

# MARITIME INCIDENT INVESTIGATION REPORT INTO INJURY TO CREW MEMBER ON PRIVATE SAILING CATAMARAN "SKYLARKS" 13<sup>TH</sup> MAY 2021



The Jersey Administration, on behalf of the appointed Minister, conducts marine safety and other investigations on ships flying the flag of the Bailiwick of Jersey and ships which are not flying the Jersey flag which are within Jersey waters in accordance with the obligations set forth in international conventions to which Jersey is a party (either directly or through the United Kingdom).

In accordance with the IMO Casualty Investigation Code, mandated by the International Convention for the Safety of Life at Sea (SOLAS) Regulation XI-1/6, investigations have the objective of preventing marine casualties and marine incidents in the future and do not seek to apportion blame or determine liability.

It should be noted that provisions in the Shipping (Jersey) Law 2012 require Masters, Officers and Owners of vessels to provide such information as is reasonably required by those appointed to conduct such investigations.

If the contents of a report were subsequently submitted as evidence in court proceedings relating to an accident there is a risk that this could offend the principle that individuals cannot be required to give evidence against themselves.

It is for this reason that the Minister is prevented under the above law from authorising publication of a report until a decision has been made not to prosecute any individual in connection with the incident concerned or any prosecution including any appeal has been completed.

The Jersey Administration makes this report available to any interested individuals, organizations, agencies or States on the strict understanding that it will not be used as evidence in any legal proceedings anywhere in the world. You must re-use it accurately and not in a misleading context. Any material used must contain the title of the source publication.

The obligation to publish accident and incident reports in accordance with the IMO Casualty Investigation Code and the International Convention for the Safety of Life at Sea (SOLAS) Regulation XI-1/6, is an acceptable reason for publication of this report in its current format under data protection legislation.

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Jersey Administration: Marine Accident Investigation Report - SY SKYLARKS 13May21 -Rev 2. 16.08.2021

#### **GLOSSARY**

#### **Chart Plotter**

Catamaran: Twin hulled vessel with the hulls rigidly connected by a bridging structure

**CoC:** Certificate of Competency: approved maritime qualification obtained following examination

**CT:** Computerised Tomography. special X-ray tests that produce cross-sectional images of the body using X-rays and a computer. Provides more exact diagnosis then a standard one-directional X-Ray

Helm: Position from which a vessel is steered and controlled

**Pleasure Yacht:** A ship, not in commercial use, used only for the sport or pleasure of the owner or the immediate family or friends of the owner which meets the requirements of Article 169 of the Shipping (Jersey) Law 2002

**RYA:** Royal Yachting Association – Body authorised by both the United Kingdom and Jersey Governments to issue Certificates of Competency for officers and ratings on pleasure vessels and certain small commercial vessels to mariners achieving defined standards.

**Skipper:** the person appointed to command a small vessel or a pleasure vessel by the owner.

**SY: Sailing Yacht:** A vessel which, even though fitted with mechanical propulsion, is designed to be safely navigated using sails

**Stainless steel:** a group of ferrous alloys containing a minimum of 11% chromium, a composition that assists in preventing the iron from rusting and also provides certain heat-resistant properties

