

Study Guide



Intrepid:
The Zac Sunderland Story
Wild Eyes:
The Abby Sunderland Story

INSTRUCTIONS FOR USING THIS STUDY GUIDE

This Study Guide is meant to be used in conjunction with the documentary DVDs Intrepid: The Zac Sunderland Story Parts 1 & 2 and Wild Eyes: The Abby Sunderland Story.

PART I of this study guide covers some of the background for Zac and Abby's stories, including general and specific boating knowledge that will help you understand the stories better and is appropriate to read through before watching the DVDs. The guide is written with a child in mind and so themes and concepts are on a basic level. Use the concepts and themes for launching points for your older students to do their own more in-depth and interest-led research.

To enhance your studies, there are also links to science projects that help illustrate some of the weather phenomenon that are discussed in this guide and throughout the DVDs.

Utilizing one of the suggested Geography apps during this phase of the study is an excellent and fun way to add more to learning (and fun!) to your round the world studies.

There is a page of discussion questions for each part of the documentary set. Feel free to read through these before watching the documentaries or just chose a few questions that are the most meaningful for your family. It was after the discussion of a sailing documentary that Zac came upon the idea to sail around the world himself. Talk, dream, imagine! You never know where your discussions will lead!

PART II of this guide contains specific background information on Zac's trip around the world including one information/study page for each stop along Zac's route. You can have your child find each country's flag online or in an atlas and color the designs if you wish. There is a very brief introduction to the country followed by some geography and demographic questions that can be answered orally or written down as you discover the answers and learn a bit more about each country.

If you have a globe or some other type of world map, have your kids mark each of Zac's stops and have a look around the surrounding area. This was one of the most interesting things for our family to do as we watched Zac sail around the world.

PART III of this guide contains specific background information about Abby's solo circumnavigation attempt including a bit about Abby's life growing up sailing and her homeschool experience. There is a world map of her route along with a detailed diagram of Abby's boat, Wild Eyes and a list of discussion questions for after watching the DVD.

TABLE OF CONTENTS

PART I: BACKGROUND STUDY

History of Sailing

Nautical Terms

Geography Terms & Geography Apps

Weather & Weather Forecasting

Navigation

Topics for Further Research

Boats of the Bible

Finding Vision/Purpose in Your Life

TABLE OF CONTENTS

PART II: ZAC

Zac's Story

A Look at Zac's Boat: INTREPID

Discussion Questions for Intrepid: Part 1

Discussion Questions for Intrepid: Part 2

PORTS OF CALL:

Hawai'i

Marshall Islands

Papua New Guinea

Torres Strait

Cocos Keeling Island

Rodrigues Island

Mauritius

Durban, South Africa

Cape Town, South Africa

St. Helena Island

Grenada

Panama

Costa Rica

Mexico

San Diego

Marina del Rey, California

PART III: ABBY

Abby's story

A Look at Abby's Boat: Wild Eyes

Discussion Questions for Wild Eyes: The Abby Sunderland Story

PART I: BACKGROUND STUDY

A BRIEF HISTORY OF SAILING

With over two thirds of the earth covered by water, it is no surprise to see that so many people on this planet live near the coast. For hundreds of years, wind was the main energy source helping man to cover long distances over seas, as these distances proved to be too tough to overcome by using muscle power and paddles only.

The earliest and most primitive vessels were little more than trees with a piece of cloth tied on top. With the building of more sophisticated boats and advancements, sailors improved their skills in navigation rapidly. Courageous men, seeking freedom and adventure, soon began to explore the world around him.

Ships and vessels are the oldest means of transport. The first ship remnants dating back to 2900 BC are a testimony to this. The Egyptians built big ships with at least 40 oars and a mast specifically designed to support a huge sail. Eventually, innovations turned these ships into war-ships.

Sailing history reveals that it has played a major role in the development of civilization. Through sailing the seas, man had not only greater mobility and capacity for fishing, but also made progress in trade and warfare.

It was in the late 5th millennium BC that the earliest illustration of a ship under sail on a painted disc found in Kuwait. From the Middle Ages onward, major advances were seen in sailing technology. This enabled explorers to make longer voyages deep into seas with rough weather and extreme climatic conditions.

THE AGE OF EXPLORATION

The Age of Discovery, also known as the Age of Exploration, was a period starting in the early 15th century and continuing to the 17th century during which Europeans explored Africa, the Americas, Asia and Oceania.

This period of time is characterized as a time when Europeans began exploring the world by sea in search of trading partners, new goods, and new trade routes. One of the

biggest reasons for exploration during this time was the desire to find a new route for the spice and silk trades and an attempt to find a trade route to Asia by sailing west. In addition, some explorers set sail to simply learn more about the world. Whatever their reasons though, the information gained during the Age of Exploration significantly helped in the advancement of the geography of the world as well as significantly improving charting (ocean mapping) and navigation methods.

HISTORY OF SINGLE-HANDED SAILING

In sailing, a 'hand' is a member of the ship's crew. 'Single-handed' therefore means with a crew of one. Sailing alone on larger vessels outside of local bays and estuaries began as men who loved sailing and the sea desired to challenge themselves.

The first circumnavigation of the earth was completed in 1522 with the Magellan-Elcano expedition, a Spanish voyage of discovery led by Portuguese explorer Ferdinand Magellan and completed by Spanish navigator Juan Sebastián Elcano after Magellan's death in the Philippines in 1521.

The first single-handed circumnavigation, that is sailing all the way around the world alone, is credited to Joshua Slocum in 1895. His book, *Sailing Alone Around the World* records his journey. His trip was much different than modern-day solo circumnavigations because of the technological advances that have been made since that time, including things like long range radios and telephones, Global Positioning Satellites (GPS), radar and modern self-steering devices.

