

### **UNITED STATES COAST GUARD**

# REPORT OF INVESTIGATION INTO THE CIRCUMSTANCES SURROUNDING THE PARASAILING ACCIDENT WITH LOSS OF LIFE AND INJURY ON THE

## SMALL PASSENGER VESSEL M/V X-TREME (O.N. 1153017)

### IN THE VICINITY OF HONOLULU HARBOR HOTEL BUOY ON JANUARY 29, 2012





Commandant United States Coast Guard US Coast Guard Stop 7501 2703 Martin Luther King Jr. Ave. SE Washington, DC 20593-7501 Staff Symbol: CG-INV Phone: (202) 372-1032 E-mail: CG-INV1@uscq.mil

16732/IIA#4234506 17 June 2022

### INJURY AND LOSS OF LIFE ONBOARD THE PASSENGER VESSEL X-TREME WHILE CONDUCTING PARASAIL OPERATIONS IN HONOLULU HARBOR ENTRANCE NEAR LIGHTED BUOY "H" ON JANUARY 29, 2012

### ACTION BY THE COMMANDANT

The record and the report of the investigation convened for the subject casualty have been reviewed. The record and the report, including the findings of fact, analysis, conclusions, and recommendations are approved subject to the following comments. This marine casualty investigation is closed.

#### ACTION ON RECOMMENDATIONS

<u>Safety Recommendation 1</u>: It is recommended that the Commandant of the Coast Guard, in consultation with national parasailing organizations and/or the parasailing industry, establish distinct license, training, qualification, and experience requirements that apply to operators and crew of commercial parasail vessels.

<u>Safety Recommendation 2</u>: It is recommended that the Commandant of the Coast Guard require owners and operators of commercial parasail vessels to conduct a written assessment of all the risks it foresees could arise in conducting parasailing, and to prepare a written contingency plan approved by the local OCMI for eliminating, minimizing or responding to the risks.

<u>Safety Recommendation 3</u>: It is recommended that the Commandant of the Coast Guard require owners and operators of commercial parasail vessels to conduct sufficient training, drills and exercises to ensure that crewmembers are proficient in parasailing emergency techniques and procedures. Training, drills and exercises shall be logged or otherwise documented for review by the Coast Guard upon request. Drills and exercises must test the proficiency of company and vessel personnel in assigned emergency response duties.

<u>Safety Recommendation 4</u>: It is recommended that the Commandant of the Coast Guard require parasail vessels to have emergency instructions onboard and readily available to the master and crew to include at least the following parasailing contingencies: unintended water landing; winch malfunction; towline failure; and propulsion machinery failure with a passenger in flight.

Safety Recommendation 5: It is recommended that the Commandant of the Coast Guard, in consultation with national parasailing organizations and/or the parasailing industry, develop parasail towline selection, inspection and retirement (removal from service) guidelines. These guidelines should require records to be kept that indicate the size, fiber, construction, length, manufacturer, minimum breaking strength, safe working load, date placed in service, and inspection interval for each towline. Inspections should be logged and should check for damage, wear and include caliper measurements of the towline diameter to determine if the towline has deteriorated. The master of the parasailing vessel should be responsible for keeping these records and reporting the same to management. For each towline, the records should be kept for the duration of its service life and should be made available for review by the Coast Guard upon request. When developing the guidelines, the Coast Guard should further evaluate: the need to conduct additional operational tests to determine a towline's required minimum breaking strength; the need to require the breaking strength of each towline to be certified by the manufacturer by subjecting a portion of the rope to destructive testing prior to its installation; and the need to specify the use of more efficient connections (e.g., eye splices, thimbles, etc.) between the towline and the yoke.

<u>Safety Recommendation 6</u>: It is recommended that the Commandant of the Coast Guard require the operator of a commercial parasail vessel to record each flight: the parasail canopy is used and its operational limitations; the estimated weight of the passenger(s); the prevailing wind and sea state; the duration of the flight; and the details of any parasailing incident that occurred during the flight. The master of the parasailing vessel should be responsible for keeping these records and reporting the same to management. For each towline, the records should be kept for the duration of its service life and should be made available for review by the Coast Guard upon request.

<u>Safety Recommendation 7</u>: It is recommended that the Commandant of the Coast Guard, in consultation with national parasailing organizations and/or the parasailing industry, develop operational readiness, maintenance, and inspection requirements for winches used to deploy and recover passengers while parasailing. When developing the inspection requirements, the Coast Guard should develop minimum power ratings and further evaluate the need for redundant or emergency winch systems that could be used should the primary winch fail.

<u>Safety Recommendation 8</u>: It is recommended that the Commandant of the Coast Guard require the inspection of the parasail gear and equipment, as necessary to determine that the gear and equipment are in good working order and fit for the service intended, before the issuance of a Certificate of Inspection to any vessel that engages in commercial parasailing.

<u>Safety Recommendation 9</u>: It is recommended that the Commandant of the Coast Guard, in consultation with national parasailing organizations and/or the parasailing industry, define the necessary route and operational limits for safe parasailing, and direct cognizant Officers in Charge, Marine Inspection, to record these route and operational limits on the Certificate of Inspection of commercial parasail vessels.

Safety Recommendation 10: It is recommended that the Commandant of the Coast Guard require owners and operators of commercial parasail vessels to provide a comprehensive passenger safety briefing prior to departure to include a discussion of the inherent risks of parasailing, the route and operational limits imposed to mitigate these risks, and the proper procedures to be followed during the course of parasailing emergencies to include: unintended water landing; winch malfunction; towline failure; and propulsion machinery failure with a passenger in flight.

<u>Safety Recommendation 11</u>: It is recommended that the Commandant of the Coast Guard require commercial parasail operators to monitor marine broadcasts prior to conducting and while engaged in parasailing, and to obtain and monitor wind speed and direction in order to evaluate the advisability of launching passenger(s) in flight, or continuing with a flight when conditions progressively deteriorate.

Safety Recommendation 12: It is recommended that the Commandant of the Coast Guard, in consultation with national parasailing organizations and/or the parasailing industry, review, modify, and ultimately adopt and incorporate by reference in 46 CFR. Subchapter T, the Professional Association of Parasail Operators Operating Standards and Guidelines, or a similarly produced and recognized industry standard. Where industry has not established suitable safety requirements addressing the causes of this casualty, the Coast Guard should provide the leadership and catalyze their development. These actions will allow the Coast Guard to capitalize on standards that are already familiar to the parasailing industry and will raise the level of safety provided to the level expected by the American public. Further, it will minimize the burdens on the parasailing industry associated with variations in safety standards imposed by various jurisdictions.

<u>Safety Recommendation 13</u>: It is recommended that the Commandant of the Coast Guard seek legislative authority to inspect parasail vessels that carry at least one passenger for hire and enact implementing regulations. This action when taken in concert with this report's other recommended actions will result in a regulatory regime that provides a set of minimum safety standards for commercial parasailing on U.S. navigable waters, and will result in lives saved.

<u>Safety Recommendation 14</u>: It is recommended that the Commandant of the Coast Guard provide written guidance to marine inspectors to be used during the inspection and certification of commercial parasail vessels. This guidance should be taught at the Marine Inspection and Investigation School at Training Center Yorktown and be made available to the public and parasailing industry.

<u>Safety Recommendation 15</u>: It is recommended that the Commandant of the Coast Guard provide written guidance to marine investigators to be used during the investigation of parasailing marine casualties. This guidance should be taught at the Marine Inspection and Investigation School at Training Center Yorktown and be made available to the public and parasailing industry.

<u>Safety Recommendation 16</u>: It is recommended that the Commandant of the Coast Guard provide notice to the parasailing industry that failures of parasailing equipment to include the winch, towline, harness, and parasail, are considered to be occurrences that materially and adversely affect a vessel's fitness for service, and are considered reportable marine casualties under 46 USC 6101 and its implementing regulations of 46 CFR 4.05-1(a)(4) and 185.202(a)(4).

<u>Safety Recommendation 17</u>: It is recommended that the Commandant of the Coast Guard implement the Voluntary Commercial Parasailing Vessel Safety Examination program instituted by Coast Guard Sector St. Petersburg throughout the Coast Guard until this report's other recommended actions can be fully enacted. This interim measure will enhance, improve, and increase Coast Guard interactions with the parasailing vessel industry and promote the voluntary compliance with industry best practices.

<u>Safety Recommendation 18</u>: It is recommended that the Commandant of the Coast Guard implement the Voluntary Recommended Guidelines for Safe Parasailing program instituted by District Fourteen and Coast Guard Sector Honolulu throughout the Coast Guard until this report's other recommended actions can be fully enacted. This interim measure will enhance, improve, and increase Coast Guard interactions with the parasailing vessel industry and promote the voluntary compliance with industry best practices.

<u>Safety Recommendation 19</u>: It is recommended that Commercial Water Sports, Inc, the builder the M/V X-TREME, O.N. 1153017, advertise a service bulletin to the parasailing industry advising of the need to retrofit their vessels with towlines that meet the minimum parasail manufacture breaking strength.

<u>Safety Recommendation 20</u>: It is recommended that X-TREME Parasail Inc., implement and enforce a quarterly training program for all company employees that adequately addresses equipment maintenance, weather forecasting, record keeping and parasail specific emergency procedures. X-TREME Parasail Inc. should keep records of all employee attendance and should base day to day crew selection on their training completion status.

<u>Safety Recommendation 21</u>: It is recommended that X-TREME Parasail Inc. develop, implement, and enforce a comprehensive weather forecasting and monitoring policy. The policy should identify a method of consistent monitoring from every vessel in the fleet.

<u>Safety Recommendation 22</u>: It is recommended that the Commandant of the Coast Guard, in consultation with national parasailing organizations and/or the parasailing industry, develop guidelines for lockable clips associated with parasailing harnesses. When developing the guidelines the Coast Guard should evaluate the type, design and position location of the clips to ensure there is no way for accidental opening either in flight or in case of an emergency water landing.

Recommendations 1-22: I concur with the intent of these recommendations. The Coast Guard currently lacks regulatory authority to compel compliance with regard to parasailing operations, equipment, or parasail specific endorsements for merchant mariner licensing. However, since 2009, the Coast Guard has shepherded the development of consensus standards with Industry stakeholders including the Water Sports Industry Association (WSIA).

In January 2012, the Coast Guard requested that stakeholders and WSIA develop voluntary standards for the parasailing industry using the American Society for Testing and Materials (ASTM) consensus standards process. A subcommittee was formally established in the fall of 2012, and the first ASTM standards were published in April 2013.

The ASTM "Standard Practices for Parasailing" continue to be reviewed and have undergone multiple revisions over the past nine years, the most recent version being F3099-19. The parasail industry has taken extensive action towards improving operational safety. Key elements of the standard are: Weather Monitoring and Limits, Equipment, Towline Care, Operations, Crew Requirements, Emergency Procedures, and Patron Responsibility. The Coast Guard continues to monitor the industry's implementation of the ASTM standards and evaluate their effectiveness. This is completed through Coast Guard presence at annual parasailing conferences and engagement with the Water Sports Industry Association (WSIA) and by periodically providing casualty data to measure ASTM standard effectiveness.

