

See the Total Solar Eclipse November 3, 2013!

ATLANTIC CROSSING TOTAL ECLIPSE 2013

October 18–November 10, 2013

On board the 4-masted Tall Ship, Star Flyer

Dear Members & Friends:

In 2013, we invite you to enjoy one of the world's greatest voyages—the famed **Atlantic Crossing**—and to see the **Total Solar Eclipse** in the mid-Atlantic on **November 3, 2013!** This will truly be a journey of a lifetime!

Our trip will begin with flights to Madrid and Malaga on Spain's popular Costa del Sol where we will board the 170 passenger, 360 foot Tall Ship Star Flyer on which we will sail to ports in Morocco, Spain, Madeira, and the Canaries, and then sail in the paths of the great navigators across the Atlantic!

After we board Star Flyer, we will first cross the Strait of Gibraltar to Tangier, Morocco, for a chance to explore the medina (old town) of the Tetouan World Heritage Site in the Rif Mountains. We will then sail to Cadiz (where Columbus departed on Voyages 2 and 4), for a visit to the Royal Astronomical Observatory, established in the 18th century to ensure Naval Officers had a thorough knowledge of astronomy, the science so necessary for navigation.

We will then sail to the Portuguese Island of Madeira, which is famous for its wine (and near where Christopher Columbus and his wealthy Portuguese wife resided on the private island of Porto Santo). Here he learned about other navigators' explorations into the Atlantic in search of new islands which fueled his dreams of sailing across the Atlantic in search of Asia. He eventually convinced the Spanish monarchs to support his trip.

In Las Palmas, Grand Canary Island, we will see the house of Christopher Columbus and the Museo Canario, the finest museum of prehistoric collections in Spain.

After a gala celebration on deck, we will depart in the historic path of Columbus across the Atlantic. For seven days, we will follow the Canary Current from Las Palmas to the mid-Atlantic to approximately 18° 16' 0" N Latitude and 39° 19' 4" W Longitude, where Star Flyer will position in advance of the Eclipse. We will then see the Total Solar Eclipse as it crosses the Atlantic and heads to Central Africa!

Leading the expedition will be **Bob Nansen**, popular leader of many Planetary Society Eclipse and Aurora Expeditions.



Our on-board historian will explore the "Age of Exploration and Discovery" and put our voyage and observing the Eclipse into a historical perspective. There will also be fascinating astronomical lectures.

We invite you to join us for what will likely be the greatest journey of our lifetimes, as it was for Columbus!

Sincerely,

Margaret Betchart, President
Betchart Expeditions Inc.

For AAAS Travels, Sigma Xi & ACS Expeditions

ITINERARY

Day 1 New York or Miami to Madrid

Expedition members depart New York or Miami on a nonstop flight to Madrid, Spain.

Day 2 Madrid to Malaga & board the *Star Flyer*

Arrive Madrid and take a connecting flight to Malaga, on Spain's Costa del Sol. Transfer to the *Star Flyer*. Enjoy a buffet dinner. Then be on deck when they raise the sails and we get underway!

Day 3 Tangier & Tetouan Medina World Heritage Site

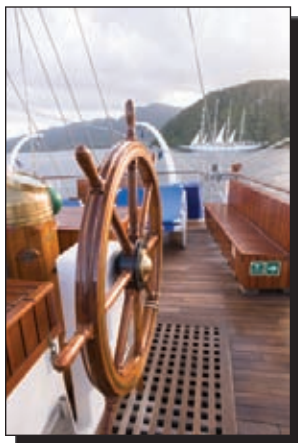
After breakfast, gather on deck to enjoy the Mediterranean crossing Malaga to Tangier on the Strait of Gibraltar. We will have a safety drill and lunch and then disembark in Tangier. One sightseeing option is a scenic adventure to Tetouan in the Rif Mountains. It is a fascinating UNESCO World Heritage Site. We will enter at the Gate of the Winds and then explore the medina and "ville nouvelle." This evening, sail to Cadiz, Spain.