NAUTICAL TERMS

Aboard: to be on a vessel

Adrift: not tied or secured

Aft: at or near the stern or back end of the boat

Anchor: a heavy object that holds a vessel in place

Backstay: any single wire supporting the mast from the stern

Bail: to throw out seawater or rainwater that has collected in a vessel

Ballast: stabilizing weights placed in the hull of a vessel

Beam: measurement of the width of a boat

Beam Reach: sailing with the wind coming across the boat's beam

Bearing: one's position

Beat: sailing against the wind by tacking (sailing a zig zag course towards the wind)

Becalm: to come to a stop because of a lack of wind \

Berth: a sailor's bunk

Bilge: the lowest part of a hull

Boom: spar that takes the foot (bottom) of a sail

Bow: the forward (front) part of a boat

Capsize: to overturn

Chart: a navigational map, or to map a course

Close-hauled: sailing close to the wind with sails pulled in

Cockpit: a steering or berthing compartment

Come about: to change course so as to be sailing at the same angle but with the wind on the other side of the boat

Course: the direction a ship is sailing

Current: a movement of water

Fore: at or toward the boat's bow (front)

Forestay: the foremost stay, running from the top of the mast to the bow

Furl: to tightly roll up a sail

Galley: a kitchen on a boat

Genoa: large headsail which overlaps the main sail

Gunwales: upper edges of the boat's sides

Halyard: line used for hoisting sails

Head: a boat's toilet

Heading: the direction a ship is sailing

Headway: progress or rate of progress in sailing

Heel: to lean over to one side

Helm: steering apparatus, or to operate such equipment

Hull: the body of the boat

Jury rig: to rig makeshift equipment

Keel: the backbone of a vessel, running along the center of the hull

Keelhaul: to drag a sailor underneath the ship along the hull as punishment

Leeway: sideways movement of a vessel because of current or wind

Line: any length of rope aboard a boat

Log: originally, a length of wood attached to a line and tossed overboard to measure speed, then a device with the same function; also, a record of operation

Mainsail: the main sail that is attached to the mast

Make fast: to secure a line

Mast: vertical spar to which the sails and rigging are attached

Navigation: the operation of a vessel
Point of sail: the different angles from the wind on which a boat may sail

Port: the left-hand side of a boat when looking forward towards the bow

Quarters: assigned living areas on a vessel

Reef: reduce the sail area by folding or rolling surplus material to the boom

Rig: arrangement of masts and sails

Rigging: ropes and wire stays of a boat; securing masts and sails

Rudder: an immersed blade of wood, metal, or plastic attached to a vessel and turned remotely to change its direction

Spar: pole, mast or boom that supports a sail

Spreaders: horizontal spar attached to the mast that help support the mast

Squall: a sudden, sharp increase in wind speed which is usually associated with active weather, such as rain showers, thunderstorms, or heavy snow

Starboard: right-hand side of a boat looking forward towards the bow

Stay: wire or rope which supports the mast in a fore-and-aft direction

Stern: the back end of a boat

Stow: to put away and, by extension, to keep one's opinion to oneself

Tack: to change a vessel's direction, or the new direction

Tide: the change of surface level of a body of water because of gravitational fluctuations

Tiller: short piece of wood by which the rudder is turned

GEOGRAPHY TERMS

Archipelago: a collection of islands in a sea

Antípodes: two points that are antipodal to each other are connected by a straight line running through the center of the Earth.

Atoll: a ring-shaped coral reef including a coral rim that encircles a lagoon partially or completely. There may be coral islands/cays on the coral rim

Coral Reef: underwater structures made from calcium carbonate secreted by corals.

Degree: degrees are used to divide the roughly spherical shape of the Earth for geographic and cartographic purposes

Equator: an imaginary circle around the Earth halfway between the North and South Pole

Hemisphere: half of the Earth, usually formed by dividing the globe into two equal parts of either north and south or east and west

Horizon: (or skyline) is the apparent line that separates earth from sky, the line that divides all visible directions into two categories: those that intersect the Earth's surface, and those that do not

Island: any piece of sub-continental land that is surrounded by water

International Date Line: a line of longitude generally 180 degrees east and west of the Prime Meridian. The date is one day earlier to the east of the line.

Latitude: a measure of distance north or south of the Equator depicted by imaginary lines that cross the surface of the Earth parallel to the Equator. One degree of latitude equals approximately 68 miles.

Longitude: a measure of distance east and west of a line drawn between the North and South Poles. Imaginary lines that cross the surface of the Earth, running from north to south, measuring how far east or west of the prime meridian a place is located.

Maritime Climate: A climate strongly influenced by an oceanic environment, found on islands and the windward shores of continents. It is characterized by small daily and yearly temperature ranges and high relative humidity.

Ocean: The salt water surrounding the great land masses, and divided by the land masses into several distinct portions, each of which is called an ocean.

Prime Meridian: An imaginary line running from north to south through Greenwich, England, used as the reference point for longitude.

Tropics: Technically, the area between the Tropic of Cancer (21-1/2° N latitude) and the Tropic of Capricorn (21-1/2° S latitude), characterized by the absence of a cold season. Often used to describe any area possessing what is considered a hot, humid climate.

GEOGRAPHY APPS

National Geographic World Atlas: The National Geographic World Atlas for iPhone is an impressive application! Quickly zoom in to any area of the world for high-quality National Geographic Maps of continents, regions, and countries. The maps are so crisp and clear, this is simply a beautiful must-have application. This map app also includes basic geographic and historic information for every country on the planet.

Google Earth for Mobile: Absolutely incredible. It's Google Earth. There isn't much more to be said - the Google Earth for Mobile mapping app provides most of the functionality of the traditional Google Earth combined with the GPS from your iPhone to quickly locate your location on the planet. The search functionality is impressive and, of course, the results are loaded onto your iPhone quite quickly. The best part is, it's free!

Learn World Geography: Learn World Geography includes: Over 1,000 flashcards to drill you on maps, flags, capitals, and even major world currencies, A customized flashcard repetition algorithm that cuts your memorization time dramatically, Convenient "browse" and "search" functions that allow you to easily find cards you want, Ongoing feedback, statistics, and visualization tools to help you track your progress.

Flags and Capitals: You can slide through a collection of the world's flags with just a flick of the finger. Select a flag and see the capital city on a map, and how far away you are. Wikipedia info is just a touch away.

The World Fact Book: The complete CIA World Factbook at your fingertips, including extensive information on more than 250 countries and locations throughout the world. Whether you're an avid traveler, a busy student, or someone who just likes to stay informed, this is the app for you!

Geo Walk HD: Do you like to discover new things? Geo Walk is an interactive globe model with handpicked articles on various topics (Animals and Plants, History, People and Inventions), which are placed on the Earth with respect to their location with pictures and short descriptions making most wonderful things of the world easy and fun to discover.

Stack the Countries: Everybody is playing Stack the States these days but have you heard of stack the countries? As you learn country capitals, landmarks, geographic locations and more, you can actually touch, move and drop the animated countries anywhere on the screen. You can choose to focus on just one specific continent or play the whole world. You can also select which types of questions are asked.

Wander Our World: Photos, music, voice with country names, and engaging graphics will fire your child's imagination. Share their wonder as they embark on journeys near and far with this amazing world map app.

TapQuiz Maps World Edition: Learn the countries of the world through a fun and engaging game! Just tap the answer to each question on the map.