Since 2009, the Coast Guard has issued multiple Safety Alerts and Marine Safety Information Bulletins (MSIBs) to the public, which are specific to the parasailing industry and include the following:

- 2009: 06-09 Safety Alert 'Parasailing Incidents'
- 2011: 05-11 Safety Alert 'Parasailing: Know your Ropes'
- 2012: The Commandant sent message (R 191851Z Jan 12) regarding commercial
  parasailing vessel safety and included the "Commercial Parasailing Vessel Safety
  Guidance," which prescribes how outreach to parasail operators should be
  conducted by Coast Guard units.
- 2013: 07-13 Safety Alert 'Parasailing Operations Know Your Ropes (2)'
- 2014: 05-14 Safety Alert 'Overheating of Parasailing Vessel Hydraulic System'
- 2015: MSIB 003-15 'Parasailing Flight Safety and Rules'
- 2015: 07-15 Safety Alert 'Prevent Parasail Accidents: Follow ASTM Standards and Follow Manufacturer Instructions!'
- 2018: 12-18 Safety Alert 'Hazards of Parasail and Watersport Passenger Transfers'
- 2019: MSIB 002-19 'Parasailing Navigation Rules and Flight Safety'

A hazardous condition is any condition that may adversely affect the safety of any vessel, bridge, structure, or shore area or the environmental quality of any port, harbor, or

navigable waterway of the United States. In July 2015, the U.S. Coast Guard issued Navigation and Vessel Inspection Circular (NVIC) 1-15, "TITLE 46, CODE OF FEDERAL REGULATIONS (CFR), PART 4 MARINE CASUALTY REPORTING PROCEDURES GUIDE WITH ASSOCIATED STANDARD INTERPRETATIONS." NVIC 1-15 clarifies that parasailing accidents not reaching reportable marine casualty thresholds in 46 CFR § 4.05-1 would still constitute a hazardous condition as defined in 33 CFR 160.202 and meet the subsequent reporting requirement of hazardous conditions as defined in 33 CFR §160.216.

In 2015, U.S. Coast Guard Training Center Yorktown added a parasail casualty scenario to the Investigating Officer Course curriculum. This scenario offers Coast Guard Investigators the opportunity to consider the unique investigation considerations associated with parasail operations.

Since this incident occurred, parasailing fatalities and injuries have declined. The Coast Guard will continue to monitor parasail safety and encourage the combined efforts of stakeholders to improve safety.

Through safety initiatives in public education and outreach, established ASTM standards, and continued partnership with WSIA and ASTM representatives, it is clear that the intent of these recommendations has been addressed as is evidenced through the downward trends in casualties. The closure of this case will allow the Coast Guard to share it and any third party safety recommendations with our parasailing industry partners to further strengthen safety measures within the parasailing industry.

This report, along with similar parasailing cases, will be posted and available to the public on the DCO website here:

https://www.dco.uscg.mil/Our-Organization/Assistant-Commandant-for-Prevention-Policy-CG-5P/Inspections-Compliance-CG-5PC-/Office-of-Investigations-Casualty-Analysis/Marine-Casualty-Reports/.

J. D. NEUBAUER

Captain, U.S. Coast Guard Acting Director of Inspections and Compliance



Commander United States Coast Guard Sector Honolulu

400 Sand Island Parkway Honolulu, HI 96819 Phone: (808) 873-3105 Fax: (808) 873-3106

16732/12-050 April 16, 2012

### **MEMORANDUM**

Apr 26, 2012 From:

**Investigating Officer** 

CG Sector Honolulu (s) To:

CG Sector Honolulu (sp) Thru:

APR30 2012

Subj: PARASAILING ACCIDENT INVOLVING LOSS OF LIFE AND INJURY

ONBOARD M/V X-TREME ON JANUARY 29, 2012

### **Preliminary Statement:**

On January 29, 2012 an informal investigation was initiated into a parasailing accident resulting in the death of one passenger and injury of another which required medical treatment beyond first aid. Sector Honolulu assumed the Lead Investigative Role in the incident and Mr. Assistant Senior Investigating Officer was assigned as the Lead Investigating Officer. During the course of this investigation, facts were gathered and evidence collected, in order to ascertain causal factors leading up to the initiating and subsequent events. Analysis has been conducted as thoroughly as possible in order to draw conclusions in accordance with the above references. All times contained in this Report of Investigation are approximate and referenced in Hawaii Standard Time. All evidence, correspondence, and testimony gathered during the investigation were used to create this report and are included in the Coast Guard's electronic database Marine Information for Safety and Law Enforcement (MISLE) Incident Investigation Activity number 4234506.

#### **Executive Summary:**

On January 29, 2012, at approximately 11:20 AM the M/V X-TREME (O.N. 1153017) was in the vicinity of Honolulu Harbor Entrance Lighted Buoy H "Hotel" buoy (U.S. Light List Number 29175) conducting parasail operations.

were the first flyers of that run and were Mr. Jack Banaszynski and Mr. launched without complication. The flight lasted approximately 12 minutes. During their recovery, just as they landed onboard the M/V X-TREME, the parasail towing line parted in way of the bowline knot connecting the parasail to the vessel, causing Mr. Banaszynski and Mr. to be violently blown off the vessel's stern deck. Mr. Banaszynski and Mr. were dragged through and skipped across the water by the now un-tethered parasail approximately 1,000 feet before the M/V X TREME chased them down. During the chase Mr. Banaszynski's inboard harness clip detached and he became inverted, hanging head down with his feet near Mr. and his face submerged underwater.

### Subj: PARASAILING ACCIDENT INVOLVING LOSS OF LIFE AND INJURY ONBOARD M/V X-TREME ON JANUARY 29, 2012

Captain of M/V X-TREME made several attempts to recover Mr.
Banaszynski and Mr. parasail by coming close aboard the moving parasail and
attempting to collapse the parasail. His final approach allowed his deckhand, Mr.
grab the parasail lines with a detachable grappling hook (flying gaff), thereby collapsing the
parasail and attaching the flying gaff to the starboard bow cleat of M/V X-TREME. Immediately
after this, Mr. entered the water and freed the unconscious Mr. Banaszynski from his
harness and the surrounding parasail lines. He swam him to the stern deck of the M/V X-
TREME. Simultaneously, the M/V LUCKY LADY (O.N. 1099159), another parasailing vessel
in the area that had seen the incident, arrived on-scene to render assistance, and their deckhand
Mr. entered the water and assisted Mr. in getting Mr. Banaszynski
onboard the M/V X-TREME. Mr. then returned to the collapsed parasail, recovered Mr.
and brought him onboard.
Once Mr. Banaszynski and Mr. were aboard M/V X-TREME, Captain
and Mr. determined Mr. Banaszynski was unconscious and not breathing. They then
began administering rescue breathing and cardio-pulmonary resuscitation (CPR). Mr. and Mrs.
passengers on the M/V X-TREME, administered first aid to Mr. who they
determined was suffering from shock.
Mr. cut the parasail away from the M/V X-TREME and piloted the M/V X-TREME
back to Kewalo Basin, Honolulu. Just as the M/V X-TREME entered Kewalo Basin, Captain
was relieved from CPR duties by Mr. and assumed command of the vessel.
Upon arrival to Fisherman's Wharf at Kewalo Basin, the vessel transferred Mr. Banaszynski and
Mr. to the Honolulu Emergency Medical Service (EMS), who transported them to
Straub Hospital. Subsequently, Mr. Banaszynski died of his injuries at the hospital.
An autopsy was performed on February 6, 2012 at the City of Honolulu Medical Examiner's
Facility. The cause of death was Hypoxic Encephalopathy, due to, or as a consequence of:
drowning, due to, or as a consequence of: parasailing accident. The Medical Examiners (ME)
report numbered 12-0186-BANASZYNSKI-Jack was signed by Dr. the ME on call on
March 21, 2012.

### Location:

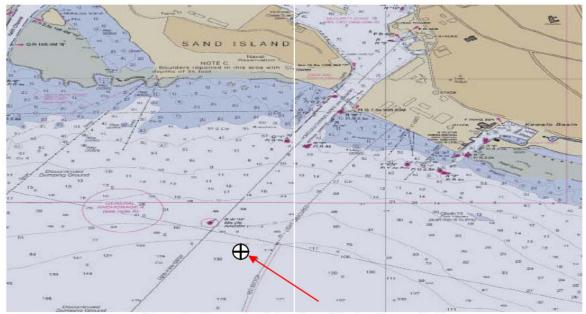


Figure 1: (Approximate location of the towline parting)

The incident happened in Mamala Bay, South East of Honolulu, Hawaii, near the "H" Buoy at the approximate location of 21° 16.789' N, 157 ° 52.211' W.

### Vessel Data:



Figure 2: (Photograph of M/V X-TREME moored in Kewalo Basin)

### Subj: PARASAILING ACCIDENT INVOLVING LOSS OF LIFE AND INJURY ONBOARD M/V X-TREME ON JANUARY 29, 2012

16732/12-050 April 16, 2012

Vessel Name: X-TREME
Flag: United States
Vessel Identification Number: 1153017
Call Sign: WDB8525
Status: Undamaged

Role: Involved in a Marine Casualty

Vessel Class, Type, Sub-Type: Passenger Ship, Parasailing Vessel, General

(More Than 6)

Gross Tonnage(GRT): 13
Net Tonnage(NRT): 10
Length: 31

Home/Hailing Port: Honolulu, Hawaii

Delivery Date: 05/27/2004

Place of Construction: Clermont, NJ, United States
Builder Name: Commercial Water Sports Inc

Propulsion: Diesel Stern Outdrive

Horsepower: Single Diesel Reduction 420

Owner: X-Treme Parasail Inc

1085 Ala Moana Blvd. Suite #110

Honolulu, HI, 96814 28 mph (calm waters)

Maximum Speed 28 mph (calm waters)
Inspection Subchapter: 46 CFR Subchapter T

Most Recent Vessel Inspection Activity: 4219877, 01/06/2012 7:47:00 AM - Annual Current Certificate of Inspection: Issued on 10/14/2008 12:28:18 PM, by Sector

Honolulu



Figure 3: (Photograph of M/V LUCKY LADY previously named the CLASSY BUM)

### Subj: PARASAILING ACCIDENT INVOLVING LOSS OF LIFE AND INJURY ONBOARD M/V X-TREME ON JANUARY 29, 2012

16732/12-050 April 16, 2012

Vessel Name: **LUCKY LADY** Flag: **United States** Vessel Identification Number: 1099159 WDB9421 Call Sign: Status: Undamaged

Role: Transiting Vicinity of Primary Subject Vessel Class, Type, Sub-Type: Passenger Ship, Parasailing Vessel, General

(More Than 6)