Day 4 Cadiz—Royal Astronomical Observatory

We will disembark in Cadiz, Spain, one of the oldest cities in Europe, founded by the Phoenicians and a popular port with the Romans. Columbus' second and fourth voyages sailed from Cadiz, and returned with fantastic riches from the Americas. Cadiz became the richest and most cosmopolitan city in Spain in the 18th century. The Royal Naval Institute and Observatory was constructed at this time to ensure Naval officers had a thorough knowledge of astronomy. Today, you may take an optional excursion to the Observatory or to Seville.

Days 5/6 At Sea en route to Madeira

For two days, we will sail to the Portuguese Island of Madeira. During our voyage, we will begin our lecture program on great voyages of discovery. We will also have an introduction to astronomy and navigation, and to the unique plants of Madeira and the Canaries.



CHRISTOPHER COLUMBUS Voyages of Discovery, 1492–1504

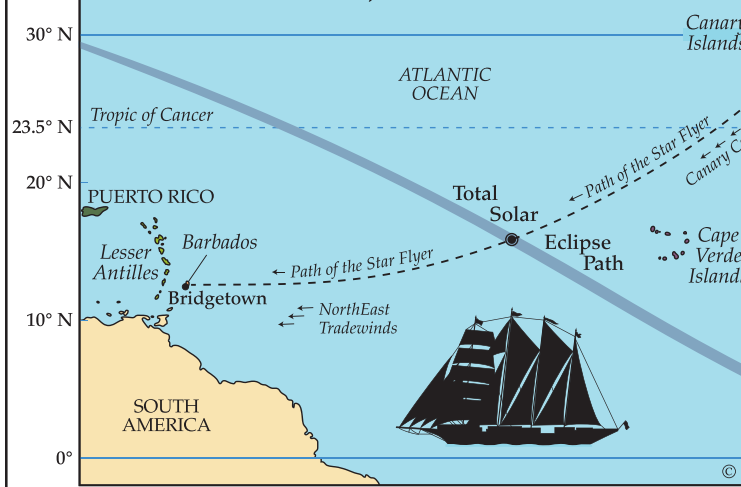
Christopher Columbus convinced King Ferdinand and Queen Isabella of Spain to support a journey across the Atlantic to discover a sea route to Asia.

On August 3, 1492 he set off from Palos, Spain to the Canaries, then across the Atlantic. After 2 1/2 months they made their first landing in the New World. They were thrilled by their discoveries and gathered new foods, native people, and supplies for the return journey to Europe.

Columbus' second voyage departed Cadiz with 17 ships, 1,000 sailors, and returned with a substantial cargo of riches. On Columbus' third voyage he returned in irons because of his mismanagement, cruelty to the natives, and disputes with his officers.

This fourth voyage took him to the far western side of the Caribbean. In Jamaica he predicted the gods would take away the Moon. On February 29, 1504, the Moon was eclipsed by the shadow of the Earth, thus showing the strength of Columbus to the native people.

PATH OF THE TOTAL SOLAR ECLIPSE November 3, 2013



Day 7 Madeira—Botanical Garden by Cable Car

At mid-day we will arrive in Funchal, Madeira for an afternoon to explore Funchal, or join an optional excursion to taste the world famous Madeira Wine, and to explore the village of Monte at 1,677 feet. You can then take the cable car to the Botanical Gardens to see plants endemic to Madeira and that originated in South America.

