilst every endeavour will be made to adhere to the proposed route, weather conditions may determine the actual route, according to the absolute discretion of the Captain of the aircraft. No guarantee can be given of clear viewing conditions and no refund or part refund will be made if the views are fully or partially obscured. Alternative routes will be selected to give the best viewing if the planned route has unfavourable weather conditions.

**Limitation of Liability** in the Event of Force Majeure In the event of a Force Majeure event making it impossible or unsafe for Viva Expeditions to deliver all or part of the holiday package, Viva Expeditions will refund the customer for the unperformed part of the holiday package less any reasonable losses incurred before cancellation. Losses may amount to a substantial proportion of the booking price.

Viva Expeditions will use reasonable endeavours to minimise losses incurred by our guests. Customers must take out travel insurance to protect themselves against loss in these circumstances.

### Aircraft

An Air New Zealand 787 aircraft will operate all flights; however, other Air New Zealand aircraft may be substituted without notice. Frequent flyer points do not apply.

Depending on prevailing weather conditions the quality and brightness of the Aurora viewed may vary. Alternative flight paths may enable viewing of the Aurora Australis but clear views cannot be guaranteed.

### Photos/videos

Photographs or videos of the flight may be used for promotional purposes. Agreeing to these terms online and acceptance of the documents indicates your acceptance and release for this material to be used for promotional and/or resale purposes.

### Airline levy

Airline fuel and/or security levies may apply. These terms and conditions are in addition to the regular Viva Expeditions terms and conditions but where there is a conflict the flight specific terms and conditions take precedence.

### Contact Details:

Address: 235B Dairy Flat Highway, Albany  
Auckland, 0632, New Zealand  
Phone: 09 950 5918  
Email: [info@vivaexpeditions.com](mailto:info@vivaexpeditions.com)  
Reservations: **0800 131 900**

*This exciting adventure is brought to you by  
Viva Expeditions in partnership with Air New Zealand  
and Otago Museum.*