Gross Tonnage(GRT): 13 Net Tonnage(NRT): 10 Length: 31

Home/Hailing Port: Honolulu, Hawaii

Place of Construction: Clermont, NJ, United States

Delivery Date: 06/09/2000

Place of Construction: Lake Havasu City, AZ, United States

Builder Name: **Commercial Water Sports** 

Propulsion: Diesel Horsepower: 296

Owner: Hawaiian Parasail Inc

1085 Ala Moana Blvd #101

Honolulu, Hi, 96814

Inspection Subchapter:

Most Recent Vessel Inspection Activity: 4175830, 10/25/2011 10:29:00 AM - Annual Current Certificate of Inspection:

Issued on 09/03/2010 1:57:42 PM, by Sector

Honolulu

### **Personnel Data:**

DECEASED PASSENGER	AGE	ROLE	CAUSE OF DEATH
Banaszynski, Jack		Passenger	Drowning

INJURED PASSENGER	AGE	ROLE	INJURY TYPE
		Passenger	Contusions

OTHER PASSENGERS	AGE	ROLE
		Passenger

M/V X-TREME CREW	PARASAILING EXPERIENCE	TIME WITH COMPANY
(master)	26 years	2 years
(deckhand – unlicensed)	9 years	9 years

M/V LUCKY LADY CREW	PARASAILING EXPERIENCE	TIME WITH COMPANY
(master)	9 years	6 years
(crewmember – unlicensed)	9 years	9 years

PERSONNEL INVOLVED	ALCOHOL TEST RESULTS	DRUG TEST RESULTS

### **Findings of Fact:**

- 1. The U.S. does not have any regulations that govern a commercial parasail vessel's parasail winch, towline, associated parasail equipment or the parasail itself.
- 2. The State of Hawaii does not have any regulations that govern a commercial parasail vessel's parasail winch, towline, associated parasail equipment or the parasail itself.
- 3. The M/V X-TREME (O.N. 1153017) is an inspected Small Passenger Vessel owned by X-TREME Parasail, Inc. and is inspected under 46 CFR Subchapter T, which does not include any parasailing equipment or winch system regulations.
- 4. Coast Guard Sector Honolulu, District Fourteen Prevention and the Office of Investigations and Analysis issued four separate Marine Safety Informational Bulletins or Safety Alerts connected to Parasail safety. These bulletins and alerts were communicated to the Hawaii Parasailing community through e-mails and handouts during the last few years and specifically during the September 2011 Honolulu Parasailing Industry Forum.
- 5. M/V X-TREME was designed and constructed by Commercial Water Sports in Clermont, NJ, United States.
- 6. M/V X-TREME a 31-foot parasailing vessel was purchased from Commercial Water Sports by X-TREME Parasail Inc. and was delivered in April 27, 2004. Included in the original delivery were the following manufacturer's documents to aid the purchaser in developing a safe parasailing operation: Guidelines and Maintenance documents for the Ocean Pro 31, Commercial Water Sports Guidelines for Ocean Pro 31, and Canopy Inflation with T-Bar or Inflation Arch, Instruction (training) program, Commercial Water Sports Inc. By Laws, Parasail Activities (roles and responsibilities), Parasailing Emergency Rescue Plan, Daily Operational Pre and Post Checklist, General Maintenance Schedule (Daily), Maintenance Log, CWS Instructional Program and Operations Policies/Captain.
- 7. On June 25, 2004 The Coast Guard issued the initial Certificate of Inspection (COI) to the M/V XTREME and the vessel was placed into Small Passenger Vessel service.

- 8. On September 13, 2011 Sector Honolulu, in conjunction with District Fourteen Prevention, held a Parasailing Industry Day forum that focused on parasailing safety. The Owner, Mr. and Captain of X-TREME Parasailing Inc. were in attendance. The Coast Guard presentations included marine casualties, reporting requirements, Coast Guard recommended Self-Assessment Check List, a panel discussion and the National Weather Service presentation on local weather trends, hazards, and reporting sources.
- 9. On January 06, 2012, Sector Honolulu Marine Inspector conducted an annual COI inspection for M/V X-TREME. No deficiencies of Coast Guard inspected systems and equipment were noted.



Figure 3: Parasail towline used on the M/V X-TREME on the day of the incident

- 10. The towline onboard the M/V X-TREME O.N. 1153017 at the time of the incident was Yale Cordage 7/16", yellow "Double Esterlon" double braided nylon line. Custom Chutes, Inc had purchased the towline from Sea Gear Marine, a distributer for Yale Cordage and sold it to X-TREME Parasail Inc. on March 15, 2011. X-TREME Parasail Inc placed the towline into service on May 10, 2011.
- 11. Advertising literature supplied by Yale Cordage in September 2009, (Industrial Catalog 8<sup>th</sup> Edition) indicated the rope is designed for industrial use and offers low stretch, high strength, and an excellent wear life. According to the literature, the line has an average and a minimum breaking strength of 7,600 pounds and 6,840 pounds, respectively, and has a

recommended safe working load of 1,900 pounds. The working load is based on safety factors associated with static or moderately dynamic lifting/pulling operations. "Instantaneous changes in load, up or down, in excess of 10% of line's rated working load constitutes hazardous shock load and voids normal working load recommendations."

- 12. The parasail being used at the time of the incident was a Bird's Parasail Australia Trivent 34-foot parasail, manufactured in November 2009. The parasail was purchased through Bird's Parasail Australia and shipped on March 15, 2011. The parasail and all associated rigging sank in deep waters at approximately 21° 16.545' N, 157 ° 52.758' W in the vicinity of Honolulu Harbor H buoy and were not recovered.
- 13. The passenger bar was purchased from Custom Chutes Inc. The passenger bar hooks into the parasail yoke and the passenger harnesses clip into the bar straps, hanging below the bar during flight. The passenger bar was not recovered after it was cut away from the M/V X-TREME and sank in deep water. The majority of the towline spooled on the winch, passenger harnesses and the bitter end of the parted line was available for inspection.

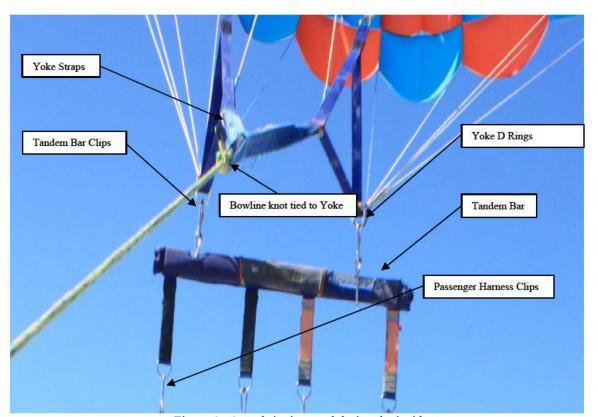


Figure 4: Actual rigging used during the incident.

14. Sector Honolulu reviewed COMDTINST 16732.1 Underwater Search, Discovery, Inspection, and Salvage in Marine Casualty Investigations. After lengthy discussions with local salvage experts it was determined that the recovery of the lost equipment was not feasible based on the considerable cost associated with the search and that recovery was very unlikely.

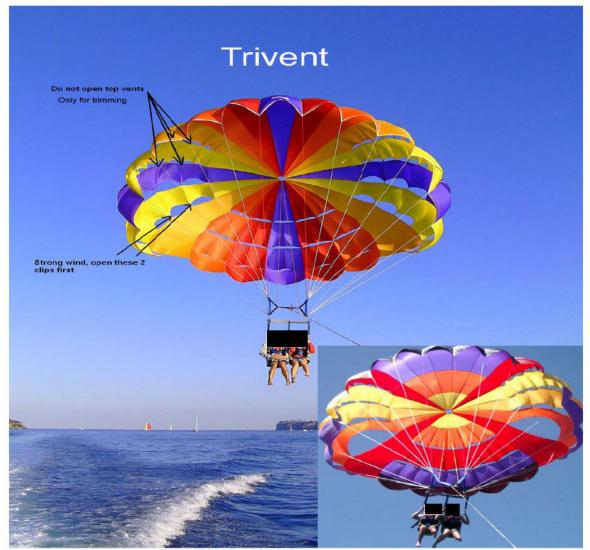


Figure 5: Design elements of a parasail.

15. The passenger harnesses were both manufactured by Custom Chutes Inc. The passenger harnesses have two leg openings and a padded back rest and seat. When worn correctly, passengers sit in the harness, with feet hanging below them, during flight. Both passenger harnesses were recovered after the incident, with no equipment failures identified. However, investigators determined that the X-TREME crew attached the harnesses to the passenger bar with clip openings facing toward the stern of the boat. This way of attaching the clips creates the potential that, in the event of passengers being dragged backwards through the water, the resultant force of the water that is applied to the clips might open them.



Figure 6: Picture of M/V X-TREME triple bar similar to the tandem bar that was lost.

16. All parasailing machinery appeared to be operating properly. The M/V X-TREME parasailing winch drum was built by Mark I Industries and is made of heavy duty, stainless steel parts, equipped to handle 1,000 feet of 7/16-inch towline.

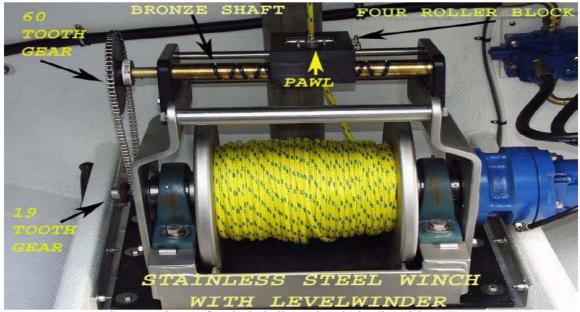


Figure 7: Picture of a winch similar to the winch onboard the M/V X-TREME.

17. The winch drum is operated by a hydraulic motor, which is driven by the engine through a clutch and a power take-off (PTO) unit. The system has a hand operated control level located at the vessel's helm. Van Air and Hydraulics supplied Commercial Water Sports several significant components used in the hydraulic system. Installation of the winch system was completed by Commercial Water Sports. There are no recognized industry standards or regulations for designing, building, operating, maintaining or inspecting a parasail winch system onboard Coast Guard inspected small passenger vessels.

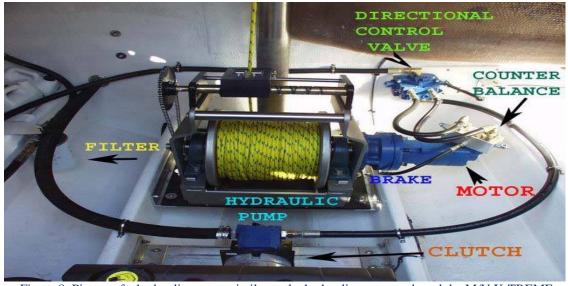


Figure 8: Picture of a hydraulic system similar to the hydraulic system onboard the M/V X-TREME.