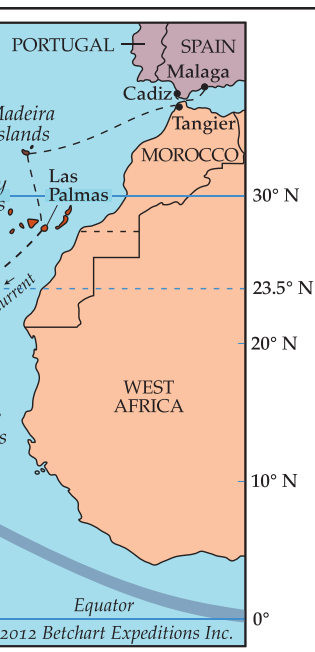
Day 8 At Sea en route to Grand Canary Island

Today, we will sail from Madeira to the Canary Islands, situated off the coast of West Africa. The Canaries were originally populated by wild dogs (in Latin, "Canariae insulae"—island of dogs). Later the islands gave their name to the song birds we call canaries. Today our lecturers will discuss the heritage and natural wonders of the Canary Islands.

Day 9 Las Palmas, Grand Canary Island

We will arrive in Las Palmas this morning, and will have the day to explore this bustling heart of the Canary Islands. Within walking distance of the dock is Christopher Columbus' house, which is now a museum, and the Museo Canario, which is the largest museum of Canary Island pre-Hispanic heritage and culture. This afternoon do your last minute purchases before we set sail on the Atlantic Crossing. We will have a festive send-off on deck in celebration!





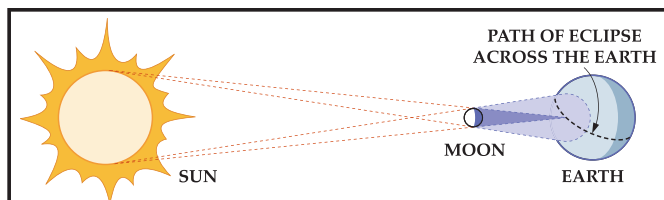
Days 10/16 Atlantic Crossing, Canaries to the Total Solar Eclipse

For the next several days, we will follow the Canary Current from Las Palmas to the mid-Atlantic at approximately 18° 16' 0" N Latitude and 39° 19' 4" W Longitude, where we'll intersect the eclipse path on November 3rd. Carried along by the Trade Winds, we will sail on the historic paths of Columbus and other explorers with balmy breezes on deck, excellent meals and lectures.

Our on-board historian will explore the "Age of Exploration and Discovery." Lectures will focus on Columbus and those that followed to discover and explore the New World. We'll delve into how they navigated, the politics of getting support for the voyages, economics,

nautical technology, cartography, life on board, and the personalities of these colorful figures of Atlantic history.

There will also be lectures and discussions on a variety of astronomical topics and we can view the night sky with absolutely no light pollution. We will explore the history of the oldest science, from Aristotle to Hubble.



Day 17 TOTAL SOLAR ECLIPSE

Early this morning, in mid-Atlantic, *Star Flyer* will position itself (in advance of the Eclipse) in what will be the path of the Total Solar Eclipse. All passengers will receive eclipse-viewing glasses. Everyone grab your glasses, and photography equipment and gather on deck for the arrival of the Eclipse!

We will look for special phenomena of the Eclipse. As the Moon slowly comes between the Sun and the Earth, you will see the dark crescent of the Moon cross the Sun and slowly advance to block all of the Sun's direct rays. The sunlight passes through craggy surface features of the Moon, and may create a phenomenon called "Baily's Beads." Sometimes the depression of the Moon is so great that it produces a larger phenomenon called the "Diamond Ring." During the Total Eclipse, the rays of the Sun produce a corona or crown of light radiating outward behind the dark globe of the Moon. This rare event can only be seen with a Total Solar Eclipse.

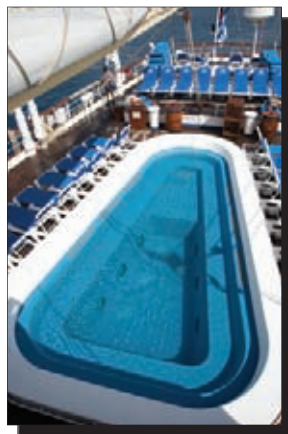
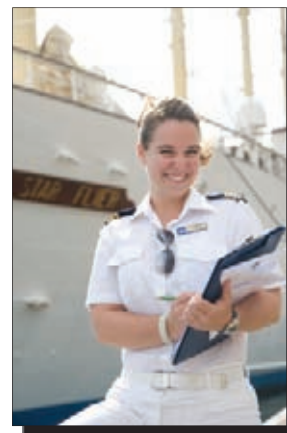
After the Eclipse, we'll have a champagne celebration, and lunch. We will then continue west on our Atlantic Crossing!