MARINE WEATHER

“When at sea, there is no day, there is no night, there is only weather.”
- Laurence Sunderland

Weather forecasting is the application of science and technology to predict the state of the atmosphere for a given location. Human beings have attempted to predict the weather informally for millennia, and formally since the nineteenth century.

Weather forecasts are made by collecting data about the current state of the atmosphere on a given place and using scientific understanding of atmospheric processes to project how the atmosphere will evolve on that place.

Measurements of barometric pressure and the pressure tendency (the change of pressure over time) have been used in forecasting since the late 19th century. The larger the change in pressure, the larger the change in weather can be expected. If the pressure drop is rapid, a low pressure system is approaching, and there is a greater chance of rain. Rapid pressure rises are associated with improving weather conditions, such as clearing skies.

Commercial and recreational use of waterways can be limited significantly by wind direction and speed, wave frequency and heights, tides, and precipitation. These factors can each influence the safety of marine transit. Consequently, a variety of codes have been established to efficiently transmit detailed marine weather forecasts to vessel pilots via radio.

Zac had a professional weather router, trained professionally as a meteorologist, that watched the weather forecasts for during his trip. Thus, Zac was warned of any impending storms and able to reroute Intrepid to avoid the worst of the storms.

WEATHER FORECASTING

One of the most important jobs of a sailor is to understand basic weather patterns and to have current knowledge about surrounding weather conditions.

There are set weather patterns based on years of accumulated statistics of each geographical area in the world. Whole books have been written on the prevailing weather patterns of the world's oceans. Zac's trip was carefully planned to make sure that he was in the right areas at the right times to avoid the worst of the potential weather for that area.

There are periods of stormy weather all over the world regardless of the season so having accurate weather forecasting is very important for the sailor to prepare for bad weather while at sea.

Meteorologists are responsible for gathering and distributing weather data to the general public through applications such as GRIB files. Modern day sailors have sophisticated navigation programs that include the ability to download GRIB files so that they can plan their routes around low and high pressure systems.

A low pressure system or depression is a region where the atmospheric pressure is lower than that of surrounding areas. A low pressure system means a greater chance of stormy weather and rain. A high pressure system is where the atmospheric pressure in a certain area is higher than that of the surrounding area. High pressure areas are usually associated with improving weather and light winds. The barometer is used and has been used for centuries to measure the atmospheric pressure surrounding a vessel. If the barometric pressure drops, a low pressure system is approaching. If the barometric pressure rises, weather should be improving.

NAVIGATION

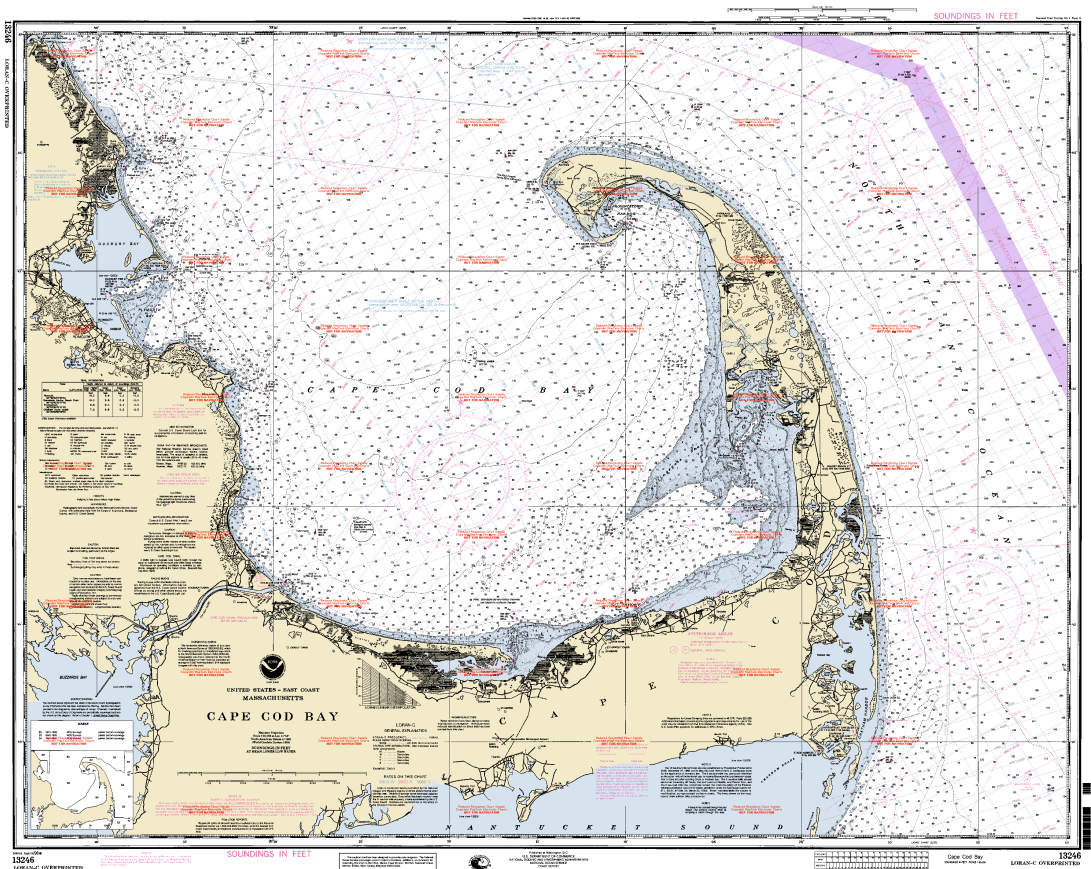
Navigation is the term used to describe the process of moving your boat from one place to another and finding your destination. There are no roads or street signs in the middle of the ocean so how do you know where you are?

Today, in modern times, most of us are all familiar with the use of Global Positioning Satellites (GPS) to know our position on the earth. A GPS finds your position electronically from information collected from satellites.

Your position on the Earth is given in degrees of latitude and longitude. Latitude is the distance north or south of the equator. You are at 0 degrees at the equator and 90 degrees at the North or South Pole. Longitude is your distance east or west of the Prime Meridian, also known as the Greenwich meridian which runs through Greenwich, England. You are at 0 degrees longitude at the Prime Meridian and anywhere from 0 to 180 degrees as you move east or west. The lines on the world map below show the imaginary lines of latitude and longitude.