- 18. The onboard hydraulic winch system is fitted with a 3,000 pounds PSI relief setting. When this relief pressure is reached, hydraulics system will re-circulate fluid, preventing a hydraulic line failure, winch overload, or free spooling of the towline and freezing the movement of the towline until the pressure is within operating parameters.
- 19. A towline tri-roller head onboard the M/V X-TREME was mounted on the vessel's tow post. The tri-roller head consists of a two and a half inch diameter swivel mount, equipped with bearings, two vertical rollers on each side, one horizontal roller and a safety mechanism called a knot breaker at the bottom of the line guide. The roller is capable of swiveling from left to right at approximately 180 degrees as passengers are in flight.

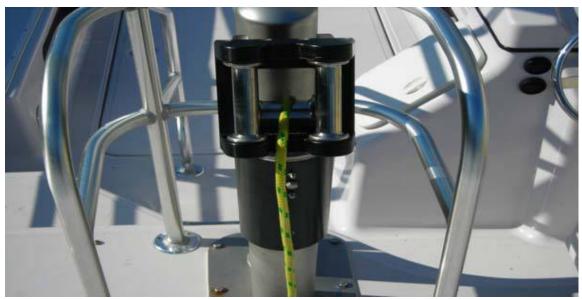


Figure 9: Picture of a Tri-roller head similar to the tri-roller head onboard the M/V X-TREME.

- 20. Passengers stated it was windy and gusty when the vessel left the docks.
- 21. National Weather Service Small Craft Advisory PHZ115-300215 was in effect, issued at 03:30 AM Hawaii Standard Time, Oahu Leeward Waters:
  - "...SMALL CRAFT ADVISORY IN EFFECT THROUGH LATE THIS AFTERNOON...
    TODAY EAST WINDS 20 KNOTS. WIND WAVES 7FT. NORTHWEST SWELL 8 FT.
    ISOLATED SHOWERS IN THE MORNING".
- 22. Based on witness statements and evidence gathered during the investigation, the following is an approximation of the observed weather conditions from Honolulu International Airport which is in close proximity to the incident location. The observations denote different time periods leading up to and immediately following the incident:

### HONOLULU INTERNATIONAL AIRPORT OBSERVATIONS

Climatological Report for January 29, 2012 (daily)

Highest Wind Speed 25 mph/21.7 Knots Highest Wind Direction E (70)

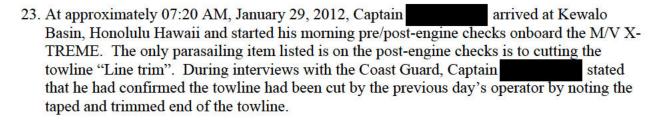
Highest Gust Speed 33 mph/28.6 Knots Highest Gust Direction E (70)

Average Wind Speed 15.4 mph/13.3 Knots

HAWAII STANDARD TIME	SUSTAINS WINDS	GUSTS
07:53	East at 22 mph/19.1 Knots	East 26 mph/22.5 Knots
08:53	East at 10 mph/8.6 Knots	No data Available
09:53	East at 15 mph/13.0 Knots	East 24 mph/20.8 Knots
10:53	East at 21 mph/18.2 Knots	East 28 mph/24.3 Knots
11:53	East at 18 mph/15.6 Knots	East 28 mph/24.3 Knots
12:53	East at 23 mph/19.9 Knots	East 30 mph/26.0 Knots



Figure 10: Map depicting closest weather station and incident location.



After completing his pre-engine check, he called NOAA's general weather phone number and listened to the daily weather report. He also observed the weather conditions at the pier. Captain described the conditions as "holey" winds, his term for periods of slack during steady winds. NOAA weather observation at Honolulu International Airport reported east winds at 22 mph (19.1 knots) with gusts to 26 mph (22.5 knots).

- 24. At approximately 07:40 AM, deckhand Mr.

  Hawaii and began assisting Captain

  His duties included obtaining Captain

  Stated they initially set up a larger parasail but changed it due to wind conditions. Captain

  Stated the only set up the 34-foot parasail that day.
- 25. At approximately 07:50 AM, Captain piloted M/V X-TREME from its mooring dock to the loading dock in Kewalo Basin to commence loading the first passengers. Captain conducted parasailing operations during the hours from 08:00 AM till 11:00 AM without incident. During the course of those earlier parasailing flights Captain started with the 34-foot Trivent parasail with one set of parasail vents open. As the wind increased, he stated that he opened the remaining vents to lessen the effects of the winds on the parasail.

### Subj: PARASAILING ACCIDENT INVOLVING LOSS OF LIFE AND INJURY ONBOARD M/V X-TREME ON JANUARY 29, 2012

26.	During the same time frame Captain of the M/V LUCKY LADY of Hawaiian Parasailing Inc. was conducting parasailing operations in the same general area and operating a similar vessel (Ocean Pro 31) to M/V X-TREME. Captain stated that he had been using the same Bird's Parasail Australia Trivent 34-foot parasail that Captain was using but he had to switch to a 31-foot parasail because his vessel was being dragged backwards quickly due to winds while using the 34-foot parasail.
27.	At approximately 11:00 AM, M/V X-TREME arrived back at the loading dock in Kewalo Basin with the 10:00 AM passengers. Captain and his deckhand offloaded the passengers and commenced loading the 11:00 AM passengers, who had checked in earlier at the X-TREME Parasail dockside kiosk and signed the X-TREME Parasail Inc. liability waiver form. Captain took a bathroom break, which resulted in the vessel's departure being delayed until approximately 11:10 AM.
	One of the 11:00 AM, passengers, Ms. observed that the towline lying on deck near the operating station and next to the rigged parasail looked dirty and fuzzy as she boarded the M/V X-TREME.
28.	At approximately 11:10 AM, Captain got the M/V X-TREME underway enroute to the company's parasail flying area with six passengers onboard. During the transit out of Kewalo Basin, Mr. handed out life jackets to all passengers. Once all of the passengers were in the life jackets, he handed out five parasailing harnesses and assisted each person into them, leaving one passenger without a harness. As Mr. helped each passenger into their harness, he instructed them in the proper way to adjust the harness to fit, particularly the leg straps, to avoid the straps from riding up into the groin. He told the passengers to ride the parasail harness like a swing and to hang on to the tandem passenger bar strap.
	The transit out to the operating area took approximately 10 minutes, during the course of that transit Captain and the Mr. did not give a passenger safety orientation briefing as required by 46 CFR 185.506. Additionally, they did not give a parasailing briefing that outlined what to do in case of emergencies.
29.	At approximately 11:15 AM, passengers recall Captain commenting that the bay waters were choppy because the wind was a "bit gusty today, but not so much that it will be a hazard" and that it was "especially windy".
30.	At approximately 11:20 AM, M/V X-TREME arrived at the Company's parasailing operating area just beyond of Hotel Buoy, Honolulu Harbor. Captain turned the vessel into the wind and Mr. deployed ("inflated") the parasail. Once the crew had the parasail inflated, Mr. directed Mr. Banaszynski and Mr. to move to the rear of the vessel. He then clipped Mr. Banaszynski to the starboard side of the tandem passenger bar strap, Mr. to the portside. Because Mr. Banaszynski had an injured knee, Mr. helped him to the launching station on the vessel's stern.



Figure 11: Picture of Mr. Banaszynski and Mr. being launched.

Captain paid out approximately 800 feet of line. Mr. Banaszynski and Mr. reached a height of approximately 200 to 300 feet. While at the peak of their flight, passengers and Mr. commented that the parasail was being buffeted by winds and the parasail was being rocked back and forth. During the retrieval leg of the flight Captain stopped the vessel and winch and dipped the flyers' feet in the water. Photographs of the flight taken by the deckhand show wind chop and white caps in the vicinity of their operation. The winds were consistent with Beaufort scale rating of #5 moderate to fresh breezes with winds speed of 17 to 21 knots.

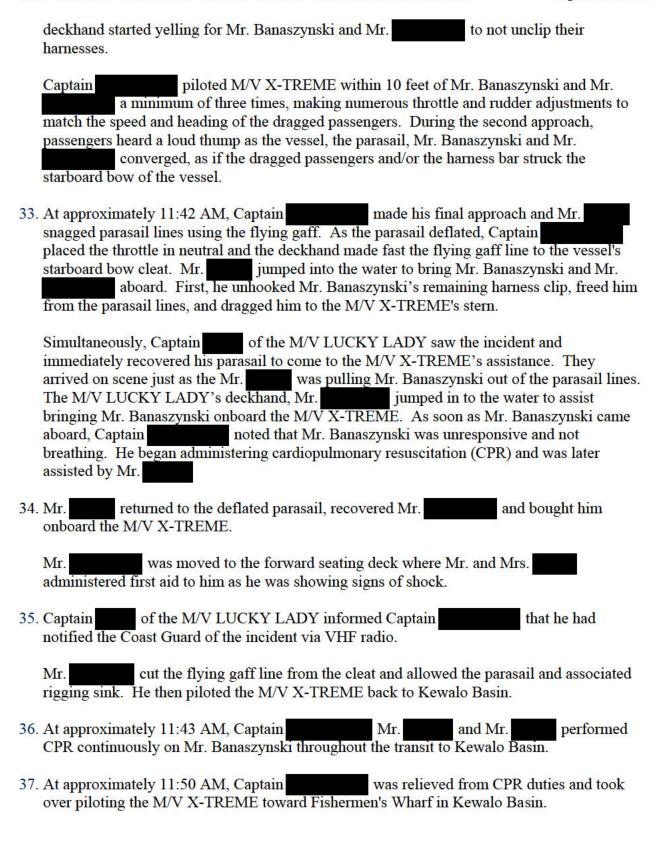


Figure 12: Picture from M/V X-TREME minutes before the towline parting.