Days 18/23 Atlantic Crossing, Eclipse Path to Barbados

For the next several days, we will continue our Atlantic Crossing from the Eclipse Path to the eastern-most island in the Caribbean, Barbados. Our lecture program will continue with insightful lectures on historic, astronomical and other topics.

Day 24 Barbados to Miami or New York & Home

Disembark after breakfast, and enjoy time to explore Bridgetown and Barbados. Transfer to the airport for our return flights.



RESERVATIONS

#1300

Yes! I/We want to join the **Atlantic Crossing Total Solar Eclipse Expedition, October 18–November 10, 2013**, offered by **AAAS Travels, ACS & Sigma Xi Expeditions**. Please reserve ____ space(s) on the expedition. As a deposit, I/we have enclosed a check for \$ ____ (\$1,000 per person), payable to Betchart Expeditions Inc. Trust Account.

Name(s): _____ Age ____ Sex ____
 _____ Age ____ Sex ____

Address: _____

City _____ State ____ Zip _____

Phone: Home (____) _____
 Work (____) _____

Email: _____

Citizenship: ____ USA ____ Canada Other: _____

Member: ____ AAAS ____ Sigma Xi ____ ACS ____ Planetary Society

Accommodations Preference: ____ Cat 2 ____ Cat 3 ____ Cat 4

____ Twin ____ Single ____ Twin Share ____ with a friend or

____ Nonsmoker ____ Smoker ____ assign a roommate

Signature: _____ Date: _____

Signature: _____ Date: _____

**Mail To: Atlantic Crossing Eclipse 2013
 Betchart Expeditions Inc.**

17050 Montebello Road, Cupertino, CA 95014-5435

Responsibility: Betchart Expeditions Inc., the American Association for the Advancement of Science (AAAS), Sigma Xi, the Scientific Research Society, and American Chemical Society (ACS) act only as agents for the passenger with respect to transportation and hotels, and exercise every care possible. However, we can assume no liability for injury, damage, delay, loss, accident or irregularity in connection with the services of any airplane, ship, motorcoach, or other conveyance used in carrying out the arrangements of the tour. Operation of the yacht is solely the responsibility of Star Clippers. We cannot accept any responsibility for losses or additional expenses due to delay or changes in air or other services, weather, sickness, strike, war, quarantine, terrorism, acts of God, or other causes beyond our control. All such losses or expenses will have to be borne by the passenger as tour rates provide for arrangements only for the time stated. We reserve the right to substitute another leader of similar expertise or to reserve the right to cancel any tour prior to departure, in which case the entire payment will be refunded with no further obligation on our part. The right is also reserved to decline to accept or retain any person as a member of the tour. No refund will be made for the unused portion of any tour unless arrangements are made in sufficient time to avoid penalties. The price of the program is based on current tariffs and rates, and is subject to change. Any tariff, exchange rate, or fuel increases will be passed on to participants. Baggage is carried at the owner's risk entirely. It is understood that the air ticket when issued shall constitute the sole contract between the passenger and the airline concerned. The airlines concerned are not to be held responsible for any act, omission, or event during the time passengers are not on board their plane or conveyance.

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AAAS Travels ACS & Sigma Xi Expeditions

BETCHART EXPEDITIONS Inc.