Once a sailor has his or her position in latitude and longitude, he or she can take their position and plot it on a nautical chart. A nautical chart is a map of the ocean. It shows detailed outlines of each coastal region and may show the heights of land masses and the depths of the sea. Nautical charts also show features of the seabed, navigational hazards, information on the tides and currents and human-made structures such as harbors, buildings and bridges. Nautical charts are essential for marine navigation and may be either paper or computerized electronic charts.



Nautical Chart of Cape Cod Bay

When Zac sailed around the world he had electronic charts as well as paper charts. Electronic charts require electricity but if for some reason, Zac's boat could not produce enough electricity to run his chart plotter, he would need the back up of his paper charts.

TOPICS FOR FURTHER RESEARCH

History of Sailing

Archeology of Noah's Ark

Archeology of Egyptian Vessels

Famous Sailors During the Age of Exploration

Marco Polo

Prince Henry the Navigator

Christopher Columbus

Sir Francis Drake

Ferdinand Magellan

Captain James Cook

Biographies of Famous Solo Circumnavigators

Joshua Slocum

Robin Lee Graham

Jesse Martin

Abby Sunderland

Jessica Watson

Minaru Saito

Mike Perham

Read or learn about the voyages of one modern day sailor and one sailor from over 100 years ago. Compare and contrast their voyages in light of technological advances in navigation and communication.

Marine Weather

Make your own weather station

Visit this web site and learn how to build your own weather station including making your own barometer, hygrometer, rain gauge, weather vane, anemometer and compass.

<http://www.fi.edu/weather/todo/>

More Science Projects for Weather and Seasons

Visit this web site for more great science projects including projects to learn about condensation, wave motion, wind, measuring air pressure, measuring air pollutants, and more.

<http://tlc.howstuffworks.com/family/science-projects-for-kids-weather-and-seasons.htm>

Earn a Sailing Badge at DIY.org

Projects include knot tying, learning to sing a sea chanty, sending messages with flags, and more fun projects. <https://diy.org/skills/sailor>

Panama Canal

Watch this short video of Zac on board Intrepid crossing the Miraflores Locks in the Panama Canal <http://www.youtube.com/watch?v=ioEhEnm4eSI>

Learn more about the Panama Canal here:

<http://video.pbs.org/video/1747929120/>

Reading

Read Zac and Abby's blogs from their trips: ZacSunderland.com and AbbySunderland.com

The Boy Who Sailed Around the World Alone by Robin Lee Graham

Carry On, Mr. Bowditch by Jean Lee Latham

Any Biography of an Explorer

Unsinkable: The Abby Sunderland Story by Abby Sunderland

BOATS IN THE BIBLE

There are many Bible stories that take place on or around boats. Read these stories and look for the truths about God in them.

Noah's Ark - Genesis 7:15-19

Boat for baby Moses - Exodus 2:1-10

Jonah's ship to Tarshish - Jonah 1:3

James & John leave their fishing boat - Matthew 4:21-22

Jesus preaches from a boat - Matthew 13:2

Jesus calms the storm - Luke 8:22-25

Jesus walks on water - John 6:16-21

Jesus fills Peter's boat - John 21:4-8

Paul travels by ship - Acts 20:13

Paul's prison ship - Acts 27:6-11

THE MARINER'S PSALM

Some went out on the sea in ships; they were merchants on the mighty waters.

They saw the works of the Lord, his wonderful deeds in the deep.

For he spoke and stirred up a tempest that lifted high the waves.

They mounted up to the heavens and went down to the depths; in their peril their courage melted away. They reeled and staggered like drunkards; they were at their wits' end. Then they cried out to the Lord in their trouble, and he brought them out of their distress. He stilled the storm to a whisper; the waves of the sea [b] were hushed. They were glad when it grew calm, and he guided them to their desired haven.

Let them give thanks to the Lord for his unfailing love and his wonderful deeds for mankind. Let them exalt him in the assembly of the people and praise him in the council of the elders. Psalm 107:23-32

FINDING VISION IN YOUR LIFE

The man without a purpose is like a ship without a rudder -
a waif, a nothing, a no man. - Thomas Carlyle

God has created us for a purpose; to do good works.

For we are His workmanship, created in Christ Jesus for good works, which God prepared beforehand that we should walk in them. Ephesians 2:10

God has given each of us talents and abilities and a passion for something. What is it that really gets you excited? What makes you want to get out of bed? What keeps you going when life gets difficult? It is quite possible that where your talents and interests intersect is where God is calling you to serve.

- Try making a list of things and activities that interest you.
- Journal your thoughts on your purpose. Pray and ask God to reveal this to you. Keep writing until you come upon the ideas and thoughts that really excite you.

Finding your God-given purpose is probably one of the most exciting things you will ever do. It is a life long journey. By learning to seek God and walk with Him early in your life, you are sure to have many of your own adventures.

So whether you eat or drink or whatever you do, do it all for the glory of God.
1 Corinthians 10:31

PART II: ZAC

ZAC'S STORY

Zac Sunderland was born in Southern California and was brought home from the hospital to live aboard his first home - a 40 foot sailboat! No he wasn't born to a family of pirates although, his father was born in an old smuggling town in England! He grew up sailing and learned to love the sea from a young age.

Zac learned early on to love the sea as well because as a young boy he spent a lot of time sailing and even living on boats with his family. He took his first sail when he was just 6 weeks old! When Zac was a young boy he didn't play in a backyard, he played on the ocean. Instead of a bike, he had a small sailboat called a dinghy.

When Zac was 9 years old, his family (he had one brother and two sisters at the time) moved aboard their 51 foot sailboat named Amazing Grace, where they lived for the next three years. Together they sailed to the local islands and south to the shores of Mexico.



Zac (9 years old) Doing School at the Beach

It was an adventurous life to be sure. Zac traveled to places where there were lots of different things that we don't see here in the United States. He and his family explored mangrove forests and volcanic craters, snorkled with beautiful tropical fish, sailed right over the tops of huge manta rays and around bobbing sea turtles! It was not unusual to see whales very close to the boat sometimes with their young calves swimming along nearby.

Zac's family returned home after three years of sailing when Zac became a good football player, playing for 6 years on local teams. When he was 16, he was getting bored with life on land and began to dream of going to sea again, only this time he had a different kind of trip planned!

When Zac was young, his favorite book was one called, *The Boy Who Sailed Around the World Alone*. It was the story of a 16-year old boy named Robin Lee Graham who sailed around the world when he was 16 back in the 1960s.

Zac began to dream of doing a trip like that himself and came to his parents to ask what they thought. What do you think your parents would think if you asked them to sail around the world alone?

Well Zac's parents actually thought that it was an excellent idea because Zac was a very strong and disciplined young man who had lots of sailing experience even though he was still only sixteen!