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	Captain and Mr. stated that a normal ride lasted 6 to 7 minutes. Mr. Banaszynski and Mr. ride lasted over 12 minutes based on the time stamps of pictures taken by M/V X-TREME's crew.
	Mr. took approximately 51 pictures of Mr. Banaszynski and Mr. flight, an average of one photo every 14 seconds. Photos show the starboard yoke displaying signs of excessive wear and broken stands. The towline also appears to have some reduced circumference due to wear ("necking") adjacent to the bowline.
31.	At approximately 11:32 AM, Captain commenced recovery of Mr. Banaszynski and Mr. heading into the wind at approximately 6 mph (5.2 knots). Based on Captain account of the vessel's actual forward movement and NOAA weather observations at the time of the parting, winds were approximately 21 mph (18.2 knots). Therefore, apparent (relative) wind speed onboard was approximately 27 mph (23.4 knots).
	As Mr. Banaszynski and Mr. approached the stern deck, Captain used both, throttles and winch control, to ensure a safe landing on the deck. Captain held the riders just off the stern and adjusted throttle to make sure safe winds existed to land them on the deck. As Captain maneuvered the passengers close to the vessel's stern, Mr. moved in front of Mr. Banaszynski to help him guide his injured leg to deck. Passengers noted that the crew appeared to be having a hard time landing the flyers.
	Just as Mr. Banaszynski and Mr. landed and as Mr. was preparing to unclip Mr. Banaszynski, passengers noted a wind gust and the parasail towline parted near the tandem harness bar attachment. Captain and Mr. heard a pop near the hawser tube leading the towline to the winch below deck and realized the towline had parted near the bowline knot that connected the towline to the yoke straps.
32.	At approximately 11:32 AM, January 29, 2012, the un-tethered parasail violently dragged Mr. Banaszynski and Mr. behind the stern of M/V X-TREME. They landed approximately 100 feet from the stern and as the wind refilled the parasail they quickly began to be dragged and skipped towards the southwest.
	Captain Captain Mr. and all passengers seated onboard saw Mr. Banaszynski and Mr. struggling as the parasail dragged them backwards across the water's surface. Captain saw Mr. grabbing the harness straps near the harness clips but could not see Mr. Banaszynski clearly.
	Based on witness statement and interviews from the passengers and the crew, early in the chase, Mr. Banaszynski's inboard harness clip disconnected from the harness bar. He immediately inverted into a face-down position and, according to one passenger, "was being tossed around like a rag doll". At approximately the same time Captain and the

### Subj: PARASAILING ACCIDENT INVOLVING LOSS OF LIFE AND INJURY ONBOARD M/V X-TREME ON JANUARY 29, 2012



### Subj: PARASAILING ACCIDENT INVOLVING LOSS OF LIFE AND INJURY ONBOARD M/V X-TREME ON JANUARY 29, 2012

- 38. At approximately 11:53 AM, the M/V X-TREME moored at Fishermen's Wharf, Kewalo Basin in Honolulu, Hawaii.
- 39. At approximately 12:03 PM, Honolulu EMS arrived at M/V X-TREME, CPR continued as EMS assessed the incident. Mr. Banaszynski and Mr. were transferred to EMS, who then transported them to Straub Hospital.
- 40. At approximately 02:25 PM Captain and deckhand Mr. submitted to post serious marine incident chemical testing with All Islands On-Site Drug and Alcohol Testing. During the testing Captain an off duty master for X-Treme Parasail Inc. arrived and aided the Coast Guard Investigator in gathering evidence. He was directed to provide 100 feet of the failed towline. When the Coast Guard Investigator returned to Sector Honolulu he noted that the parted end had been removed. The Coast Guard investigator subsequently contacted the owner and had the parted end recovered from the trash.
- 41. X-TREME Parasail Inc. provides no training or guidance either in writing or verbally as it relates to parasailing equipment, operating parameters, weather, or inspection of parasailing equipment. According to the owner, Mr. and supported by the vessel's crew, the Company hires only experienced captains and crew, with the implication that such experience translates into knowing what to do without specific Company guidance. The owner conducts new hire "check rides" with each new captain as a condition of employment. The M/V X-TREME's crew was unable to describe any manufacturers' specifications connected to any of the parasailing equipment. The captains were not aware that the Bird's Parasail Australia Trivent 34-foot parasail had manufacturer operating limitations even though it clearly marked on the parasail storage bag they utilized daily to store and retrieve the parasail.
- 42. During the investigation, X-TREME Parasail Inc. was unable to provide any manufacturers' manuals or reference materials for their parasailing equipment.
- 43. Maintenance logs produced by X-TREME Parasail Inc. were not consistent with the boat builder's recommendations for daily, weekly or monthly maintenance. Log entries consisted almost entirely of repairs to broken equipment rather than completion of preventative maintenance. X-TREME Parasail Inc. employees did not consistently complete employer's prescribed daily operations checklist. Several discrepancies were noted by crewmembers; however, there are no documentary records indicating any actions that may have been taken to remedy the issues.
- 44. X-TREME Parasail Inc. did not keep records of the replacement of parasailing equipment other than new purchase invoices. X-TREME Parasail Inc. did have a single record showing the date the towline entered service onboard the vessel, but had no methods for recording the flights and load cycles on the towline. They have no written policies for scheduled replacement of the towlines and rely solely on the crews' observations. The same is true for the parasails.

- 45. X-TREME Parasail Inc. had invoices for the purchase of parasails however, the installation dates, the amount of equipment usage (flight cycles) and which vessels they had been flown on is not recorded.
- 46. X-TREME Parasail Inc. has limited written or verbal policy for the cutting the bitter end of the parasail towline. However, their vessel captains are cutting the line at their own discretion; for the most part they logged the cutting in the daily operations checklist but do not keep cut portions for further inspection. During interviews the captains and crewmembers contradicted one another by stating different cutting lengths ranging from 2-3 inches to 1 foot from the knot and that X-TREME Parasail Inc. requires them to cut the line daily.
- 47. X-TREME Parasail Inc. has no written or verbal policy or a standard method of monitoring weather. During interviews with the M/V X-TREME's Captain stated that he called a general NOAA weather phone number and observed conditions while operating. The X-TREME Parasail Inc. owner stated that the captains make the call on weather; he has no guidance for maximum wind conditions and has not provided the captains with parasail manufacturers' recommended wind limitations. The owner stated that they were senior captains and some have various smart phone applications or they could look up weather on the office computer. The X-TREME Parasail Inc. owner leaves the decision solely on the captain's to monitor weather before and during operations.
- 48. The X-TREME Parasail Inc. owner had previously been a member of the Professional Association of Parasail Operators (PAPO) in the early 2000's, but let the association with PAPO lapse and has not become a member of any other industry organization. X-TREME Parasail Inc. has one written policy for general duties of the captains and provides no other guidance to its employees.
- 49. The X-TREME Parasail Inc. owner failed to provide any records of abandon ship/man overboard or fire fighting drills as per 46 CFR 185.520 and 46 CFR 185.524 respectively. He also failed to provide any records of crew training as per 46 CFR 185.420.
- 50. The Coast Guard does not officially endorse PAPO or its Operating Standards and Guidelines (OSAG); however, the Coast Guard has referred to the organization in literature, industry outreach events and recommends adherence to its standards and guidelines as best practices.
- 51. On February 3, 2012, Mr. Banaszynski was taken off life support and died from injuries resulting from the incident.
- 52. On February 6, 2012 an autopsy was performed on the deceased by Dr. at City of Honolulu Medical Examiner's Facility. The cause of death was determined to be Hypoxic Encephalopathy due to, or as a consequence of drowning, due to, or a consequence of parasailing accident.

Subj: PARASAILING ACCIDENT INVOLVING LOSS OF LIFE	
AND INITIRY ONBOARD M/V X-TREME ON IANIIARY 29 2012	

both

55. Captain	and Mr.	work/Rest Histories showed both crew members had
adequate rest o	ver the 96 hour per	riod prior to the incident.
54. Captain	and Mr.	post serious marine incident chemical testing were

#### **Analysis:**

#### Weather:

The investigation garnered weather data from The National Weather Service including weather forecast for Hawaii islands and Oahu (specific) observation from Honolulu International Airport.

On Friday, the National Weather Service issued a Generalized Statewide Coastal Waters Forecast for Hawaii message at 331 PM HST FRI Jan 27 2012:

GENERALIZED STATEWIDE COASTAL WATERS FORECAST FOR HAWAII NATIONAL WEATHER SERVICE HONOLULU HI 331 PM HST FRI JAN 27 2012 .SYNOPSIS FOR HAWAIIAN COASTAL WATERS... A WEAKENING FRONT WILL DISSIPATE NEAR OAHU. TRADE WINDS WILL RETURN FOR THE WEEKEND AS HIGH PRESSURE STRENGTHENS NORTH OF THE ISLANDS. \$\$ HAWAIIAN WATERS WITHIN 40 NAUTICAL MILES INCLUDING THE CHANNELS-... SMALL CRAFT ADVISORY FROM LATE FRIDAY NIGHT THROUGH SUNDAY AFTERNOON FOR WATERS AROUND KAUAI...KAUAI CHANNEL...WATERS AROUND OAHU...KAIWI CHANNEL...MAUI COUNTY WINDWARD WATERS...PAILOLO CHANNEL...ALENUIHAHA CHANNEL AND BIG ISLAND WINDWARD WATERS... .TONIGHT...EAST WINDS 10 TO 20 KT. WIND WAVES 3 TO 6 FT. NORTHWEST SWELL 3 FT INCREASING TO 10 FT LATE IN THE NIGHT. SWELL NORTH 4 FT. SCATTERED SHOWERS. .SATURDAY...EAST WINDS 15 TO 20 KT. WIND WAVES 4 TO 8 FT. NORTHWEST SWELL 11 FT AND NORTH 3 FT. SCATTERED SHOWERS. .SATURDAY NIGHT...EAST WINDS 25 KT ALENUIHAHA CHANNEL...EAST 15 TO 20 KT ELSEWHERE. WIND WAVES 5 TO 11 FT. NORTHWEST SWELL 8 FT. SCATTERED SHOWERS. .SUNDAY...NORTHEAST WINDS 25 KT ALENUIHAHA CHANNEL...EAST 15 TO 20 KT ELSEWHERE. WIND WAVES 6 TO 13 FT. NORTHWEST SWELL 7 FT. ISOLATED SHOWERS. .SUNDAY NIGHT...EAST WINDS 20 TO 25 KT. WIND WAVES 6 TO 11 FT. NORTHWEST SWELL 7 FT. ISOLATED SHOWERS. .MONDAY...EAST WINDS 20 TO 25 KT. WIND WAVES 6 TO 11 FT. NORTHWEST SWELL 10 FT. ISOLATED SHOWERS. .MONDAY NIGHT...EAST WINDS 15 TO 20 KT. WIND WAVES 5 TO 9 FT. NORTHWEST SWELL 11 FT. ISOLATED SHOWERS. .TUESDAY...EAST WINDS 15 TO 20 KT. WIND WAVES 4 TO 8 FT. NORTHWEST SWELL 10 TO 11 FT. .WEDNESDAY...EAST WINDS 15 TO 25 KT. WIND WAVES 6 TO 11 FT. NORTHWEST SWELL 7 FT. \$\$

On Sunday, the National Weather Service issued an Oahu Leeward Waters message PHZ115-300215 at 330AM HST Sun Jan 29 2012

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PHZ115-300215-
OAHU LEEWARD WATERS-
330 AM HST SUN JAN 29 2012
... SMALL CRAFT ADVISORY IN EFFECT THROUGH LATE THIS AFTERNOON...
.TODAY...EAST WINDS 20 KT. WIND WAVES 7 FT. NORTHWEST SWELL 8 FT.
ISOLATED SHOWERS IN THE MORNING.
.TONIGHT...NORTHEAST WINDS 20 KT. WIND WAVES 8 FT. NORTHWEST
SWELL 5 FT.
.MONDAY...EAST WINDS 20 KT. WIND WAVES 7 FT. NORTHWEST SWELL
.MONDAY NIGHT...EAST WINDS 20 KT. WIND WAVES 6 FT. NORTHWEST
SWELL 10 FT.
.TUESDAY...EAST WINDS 15 KT. WIND WAVES 6 FT. NORTHWEST SWELL
9 FT.
.TUESDAY NIGHT...NORTHEAST WINDS 15 KT. WIND WAVES 6 FT.
NORTHWEST SWELL 8 FT.
.WEDNESDAY...NORTHEAST WINDS 15 KT. WIND WAVES 6 TO 7 FT.
NORTHWEST SWELL 8 FT.
.THURSDAY...NORTHEAST WINDS 15 KT. WIND WAVES 6 TO 7 FT.
NORTHWEST SWELL 6 TO 7 FT. SCATTERED SHOWERS.
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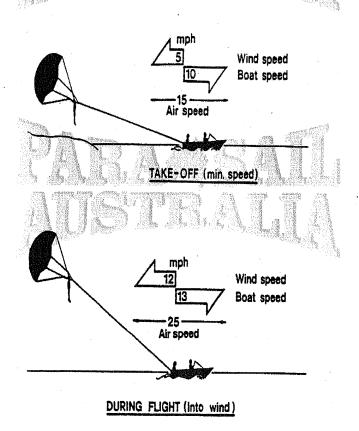
In addition to the forecast weather messages the investigation obtained detailed weather observation data from the Honolulu International Airport weather observation station. The observation location is approximate 2.9 miles North West from the general position of where the incident occurred.