17050 Montebello Road, Cupertino, CA 95014-5435



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TIME VALUE

See the Total Solar Eclipse November 3, 2013...
On one of the Great Sailing Voyages of
the World—the ATLANTIC CROSSING!
October 18–November 10, 2013

COSTS & CONDITIONS

Expedition Fee: Is based on per person twin share (depending on cabin category) + air fare of \$1,295 including tax, fuel surcharge, and ticketing fee from New York or Miami to Malaga, Spain, with a return from Barbados to Miami or New York.

Category 4: \$5,495 per person + Port Charges \$260

Category 3: \$5,795 per person + Port Charges \$260

Category 2: \$5,995 per person + Port Charges \$260

Single Supplement: Is 150% of the cabin rate in Category 2, 3, or 4. We encourage all singles to bring a roommate, or we may be able to pair you up with a roommate.

Triples: A limited number of cabins are available for triple occupancy in each category for 1/2 price for the third person.

Expedition Fee Includes: Group transfers in Malaga and Barbados; transportation by yacht from October 19 to November 10; accommodations based on twin share in comfortable yacht-sized cabin with private bath; meals and activities on board ship; tour leadership and lecture program; administration.

Expedition Fee Does Not Include: International air fare (quoted separately); independent transfers; optional shore excursions in Tangier, Cadiz, Madeira, or Las Palmas; tips on board ship; baggage handling; alcoholic beverages, snacks, sodas, bottled water, laundry, internet use, phone, fax, passport, travel insurance, or other personal expenses; foreign airport departure taxes.

What to Expect: This expedition is for the travel enthusiast who would like to participate in one of the great sailing voyages of the world—the Atlantic Crossing—and to see the Total Solar Eclipse en route! Like the great navigators of the 15th century, we will set sail across the Atlantic from the Canary Islands, and travel on the Canary Current, bolstered by the Trade Winds, at 8 or 8 1/2 knots, with lively lectures and discussions, excellent meals, and camaraderie. Fourteen hundred miles into our journey (at approximately 18° 16' 0" N Latitude and 39° 19' 4" W Longitude) on November 3rd, we will see the Total Solar Eclipse at 11:30 UT or 8:30 local time!



We will then continue our journey across the Atlantic to Barbados for a relaxing, fun-filled adventure! Typically, it will be in the 70's to 80's with the balmy weather for which the mid-Atlantic is known. There is a high possibility of clear skies, but there is a slight chance the eclipse could be obscured by haze or clouds.

M/Y Star Flyer: Our journey will be on board the 170 passenger clipper ship, *Star Flyer*, which, at 360 feet long, is one of the largest full-rigged sailing yachts in the world. *Star Flyer* was the dream of a Swedish gentleman, who built the yacht in 1991. It accommodates passengers in 85 cabins, with double or twin lower beds, all with private bath (some cabins have triples available). All cabins have portholes and are air conditioned. The dining room serves all passengers at once and doubles as a lecture room. There are indoor and outdoor bars, a library, and two mini pools. Betchart groups have enjoyed the service, food, and lifestyle on *Star Flyer* on Tahiti Voyages in 2008 and 2009, and along the Pacific Coast of Costa Rica in 2011. We look forward to sharing this magnificent journey with you!

Air Fare & Airline Ticketing: Group flights from New York or Miami to Malaga, Spain are on Iberia Airlines, with a return from Barbados to Miami or New York on American Airlines. Please contact Marisa for flight information. AIR FARES ARE SUBJECT TO CHANGE.

Reservations, Deposits & Payments: To reserve a space, please contact **Marisa, Betchart Expeditions Inc.**

Phone (800) 252-4910 (USA) or (408) 252-4910 (International)

Fax (408) 252-1444

Email: Marisa@betchartexpeditions.com

Final payment is due 150 days before departure (May 18, 2013).

Cancellations & Refunds: The initial deposit is refundable up to 150 days before departure, less a handling fee of \$250 per person. From 149 to 120 days before departure, the cancellation penalty is \$500 per person. There is no refund for any cancellation within 120 days of departure. Trip cancellation insurance will be offered. No refunds are made for unused services.



Star Flyer Deck Plan