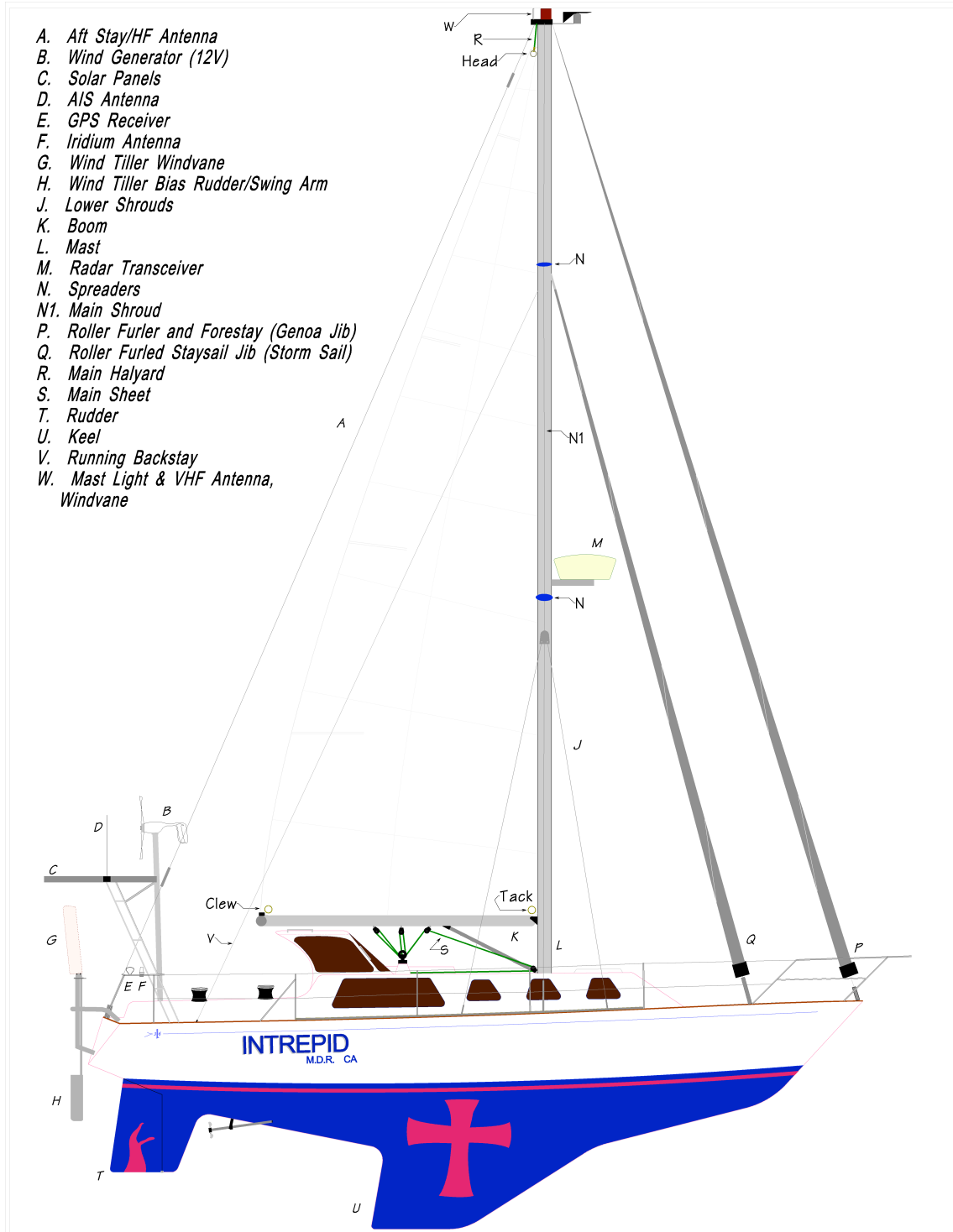
Zac had saved about \$6,000 from working with his father delivering boats and from buying, fixing up and selling small sailing dinghies and so he and his father went hunting to find the perfect boat.

Well, that is enough of the story now. I don't want to give away the excitement of the documentaries that you will soon watch.



A LOOK AT INTREPID

Zac's 36 foot sailboat was equipped with an impressive amount of modern technology and equipment to keep him safe on his journey around the world.



DISCUSSION QUESTIONS

Intrepid: The Zac Sunderland Story: Part 1

1. Discuss how Zac's unique childhood prepared him to do his trip. What are some unique things about your family?
2. What are some of the character traits that Zac had that his parents felt qualified him to take his trip? What are some character traits that you are strong in? In what areas do you need to grow?
3. During Part 1, Zac's mom talks about praying for Zac before he left. How did this affect how Zac's parents felt when Zac lost contact for a few days out of Papua New Guinea?
4. Talk about how Zac felt when he finally made it to Hawaii? How do you think you would have felt?
5. A squall is a small storm cell that is powerful but short-lived. They can be very unpredictable. Talk about how Zac felt after his first squall and contrast that to how he later used squalls to shower in?
6. Discuss some ways that Zac showed ingenuity during his trip? How did he deal with difficulties along the way?
7. Crossing the equator has always been a major milestone for any seafarer. Ancient sailors had many interesting traditions surrounding the event. Discuss important milestones in your life and how you celebrate them.

DISCUSSION QUESTIONS

Intrepid: The Zac Sunderland Story: Part 2

1. Many people think of movies and old stories when they think of pirates. Did you know that pirates still exist?
2. After his trip, Zac was able to meet his childhood hero, Robin Lee Graham, whose book about his own solo circumnavigation inspired Zac to do his trip. What does it mean to be a hero? Who are your heroes?
3. Talk about how God provided for Zac in a most amazing way after his tiller arm and boom broke in a remote area of the Indian Ocean. How has God provided for you?
4. Zac celebrated his 17th birthday at sea. His mom packed all of his presents in a shoebox so that he could bring them with him on his trip. If you could only have one shoebox full of presents, what would you choose?
5. Find the book Do Hard Things by Alex and Brett Harris, read and discuss.
6. Zac had a hard time when he lost communication, his satellite phone, during a long passage. Try turning off your cell phone and staying off of your computer for a day or two and talk about what it was like.

ZAC'S PORTS OF CALL

Oahu, Hawai'i

Hawaiian Flag



The island chain of Hawai'i, also called an **archipelago**, is the most recent of the US States and is the only state made up entirely of islands. All seven of the Hawaiian Islands were (and continue to be) formed from volcanic activity. The 1778 arrival of British explorer James Cook was Hawai'i's first documented contact with European explorers. Cook named the islands the "Sandwich Islands" in honor of his sponsor John Montagu, 4th Earl of Sandwich.