STATION INFO	Tabular Li	sting Jan	uary 29	. 2012 - 0	:00 throu	gh Ja	nuary	30, 201	2 - 00:	00 HST	•				
AE: Honolulu International	Time(HST)	[emperatu	re Dew	Wet Bulb	Relative	Wind	Wind	Wind	Quality	Pressure	Sea	Altimeter	1500 m	Weather	Visibility
ort		_	Point?	emperature	Humidity	Speed	Gust I	Direction	check		level pressure		Pressure	conditions	
TTUDE: 21.32750 IGITUDE: -157.94306		° F	°F	°F	96	mph	mph			in	in	in	in		miles
VATION: 10 ft ET: NWS/FAA	23:53	72.0	64.9	67.3	79	12		NE	<u>ok</u>	30.13	30.14	30.14	25.15	partly cloudy	10.00
D COVER: Avail for CONUS only	22:53	72.0	66.0	68.0	82	14		ENE	<u>ok</u>	30.15	30.15	30.16	25.17	partly cloudy	10.00
A COURTESY OF:	21:53	73.0	64.9	67.6	76	18	24	E	OK	30.15	30.16	30.16	25.17	It rain	10.00
Find us on	20:53	72.0	66.0	68.0	82	10		NE	OK	30 14	30.15	30 15	25 16	partly cloudy	10.00
Facebook	19:53	73.9	64.9	67.9	74	14		ENE	<u>OK</u>	30.13	30.14	30.14	25.15	mostly clear	10.00
OTHER DISPLAYS  XML RSS	18:53	73.9	64.0	67.3	71	17	28	ENE	<u>ok</u>	30.11	30.11	30.12	25.14	partly	10.00
	17:53	75.9	63.0	67.3	64	22	26	ENE	OK	30.10	30.11	30.11	25.13	partly	10.00
	16:53	77.0	62.6	67.4	61	18	29	ENE	OK	30.10	30.10	30.11	25.13	partly	10.00
Change to Weather Map	15:53	80.1	62.1	68.1	54	15	26	ENE	OK	30.08	30.09	30.09	25.11	partly	10.00
Change to Metric Units Change to UTC Time Change Date/Time	14:53	81.0	60.1	67.3	49	21	28	ENE	OK	30.08	30.09	30.09	25.11	partly	10.00
Download Data 2 Week Summary	13:53	81.0	61.0	67.8	51	22	26	NE	OK	30.08	30.09	30.09	25.11	partly	10.00
MORE INFO	12:53	80.1	61.0	67.5	52	23	30	NE	<u>ok</u>	30.11	30.12	30.12	25.14	partly	10.00
n Information	11:53	81.0	60.1	67.3	49	18	28	ENE	OK	30.13	30.14	30.14	25.15	partly	10.00
cy (delay of obs) s (number of obs)	10:53	80.1	62.1	68.1	54	21	28	E	OK	30.14	30.15	30.15	25.16	partly	10.00
ble PDF by Stations ictions	9:53	77.0	62.6	67.4	61	15	24	ENE	<u>ok</u>	30.15	30.16	30.16	25.17	partly	10.00
	8:53	75.0	62.1	66.5	64	10		ENE	OK	30.15	30.15	30.16	25.17	partly	10.00
	7:53	73.0	63.0	66.4	71	22	26	E	OK	30.13	30.14	30.14	25.15	partly	10.00

The forecasted and observed winds at the time of the incident exceeded the manufacturers' limitations of 20 mph (18 knots) with all vents open. By adding the vessel's speed to the observed winds to obtain the apparent (relative) wind speed, the calculated 27 mph (23.4 Knots) wind speed clearly exceeded the manufacturer's recommended maximum wind speed. See diagram below for calculating apparent (relative) wind speeds.

### 4.3.4 Towing speed

When towing the parasail take into account both the airspeed limitations of the parasail canopy and the prevailing wind speed and direction. For example when towing down wind the boat speed must be adjusted to account for the loss of wind into the parasail canopy. If you don't, someone is going to get their feet wet.



MANUFACTURERS of PARASAILS & EQUIPMENT

Manly, Sydney Australia 2095

### **Equipment:**

The X-Treme Parasail Inc. owner stated that he believed that he had M/V X-TREME technical manuals regarding the vessel and its onboard equipment somewhere. However, it was not readily available to the vessel crew. When the owner was asked how an employee would get specifics on their equipment, he stated they could go to the manufacturers' web page. The owner then confirmed that he and his staff had no manufacturers' manuals or documents for the parasailing equipment. During the interviews with the owner and the operational employees, it was clear that none of them knew any of the guidelines for maintenance, lifespan/load cycles, safety settings, and wind/weather limitations outlined by parasailing equipment manufacturers.

X-Treme Parasail Inc. only has minimal maintenance documentation which includes a daily pre and post engine check list and an informal maintenance log to record repairs on all vessels owned by the company. X-Treme Parasail Inc. does not maintain any records of parasail equipment inspections, has no written or verbal policies connected to parasailing equipment, does not have records of towline service dates, and does not have a policy for tow line retirement dates. It has no policy or way of tracking wear and fatigue as it relates to parasail gear. The owner stated that he only hires senior captains and the inspections were done by them daily and that it's their responsibility to identify problems. As such, the company's management and oversight of its parasailing equipment is non-existent.

The parasail canopy, yoke, and passenger tandem bar were cut away by Mr. after recovering the injured passengers to expedite getting medical assistance. The gear sank in deep water and is considered to be not recoverable. Photographs taken by the deckhand during the last flight prior to line failure showed signs of material degradation of the yoke strap. It is impossible to conclude whether the degraded yoke strap contributed to the casualty. The lack of forensic evidence makes it impossible to determine how Mr. Banaszynski's inboard harness clip became detached. The investigation considered the following possibilities: tandem bar D ring failure, tandem bar D ring strap failure, Mr. Banaszynski unclipped himself or water pressure opened the harness clip while he was being skipped and dragged across the water. The harness worn by Mr. Banaszynski's was examined and showed no signed of failure or problems.

The towline in use onboard the M/V X-TREME was a Yale Cordage 7/16-inch diameter (Double Esterlon polyester double braided) rope supplied by Custom Water Sports. The towline was purchased by X-Treme Parasail Inc. on March 15, 2011. X-TREME Parasail Inc. installed the towline on May 10, 2011. Based on limited Company records the towline may have had only had 24 days of parasailing operations.

The manufacturer of M/V X-TREME, Commercial Water Sports Inc recommended a towline of 7/16-inch diameter, Double Braid with a minimum tensile strength of 7,800 pounds. The manufacturer of the parasail being used the day of the incident, Birds Parasail Australia recommended a towline of 10 millimeter (7/16-inch) spectra, two component rope and a minimum breaking strain of 10,000 pounds. The difference between the boat builder and the parasail manufacture towline recommendations are considerable. The owner was aware of those differences but stated the 10,000 pound Birds Parasail Australia recommendation was only a

suggestion. The Owner stated during his interview that parasailing manufacturer's recommendations are driven by reducing their liability and specifically the Birds Parasail Australia recommendations for towline strength is for Australia and not for the United States.

Southwest Ocean Services Inc. examined and conducted laboratory tensile tests on the M/V X-TREME towline and compared it against an unused (exemplar) 7/16-inch diameter Double Esterlon polyester double braided rope manufactured by Yale Cordage. The new (exemplar) test was complete in January 26, 2012, connected to a previous Coast Guard parasailing investigation (MISLE Incident Investigation number 4189646). A series of tensile tests were conducted on both ropes without and with bowline knots.

Detailed information of the towline tensile strength tests are contained in MISLE. Tests were in accordance with Cordage Institute International Standard CI 1500-02 (V.2 May 2006) (a recognized industry standard for testing ropes and lines) Test Method for Fiber Rope. This standard provides information and procedures for line testing.

Tensile Tests of Manufacturers Towline (New)

The un-knotted exemplar rope average failure load was 7,258 pounds; which was 418 pounds (+4.7%) above the manufacturer's (8<sup>th</sup> Edition) minimum breaking strength of 6,840 pounds. In past towline failure cases the NTSB considered this increase in the as-tested strength to the manufacturer's minimum strength to be within marginally acceptable parameters. When new, the M/V X-TREME towline breaking strength may have been similarly above the manufacturer's minimum breaking strength, but this assumption cannot be confirmed.

The knotted exemplar rope always failed at the knot, with an average failure load of 5,300 pounds which, was 1,540 pounds difference (29%) below the manufacturer's minimum breaking strength of 6,840 pounds.

Manufacturers	As Tested Average Breaking	Percent Diff. from Manufacturer's		
Exemplar Line	Strength (lbs.)	Reported Minimum Breaking Strength		
No Bowline Knot	7,258	+4.7%		
With Bowline Knot	5,300	-29%		

Tensile Test of M/V X-TREME O.N. 1153017 Towline

After only 24 days of documented operational service, the M/V X-TREME un-knotted towline average failure load of 3,897 pounds was a significant 2,943 pounds difference (43%) below the manufacturer's minimum breaking strength of 6,840 pounds.

The knotted M/V X-TREME O.N. 1153017 towline average failure load of 2,820 pounds was a significant 4,200 pounds (61%) below the manufacturer's minimum breaking strength of 6,840 pounds. As with the exemplar rope, all failures were at the bowline knot.

M/V X-TREME	As Tested	Percent Diff. from	Percent Diff. from	
Towline	Average Breaking	Manufacturer's	Exemplar Rope as tested	
	Strength (lbs.)	Reported Minimum	Average Breaking	
		Breaking Strength	Strength	
No Bowline Knot	3,897	-43%	-46%	
With Bowline Knot	2,820	-59%	-61%	

A visual examination of the M/V X-TREME first 100 feet of towline after the parting revealed broken filaments which could be seen on its surface, giving it a fuzzy appearance. This fuzzy appearance is consistent with a braided rope that has filament breakage. This wear is supported by witness testimony stating that the towline on the vessel's deck "looked dirty and fuzzy".

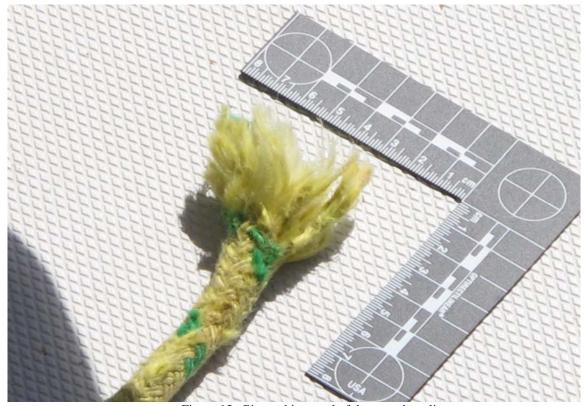


Figure 13: Picture bitter end of the parted towline.

There is evidence that the M/V X-TREME towline strength was significantly reduced by the bowline knot. Photographs of the parasailing flight minutes before the towline parted shows signs of visibly reduced circumference due to excessive strain ("necking") immediately adjacent to the bowline.

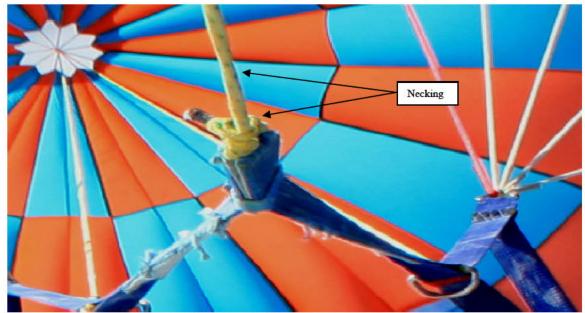


Figure 14: Necking adjacent to the bowline knot.

Because, it's a simple way to tie and untie, the bowline knot is typically used throughout the parasailing industry to fasten the towline to the parasail harness. Most knots will induce structural damage and will reduce a line's breaking strength by as much as 50% according to Cordage Institute, International Standard CI 1500-02.

To remove this structural damage, within the parasailing industry it is common practice to cut off a length of the bitter end of the towline after a certain number of flights, and discard the worn portion of the rope. The PAPO OSAG requires that a minimum of two feet be cut from the towline bitter end within a maximum period of 7 days, and or every 400 flights, or as may become necessary. The vessel manufacturer recommendations are "trim towline daily, always tie the bowline in a new spot". X-Treme Parasail Inc. owner stated that he had no written or verbal guidelines for the crew on line cutting. In contrast, all the company's captains believed that they were required by the company to cut the towline daily. Each of the captains had a different length ranging from six inches to one foot they trimmed off the bitter end of the towline and they generally logged it on the daily pre and post engine check sheets.

A review of Federal and State regulations that pertain to the operation of parasail vessels, along with industry created safety protocols, revealed that neither the United States nor the State of Hawaii has any regulation that pertain to parasailing equipment. X-Treme Parasail Inc. had been a member PAPO but ended their membership in the early 2000s.

### **Conclusions:**

The Initiating Event (or first unwanted outcome) for this casualty was the failure of the towline during high winds.

- 1. The causal factors that led to this casualty are:
  - a) Environment: There is one environmental causal factor.
    - 1) The weather, specifically wind speed, was a key factor in this casualty. Weather data gathered throughout the investigation shows the areas the vessel was operating in had a Small Craft Advisory issued by the National Weather Service. The average wind speed from the closest weather station (approximately 3 miles from the incidents location) at 10:53 was 21 mph (18.2 knots) with gusts of 28 mph (24.3 knots). Witnesses confirmed that the on-scene weather was gusty and that as the flying passengers were landing when a gust of wind hit the parasail resulting in the towline failure. The wind speed of 21 mph (18.2 knots) and the vessel's forward movement of 6 mph (5.21 knots), approximately 27 mph (23.4 knots) (relative wind) caused excessive loading on the towline and ultimately resulted in the towline failure in way of the bowline knot.
  - b) Equipment: There are five equipment-related causal factors.
    - 1) The towline failing, parting in way of the bowline knot inside of the towline hawse pipe. This determination is based on the amount of towline remaining on the reel after the casualty and the fact that the flyers had landed onboard the vessel. An additional clue was garnered through the X-Treme Parasail Inc photographs that showed towline necking in way of the bowline knot.
    - 2) The towline's rapid and significant degradation in strength while in parasailing service. Parasailing is a severe application to towlines that caused to rapid degradation and strength loss. The break tests of the M/V X-TREME towline (first 60 feet aft of the bowline) indicated it had a 46% reduction in strength from only 24 operational days in service. The loss of strength was due to the combined effects of cyclical tension wear, shock loading, external abrasion and flex fatigue.
    - 3) The towline's significant reduction in strength due to the use of a bowline knot to fasten the towline to the parasail harness. Lab testing indicated that the bowline knot reduced the breaking strength of the M/V X-TREME towline an additional 21% beyond that provided by the towline in its worn condition. At the time of the casualty, the average breaking strength of the M/V X-TREME towline was a significant 61% below the manufacturer's minimum breaking strength.
    - 4) The 34 foot trivent parasail yokes starboard strap appeared to show signs of deterioration. This deterioration and possible failure could not be discounted in the

investigation. If the strap failed inside the roller as the flyers landed it could have added to the shock-loading of the towline and contributed to the incident.



Figure 15: Picture of degraded yoke strap just prior to the incident.

- 5) The vessel's parasail winch pressure relief setting of 3,000 psi was most likely reached during the high wind conditions. The relief setting effectively shut down the winch motor, locking the brakes, in order to prevent a hydraulic system failure or free spool situation. The standard ride consists of paying out 800 feet of towline and then retrieving the riders in one continuous operation. The crew onboard the M/V X-TREME had no method of knowing if the system's pressure relief setting was being reached due to a lack of a system gauge on this class of vessel. This conclusion would account for the actual parasailing flight lasting over 12 minutes in duration and the crew believing it was a standard 6 to 8 minute flight.
- Safety regulations/standards: There are four causal factors related to safety regulations/standards.
  - 1) Parasail towlines are exposed to constantly changing environmental conditions along with variable operating loads and strains. Currently, there are no established replacement requirements for parasail towlines. The boat manufacturer recommends "inspect towline daily, replace the entire towline every 2,000 flights or when jacket shows wear". The employees believed that the owner was monitoring the flight cycles and thought the towlines were being replaced every 3,000 flights. The owner stated that he did not document flight cycles and the replacement of towline is left to the captains.
  - Currently, there is no regulatory authority for parasail equipment onboard vessels.
     The U.S. Coast Guard regulates and inspects Small Passenger Vessels material

condition and safety equipment regulations outlined in 46 CFR Subpart T. The Coast Guard does not regulate the specific activities associated with these types of vessels and specifically not the parasailing specific equipment (i.e. winch, hydraulics, towline, parasail equipment, roller assembly).

- 3) Although there are industry organizations such as PAPO that create operating standards and guidelines for members to follow. There is no requirement to be affiliated with these organizations. Furthermore, these safety standards have not been incorporated into Coast Guard regulations.
- 4) Currently, there are no master or crew licensing or training requirements specific to the unique procedures or safety precautions associated with parasailing operations. The Coast Guard requires U.S. licensed mariners be in direct control of motorized vessels carrying passengers for hire: however there are no license endorsements or special training requirements needed to operate a parasail vessel.
- d) Personnel: There are five personnel related causal factors
  - 1) Captain failed to adequately assess and react to the prevailing weather conditions; he failed to have knowledge of operational limitation of his equipments which resulted in flying passengers beyond the manufactures recommendations. The Captain stated he used his 26 years of experience to assess the on-scene weather and showed no concern about not knowing the manufacturer's limitation for the equipment being used.
  - 2) X-TREME Parasail Inc. owner and employees have a culture of indifference towards manufacturer recommendations for towline strength, wind speed and maximum passenger weight. They were unable to define any limitations of their parasailing equipment. Even more disturbing was the owner feeling that any recommendations that are placed on equipment are based on protecting the manufacturer's liabilities. The owner stated the 34 foot Australian parasail maximum wind speeds were only for Australia and saw it as only a suggestion for US operations.
  - 3) X-TREME Parasail Inc. failed to provide any documented operational doctrine or guidance to its employees. The company failed to associate with any professional parasailing safety organization, and heed numerous United States Coast Guard recommendations related to establishing safety standards for his parasailing company. He continued to place the sole responsibility on his captains. This lack of operational doctrine failed to include or address:
    - a. equipment checks in accordance with manufacturer's recommendations;
    - b. equipment maintenance and replacement in accordance with manufacturer's recommendations;
    - c. passenger safety briefs in accordance with federal regulations;
    - d. weather forecasting and monitoring per industry safety standards

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- e. crew qualifications per industry safety standards
- f. crewmember training per industry safety standards
- 4) X-TREME Parasail Inc. and their operational employees accept that towline breaks are an acceptable risk during the course of routine business. They describe the towline as the weak link in the parasailing operation and were proud of their ability to execute water recoveries. The investigation revealed that one X-TREME Parasail Inc. deckhand handled over 40 line parts in 9 years. Similar line parts and water landing numbers were garnered from the captains of X-Treme Parasail Inc. and represent a consistent behavior that disregards the potential dangers of a line part and water recovery.
- 5) Captain unfamiliarity with, or disregard for, Manufacturers, PAPO OSAG and Federal recommendations, standards and regulations was apparent in this case. The Captain failed to:
  - a. trim the towline's bitter end as per manufacturer recommendations
  - b. perform maintenance per manufacturer's recommendations
  - c. give a passenger safety brief meeting standards of PAPO OSAG or any other parasailing safety organization
  - d. give a passenger safety brief as required in 46 CFR 185.506
  - e. ensure proper training of the onboard crewmember

### Subsequent events:

- 2. The causal factors that existed or occurred during the rescue efforts are as follows:
  - a) Safety regulations/standards
    - 1) Captain failed to ensure that a Passenger Safety Orientation briefing (as required by 46 CFR 185. 506) was completed on the 11:10 AM parasailing run. Mr. stated that he always gave the briefings and it included parasailing safety items. This failure to brief the passengers left them without the knowledge of emergency procedures that could have aided or minimized the outcome associated with this incident.
    - 2) Captain failed to ensure a parasailing safety briefing was given. During interviews he and Mr. stated that they always give a briefing connected to parasailing operations. On the 11:10 AM run the vessel departed the loading dock late and all the passengers confirmed that they did not receive any safety briefings. It is impossible to determine what happened to Mr. Banaszynski's inboard harness clip, but one theory considered was that he had unclipped himself while being dragged. Mr. stated that during the violent ride he did try to unclip himself but was unsuccessful. It is clear that

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neither Mr. Banaszynski nor Mr. understood the danger of unclipping while being dragged based on the lack of a parasailing safety briefing.