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

Which Hemisphere: North or South

Located on which Ocean:

Climate: Tropics

Latitude & Longitude:

Marshall Islands

Marshall Island Flag



The Marshall Islands is an island country located in the Northern Pacific Ocean made up of 34 low-lying coral atolls that make up 1,156 individual islands and islets. Colonists from nearby islands gradually settled there by simple navigation using traditional stick charts.

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

Which Hemisphere: North or South

Located on which Ocean:

Climate:

Latitude & Longitude:

Papua New Guinea

Flag of Papua New Guinea



Papua New Guinea is a country in Oceania that is one of the most culturally diverse countries in the world. According to recent data, 841 different languages are listed for the country. Little was known about the island until Portuguese and Spanish explorers encountered it as early as the 1500s. Head-hunting and ritual cannibalism were commonplace in certain isolated areas, into the fifties, sixties, and seventies, and still leave traces within certain social groups!

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

Which Hemisphere: North or South

Located on which Ocean:

Climate:

Latitude & Longitude:

Darwin, Australia

Flag of Australia



Darwin, Australia has grown from a pioneer outpost and small port into one of Australia's most modern and multicultural cities. On 9 September 1839, HMS Beagle sailed into Darwin harbor during its surveying of the area. John Clements Wickham named the region "Port Darwin" in honor of their former shipmate Charles Darwin, who had sailed with them on the ship's previous voyage which in 1836.

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

Which Hemisphere: North or South

Located on which Ocean:

Climate:

Latitude & Longitude:

Cocos Keeling Islands

Flag of Cocos Keeling



Cocos Keeling Islands are a territory of Australia and consists of two atolls and 27 coral islands, of which two, West Island and Home Island are inhabited with a total population of approximately 600 people. In 1609, Captain William Keeling was the first European to see the islands, while serving in the East India Company, but they remained uninhabited until the 19th century.

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

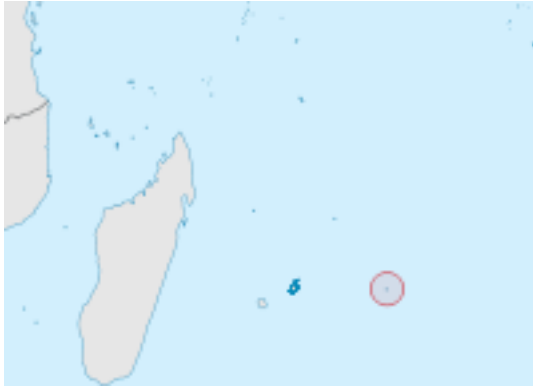
Which Hemisphere: North or South

Located on which Ocean:

Climate:

Latitude & Longitude

Rodrigues Island



The island of Rodrigues was named after the Portuguese explorer Diogo Rodriguez in February 1528. A large fringing reef surrounds the island forming a lagoon within which lie eighteen small islets. The coral reef of Rodrigues is of particular interest as it is self-seeding – it receives no coral zooplankton from elsewhere.

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

Which Hemisphere: North or South

Located on which Ocean:

Climate:

Latitude & Longitude:

Maurítius

Flag of Maurítius



The island nation of Maurítius is part of an archipelago that includes the islands of Rodrigues and Reunion. It was unknown and uninhabited before its first recorded visit during the Middle Ages by Arab sailors, who named it Dína Arobi. In 1507 Portuguese sailors visited the uninhabited island and established a visiting base.

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

Which Hemisphere: North or South

Located on which Ocean:

Climate:

Latitude & Longitude:

Durban, South Africa

Flag of South Africa



Durban, South Africa is famous for being the busiest port in South Africa. First sighted by Vasco da Gama in 1497, the area was not populated until 1824. The famous battles between the British and the Zulu tribes that lived in the area are legendary.

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

Which Hemisphere: North or South

Located on which Ocean:

Climate:

Latitude & Longitude:

Cape Town, South Africa

Map of South Africa



Cape Town, South Africa is the second most populated city in the country of South Africa. The tip of South Africa is called the Cape of Good Hope and is known for its treacherous seas. Many explorers were known to have sailed its waters including Bartolomeu Dias and Vasco da Gama as early as 1497.

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

Which Hemisphere: North or South

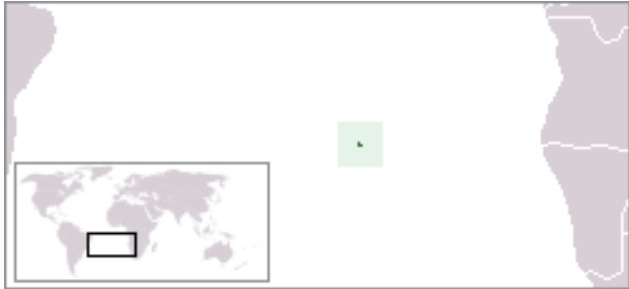
Located on which Ocean:

Climate:

Latitude & Longitude:

St Helena Island

Flag of St. Helena Island



St Helena Island was uninhabited when it was discovered by the Portuguese navigator, Joao da Nova in 1502. One of the most isolated islands in the world, it was for centuries an important stopover for ships sailing to Europe from Asia and South Africa. The British also used the island as a place of exile, most notably for Napoleon I.

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

Which Hemisphere: North or South

Located on which Ocean:

Climate:

Latitude & Longitude:

Grenada

Flag of Grenada



The island country of Grenada is known as the island of spice because they are one of the world's largest exporters of nutmeg and mace. Grenada was colonized by the French in 1649 but captured during the Seven Years' War by the British in 1762.

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

Which Hemisphere: North or South

Located on which Ocean:

Climate:

Latitude & Longitude:

Panama & The Panama Canal

Flag of Panama



Panama is the southernmost country in Central America. It was visited by such famous Spanish explorers as Columbus and Balboa. The isthmus was so narrow that it proved to be the closest thing to a path between the two seas. Until the building of the Panama Canal in , gold and silver were brought from South America, hauled across the isthmus and loaded aboard ships for Spain.

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

Which Hemisphere: North or South

Located on which Ocean:

Climate:

Latitude & Longitude:

Costa Rica

Flag of Cost Rica



Costa Rica is a country in Central America bordered by Nicaragua on the north and Panama to the southeast. Christopher Columbus sailed here on his final voyage in 1502. Costa Rica (translated as rich coast) is known for some of the world's most beautiful beaches and wildlife and has been called the greenest country in the world.