### b) Personnel

- 1. Captain initially failed to recognize the gravity of the towline parting. His initial responsiveness was casual based on witness statements. This was consistent with an attitude that accepts line partings as routine. If he had a sense of urgency the rescue might not have taken over 10 minutes and approximately 3 attempts to deflate the parasail.
- 2. Captain failed on the first two attempts to vector the vessel in the right position to collapse the parasail. During the second attempt he almost ran over the passengers in the water. It is unclear if the use of the new flying gaff played a role in the near miss of catching the passengers or whether the speed of the fast moving un-tethered parasail made recovery of the parasail more difficult.

### c) Equipment

- 1. X-Treme Parasail Inc. had developed and trained on what they called a cutting edge detachable flying gaff designed to deflate the parasail without the need to have the crewmember jump out of the boat on the parasail. The use of the flying gaff may have saved significant time in getting the parasail deflated. A review of previous parasailing incidents showed it is routine for the captain to have a crewmember jump on top of the parasail to deflate it. Often the crewmember misses the parasail and the vessel has to recover the crewmember before attempting another try.
- 3. There is no evidence that work/rest related issues contributed to this casualty.
- 4. The investigation did not identify any inconsistencies with regards to the U.S. Coast Guard's vessel inspection history for the M/V X-TREME, O.N. 1153017.
- 5. The actions of the Captain and Mr. of the LUCKY LADY were commendable and likely helped to mitigate the injuries to Mr.
- 6. There is no evidence that any Federal or State enforcement agency personnel contributed to this casualty, or to the death.

### **Safety Recommendations:**

- 1. It is recommended that the Commandant of the Coast Guard seek legislative authority to inspect parasail vessels that carry at least one passenger for hire and enact implementing regulations. This action, when taken in concert with this report's other recommended actions, will result in a regulatory regime that provides a set of minimum safety standards for commercial parasailing on U.S. navigable waters, and will result in lives saved.
- 2. It is recommended that the Commandant of the Coast Guard, in consultation with national parasailing organizations and/or the parasailing industry, establish distinct license, training, qualification, and experience requirements that apply to operators and crew of commercial parasail vessels.
- 3. It is recommended that the Commandant of the Coast Guard require owners and operators of commercial parasail vessels to conduct a written assessment of all the risks it foresees could while conducting parasailing, and to prepare a written contingency plan approved by the local OCMI for eliminating, minimizing or responding to the risks.
- 4. It is recommended that the Commandant of the Coast Guard require owners and operators of commercial parasail vessels to conduct sufficient training, drills and exercises to ensure that crewmembers are proficient in parasailing emergency techniques and procedures. Training, drills, and exercises shall be logged or otherwise documented for review by the Coast Guard upon request. Drills and exercises must test the proficiency of company and vessel personnel in assigned emergency response duties.
- 5. It is recommended that the Commandant of the Coast Guard require parasail vessels to have emergency instructions onboard and readily available to the master and crew to include at least the following parasailing contingencies: unintended water landing; winch malfunction; towline failure; and propulsion machinery failure with a passenger in flight.
- 6. It is recommended that the Commandant of the Coast Guard, in consultation with national parasailing organizations and/or the parasailing industry, develop parasail towline selection, inspection, and retirement (removal from service) guidelines. These guidelines should require records to be kept that indicate the size, fiber, construction, length, manufacturer, minimum breaking strength, safe working load, date placed in service, and inspection interval for each towline. Inspections should be logged and should check for damage, wear and include caliper measurements of the towline diameter to determine if the towline has deteriorated. The master of the parasailing vessel should be responsible for keeping these records and reporting the same to management. For each towline, the records should be kept for the duration of its service life and should be made available for review by the Coast Guard upon request. When developing the guidelines, the Coast Guard should further evaluate: the need to conduct additional operational tests to determine a towline's required minimum breaking strength; the need to require the breaking strength of each towline to be certified by the manufacturer by subjecting a portion of the rope to destructive testing prior to

its installation; and the need to specify the use of more efficient connections (e.g., eye splices, thimbles, etc.) between the towline and the yoke.

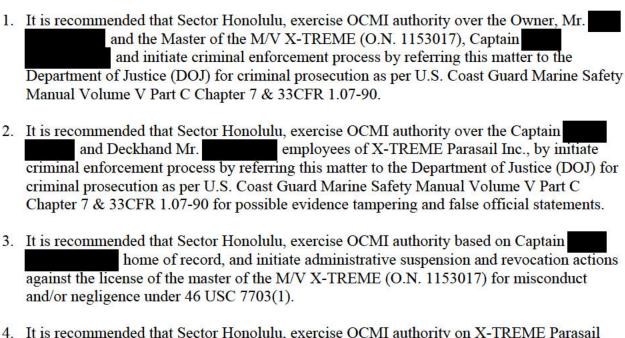
- 7. It is recommended that the Commandant of the Coast Guard require the operator of a commercial parasail vessel to record for each flight: the parasail canopy used and its operational limitations; the estimated weight of the passenger(s); the prevailing wind and sea state; the duration of the flight; and the details of any parasailing incident that occurred during the flight. The master of the parasailing vessel should be responsible for keeping these records and reporting the same to management. For each towline, the records should be kept for the duration of its service life and should be made available for review by the Coast Guard upon request.
- 8. It is recommended that the Commandant of the Coast Guard, in consultation with national parasailing organizations and/or the parasailing industry, develop operational readiness, maintenance, and inspection requirements for winches used to deploy and recover passengers while parasailing. When developing the inspection requirements, the Coast Guard should develop minimum power ratings and further evaluate the need for redundant or emergency winch systems that could be used should the primary winch fail.
- 9. It is recommended that the Commandant of the Coast Guard require the inspection of the parasail gear and equipment, as necessary to determine that the gear and equipment are in good working order and fit for the service intended, before the issuance of a Certificate of Inspection to any vessel that engages in commercial parasailing.
- 10. It is recommended that the Commandant of the Coast Guard, in consultation with national parasailing organizations and/or the parasailing industry, define the necessary route and operational limits for safe parasailing, and direct cognizant Officers in Charge, Marine Inspection, to record these route and operational limits on the Certificate of Inspection of commercial parasail vessels.
- 11. It is recommended that the Commandant of the Coast Guard require owners and operators of commercial parasail vessels to provide a comprehensive passenger safety briefing prior to departure to include a discussion of the inherent risks of parasailing, the route and operational limits imposed to mitigate these risks, and the proper procedures to be followed during the course a parasailing emergencies to include: unintended landing on water; winch malfunction; towline failure; and propulsion machinery failure with a passenger in flight.
- 12. It is recommended that the Commandant of the Coast Guard require commercial parasail operators to monitor marine broadcasts prior to conducting and while engaged in parasailing, and to obtain and monitor wind speed and direction in order to evaluate the advisability of launching passenger(s) in flight, or continuing with a flight when conditions progressively deteriorate.
- 13. It is recommended that the Commandant of the Coast Guard, in consultation with national parasailing organizations and/or the parasailing industry, review, modify, and ultimately

adopt and incorporate by reference in 46 CFR Subchapter T, the Professional Association of Parasail Operators Operating Standards and Guidelines, or a similarly produced and recognized industry standard. Where industry has not established suitable safety requirements addressing the causes of this casualty, the Coast Guard should provide the leadership and catalyze their development. These actions will allow the Coast Guard to capitalize on standards that are already familiar to the parasailing industry and will raise the level of safety provided to the level expected by the American public. Further, it will minimize the burdens on the parasailing industry associated with variations in safety standards imposed by various jurisdictions.

- 14. It is recommended that the Commandant of the Coast Guard provide written guidance to marine inspectors to be used during the inspection and certification of commercial parasail vessels. This guidance should be taught at the Marine Inspection and Investigation School at Training Center Yorktown and be made available to the public and parasailing industry.
- 15. It is recommended that the Commandant of the Coast Guard provide written guidance to marine investigators to be used during the investigation of parasailing marine casualties. This guidance should be taught at the Marine Inspection and Investigation School at Training Center Yorktown and be made available to the public and parasailing industry.
- 16. It is recommended that the Commandant of the Coast Guard provide notice to the parasailing industry that failures of parasailing equipment to include the winch, towline, harness, and parasail, are considered to be occurrences that materially and adversely affect a vessel's fitness for service, and are considered reportable marine casualties under 46 USC 6101 and its implementing regulations of 46 CFR. 4.05-1(a)(4) and 185.202(a)(4).
- 17. It is recommended that the Commandant of the Coast Guard implement the Voluntary Commercial Parasailing Vessel Safety Examination program instituted by Coast Guard Sector St. Petersburg throughout the Coast Guard until this report's other recommended actions can be fully enacted. This interim measure will enhance, improve, and increase Coast Guard interactions with the parasailing vessel industry and promote the voluntary compliance with industry best practices.
- 18. It is recommended that the Commandant of the Coast Guard implement the Voluntary Recommended Guidelines for Safe Parasailing program instituted by District Fourteen and Coast Guard Sector Honolulu throughout the Coast Guard until this report's other recommended actions can be fully enacted. This interim measure will enhance, improve, and increase Coast Guard interactions with the parasailing vessel industry and promote the voluntary compliance with industry best practices.
- 19. It is recommended that Commercial Water Sports, Inc., the builder the M/V X-TREME, O.N. 1153017, advertise a service bulletin to the parasailing industry advising of the need to retrofit their vessels with towlines that meet the minimum parasail manufacture breaking strength.

- 20. It is recommended that X-TREME Parasail Inc., implement and enforce a quarterly training program for all company employees that adequately addresses equipment maintenance, weather forecasting and observation, record-keeping and parasail specific emergency procedures. X-TREME Parasail Inc. should keep records of all employee attendance and should base day-to-day crew selection on their training completion status.
- 21. It is recommended that X-TREME Parasail Inc. develop, implement, and enforce a comprehensive weather forecasting and monitoring policy. The policy should identify a method of consistent monitoring from every vessel in the fleet.
- 22. It is recommended that the Commandant of the Coast Guard, in consultation with national parasailing organizations and/or the parasailing industry, develop guidelines for lockable clips associated with parasailing harnesses. When developing the guidelines the Coast Guard should evaluate the type, design and position location of the clips to ensure there is no way for accidental opening either in flight or in case of an emergency water landing.
- 23. It is recommended that the Commandant of the Coast Guard provide a copy of this report to the following entities:
  - a. Area, District, and Sector Commanders;
  - b. Estates of the deceased;
  - c. U.S. Attorney;
  - d. Professional Association of Parasail Operators;
  - e. Parasail Safety Council;
  - f. Water Sports Industry Association;
  - g. Yale Cordage, Inc.

### **Enforcement:**



4. It is recommended that Sector Honolulu, exercise OCMI authority on X-TREME Parasail Inc., and initiate administrative civil penalty actions against the Owner of the M/V X-TREME (O.N. 1153017) for misconduct and/or negligence and/or violations of law under 33CFR 1.07-10. Specifically, for failing to ensure a proper safety briefing occurred as required by 46 CFR 185.506.

#### Administrative recommendations:

1. Recommend closure of this investigation.

2.	Recommend Sector Commander formally recognize Captain	and Mr.	of the
	M/V LUCKY LADY	Si San	