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

Which Hemisphere: North or South

Located on which Ocean:

Climate:

Latitude & Longitude:

Puerta Vallarta, México

Flag of Mexico



Puerta Vallarta, México is located within Banderas Bay and the agricultural valley of the Ameca River. The Spanish explorer, Hernan Cortes, visited this area and it is seen on old sea maps and marked as a bay of refuge. There are accounts of pirates visiting the area and making use of the bay's natural shelter.

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

Which Hemisphere: North or South

Located on which Ocean:

Climate:

Latitude & Longitude:

San Diego, California, USA

Flag of the United States



San Diego is the eighth-largest city in the US and second-largest city in California. It was the first area ever populated in the state of California. The Spanish explorer, Juan Cabrillo, discovered the area and claimed it for Spain in 1542.

Capital City:

Population:

Language:

Currency:

Government

Geography Notes:

Which Hemisphere: North or South

Located on which Ocean:

Climate:

Latitude & Longitude:

Marina del Rey, California



The marina in Marina del Rey is the world's largest man-made small craft harbor with 19 marinas with capacity for 5,300 boats and is home port to approximately 6,500 boats. Fisherman's Village in Marina del Rey was the starting and ending point for Zac's solo circumnavigation.



PART III: ABBY'S STORY

ABBY'S STORY

Abby Sunderland was born in Santa Monica California in 1993. She always loved the beach and the sea which is a good thing since she and her family spent so much time there!

When Abby was just 6 months old, she, her parents and her big brother Zac moved aboard a 50 foot sailboat as their home. Most people don't think of a boat as a home but they are very cozy inside and Abby loved to crawl through the boat and play around the little beds and tables inside.



Since Abby's family lived on a boat, they spent lots of time sailing and both Abby and Zac grew up enjoying swimming, snorkeling, boogie boarding and sailing. When Abby was 7, her family (including another younger brother and sister) moved aboard a new boat - a 51 foot sailboat named Amazing Grace that was to be their home for the next three years.

This time, however, Abby and her family traveled aboard their boat. First they spent two summers at Catalina Island which is part of a string of small islands off of the California

coast known as the Channel Islands. At Catalina, Abby and her family learned how to live on board their boat while at anchor in the bay. This meant that if her family wanted to go to shore, they had to hop in their dinghy (a small rubber boat) and take that to shore.

After spending two summers and Catalina, Abby's family was ready to sail south to Baja California and mainland Mexico. This was a real adventure for all of them as they visited interesting places and saw all kinds of amazing wild life.

Abby was 9 years old when her family returned to their house in Southern California. She loved animals and always wanted to make a petting zoo in her back yard. At one point she almost did. She had 6 Netherland Dwarf rabbits, 2 Queensland Healer dogs, too many chickens to count, 6 turkeys, fish, turtles and a grey and white cat named Sophie.

Abby always missed her life on board Amazing Grace and talked often about going sailing again. She loved to go with her dad on sail boat deliveries and never seemed to mind the cold, wet or even storms. Once, when she was about 13 years old someone who saw her sailing with her dad said she might be the youngest person to sail around the world one day. That sparked an idea in Abby that maybe she could be.

Abby and her family had often read of exciting explorers and adventurers during their homeschool days. Why not become one herself, she thought!

From that point on, Abby often talked about sailing around the world. Her parents were a bit surprised because of her age and encouraged her to continue with her schoolwork and to learn as much as she could about sailing until she was older.

When Abby's brother, Zac, sailed around the world in 2009, Abby knew that if he could do it, so could she. She set about to find a boat and sponsors and well, I don't want to give away the story so I will stop here and you can watch the DVD now.

DIFFERENCES BETWEEN TRIPS

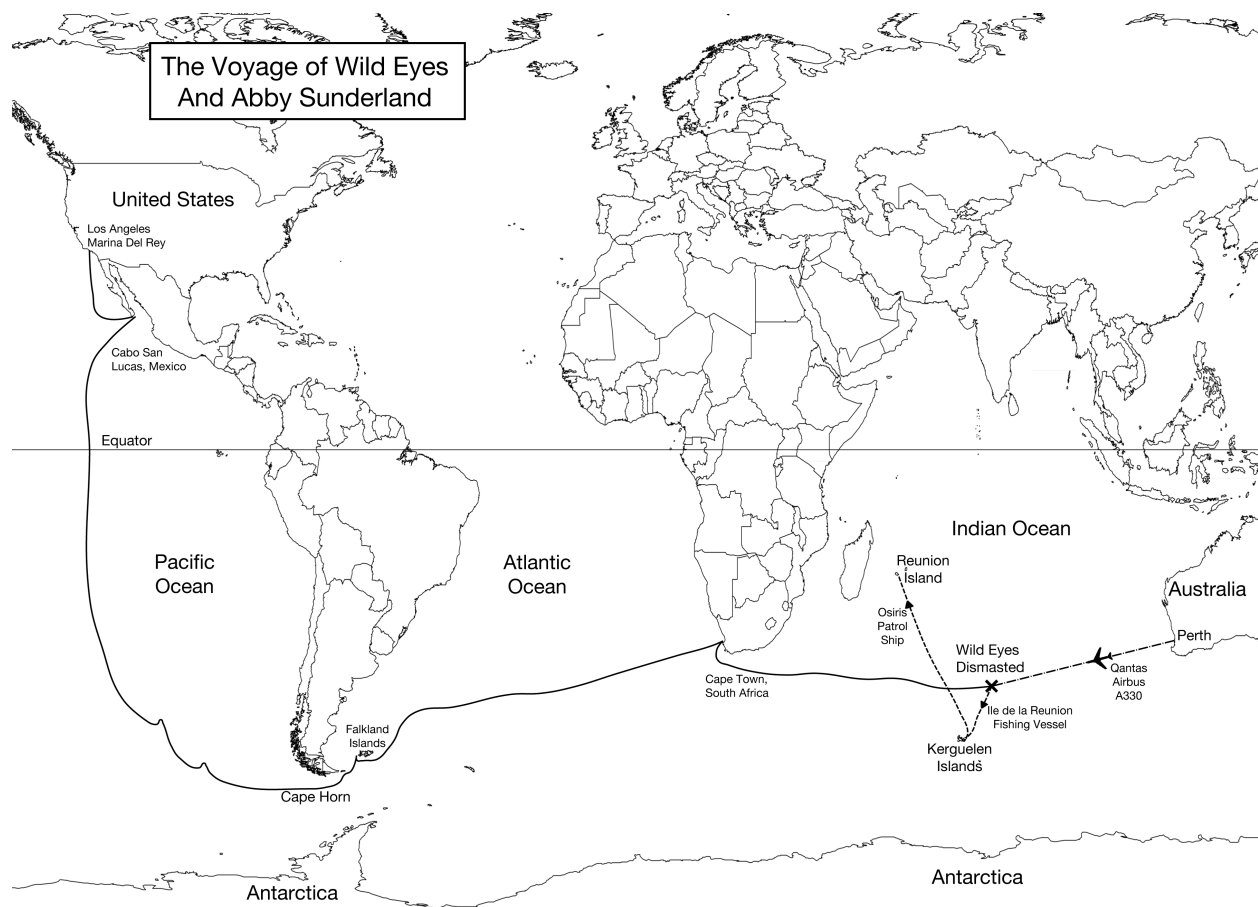
Abby's trip was different from Zac's in several ways. Abby's route was intended to be a non-stop trip which meant that she would not pass through the Panama Canal as Zac did but rather she would go south around the infamous Cape Horn at the tip of South

America. Traveling this far south can be very dangerous because the weather is much stormier and unpredictable. Like Zac, Abby had a professional meteorologist sending her weather reports so that she could plan the best route to take.

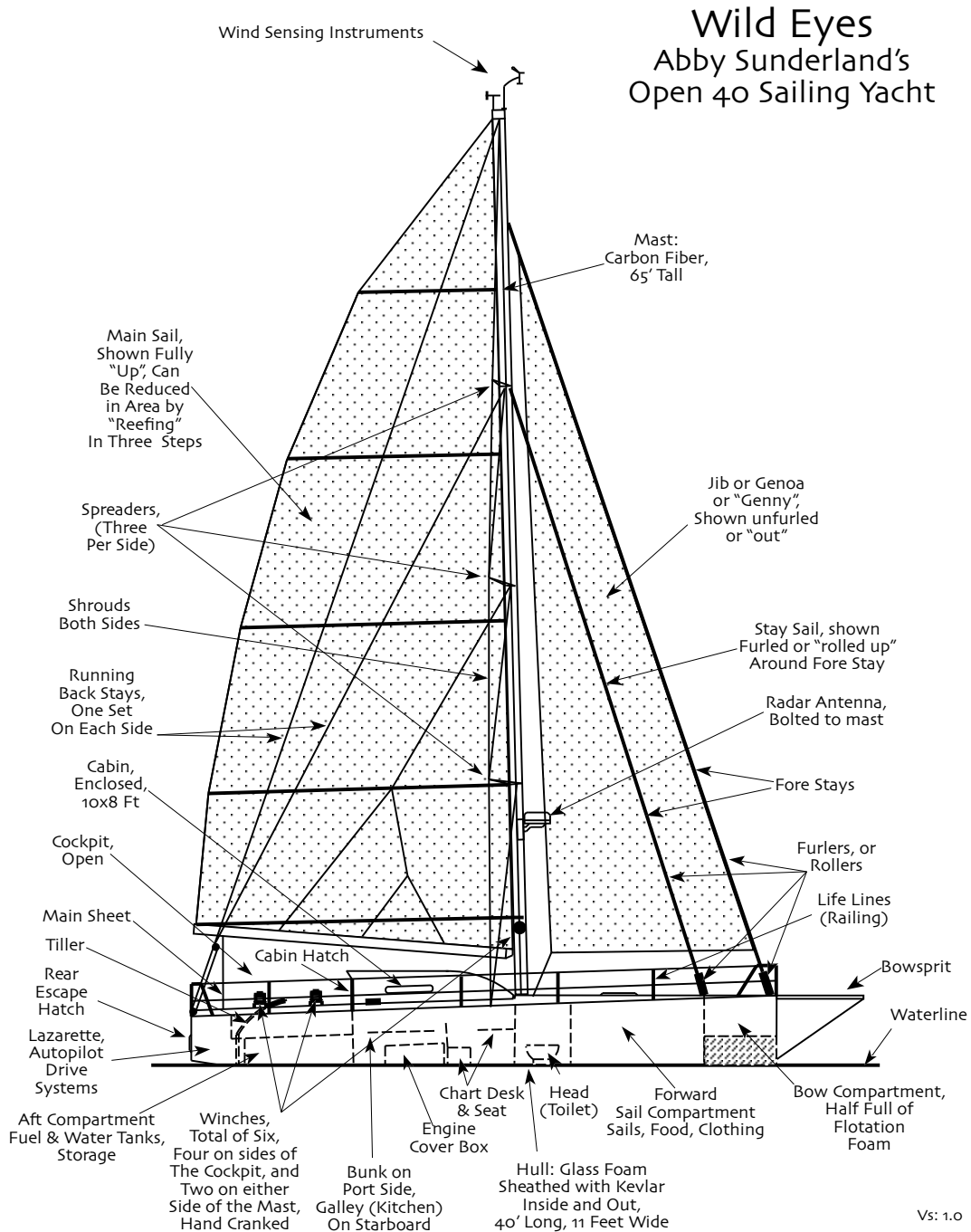
Because of Abby's route, she needed a different kind of boat. Wild Eyes, was designed for sailing in the turbulent waters of the Southern Ocean. It was also designed to be sailed by one person.

For more information on Abby's trip, you can read her book, *Unsinkable: The Abby Sunderland Story*, or visit her web site where she wrote every week of her trip on her blog.

ABBY'S ROUTE



A LOOK AT ABBY'S BOAT: WILD EYES



Discussion Questions

1. Abby's brother's trip was a big influence on her, encouraging her that she could really do her own solo sail. Talk to your parents about the important influences they had in their lives and how they impacted them. What is influencing your life?
2. After a lot of hard work preparing Abby's boat, Wild Eyes, for her trip, the mechanical failures she experienced were a huge disappointment. How do you react when things don't go the way you hoped? Does it help to remember that God is always in control of your life?
3. A milestone is an action or event that marks a significant change or stage in your life. Abby experienced many milestones during her trip; crossing the equator, rounding Cape Horn etc. What are some milestones that you have experienced in your life and what are some that you look forward to?
4. People around the world were praying for Abby during her rescue. Talk about the power of prayer and how prayer has influenced your life.
5. At the end of the documentary, Abby talks about the lessons that she learned from her trip despite her accident. Things like persevering and knowing that life can be hard and the importance of continuing to try. What lessons did you learn from learning about Abby's trip?
6. Do you have a dream? Is there something that you would like to do that is big? Talk about it with your parents. Pray and see what God will do!