# 1.0 SYNOPSIS

- 1.1 At 0330 on the morning of the 13<sup>th</sup> May 2021, in position 9° 46.067N 026° 03.000 W; the privately owned, Jersey Registered, 12.5m, Sailing Catamaran 'SKYLARKS' suffered a weld failure at the base of the support pillar of the helm seat. The 48-year-old skipper, who was on watch at the time and occupying the seat, fell to the deck striking the left side of his ribs and lower back in the process. The weather at the time was recorded as ENE 8 knot with slight sea and low swell.
- 1.2 Following his fall the skipper was attended to by the owner, a qualified medical practitioner, and the deck hand. The casualty was transferred to the salon, complaining of severe pain. A CT scan carried out 5 days later revealed the skipper had sustained a fracture to one rib and also revealed an underinflation of his left lower lung..
- 1.3 The vessel was already enroute to Mindelo in the Cape Verde Islands, approximately 400 nautical miles distant and maintained passage, with the casualty's condition being frequently checked by the owner and appropriate medical and first aid support being given
- 1.4 On arrival on 17<sup>th</sup> May 2021 the skipper was transferred to the Medi Centro medical facility for evaluation and treatment, this included a CT scan insisted on by the owner, which identified the injuries as above.
- 1.5 The owner recommended that the skipper recover in Cape Verde and then, when fit to do so, complete the intended voyage to Gibraltar. The skipper, however, believing he would need between 4 and 12 weeks to recover sufficiently to resume command, elected to be repatriated to his home in South Africa to complete his recovery. At the time of writing the skipper reports that he is yet to make a full recovery. The completion of the delivery voyage was consequently delayed, due to difficulties in recruiting a new skipper and crew under COVID restrictions. At the time of completing this report SKYLARKS therefore remains in Cape Verde. (16Aug21).
- 1.6 The owner notified the builders of the failure and, as a consequence, repairs and modifications to the 'helm seat' were carried out in Cape Verde. This prevented a metallurgical examination of the failure.
- 1.7 The Jersey Administration was first advised of the incident by the skipper on 26<sup>th</sup> May 2021 and a Maine Incident investigation was commenced, with input received from the Owner, the Skipper, and the vessel's builders.

# 2.0 NARRATIVE

**General description:** <u>General Arrangement – layout of sailing vessel 'SKYLARKS'</u>







# Voyage preparation:

- 2.1 SKYLARKS is a 12.4m Maverick 440 class Catamaran sailing vessel built for private owners by Maverick yachts in Cape Town South Africa. The vessel was registered as a pleasure vessel in Jersey on 14<sup>th</sup> January 2021. The vessel being appropriately certificated the owners appointed a professional delivery skipper to manage the delivery of their vessel from Cape Town to Gibraltar. The owner was also to undertake the voyage.
- 2.2 The Skipper was appointed to the vessel to take command week commencing 22<sup>nd</sup> March 2021 to commence preparations for the voyage. A previously appointed skipper having had to withdraw due to problems with renewing his passport. The skipper was responsible for making the necessary preparations for the delivery voyage. The Skipper reports having removed and inspected the seat prior to departure from Cape Town in an attempt to remove the small amount of lateral movement detected. The owner and the skipper had specifically discussed the helm seat prior to departure but after the inspection the skipper considered it satisfactory and advised the owner accordingly.

# From Departure Cape Town (via Ascension) until to the incident

- 2.4 The voyage was uneventful apart from A large squall (24 miles diameter) experienced on 6<sup>th</sup> May 2021 with winds of over 30 knots. All sails on SKYLARKS were initially furled as the squall approached, the vessel subsequently motor-sailed with only the gib (with 2 reefs) until the squall had passed.
- 2.5 After the passage of the squall the owner reports that the helm seat appeared 'rather wobbly' but that no further investigation was undertaken.
- 2.6 The skipper, however, maintains that, at no point between departure from Cape Town and the accident, did the chair feel any different. The Skipper further maintains that, had such a report been made to him, he would have made an entry in the vessel's log. The assessment is that, had a more detailed inspection been made after the squall, it is possible that that damage might have been found and appropriate measures taken to reduce the risk of complete failure.

#### The incident:

- 2.7 At 0330 on the morning of the 13<sup>th</sup> May 2021, in position 9° 46.067N 026° 03.000 W; the skipper was on watch alone, with the other two people aboard asleep, when connection of the seat support pillar to the baseplate failed without further warning.
- 2.8 The skipper fell onto his left side and sustained injuries to his ribs and complained of difficulty breathing and pain in his lower back and left side. His calls awoke both the crew member and the owner.

# **Subsequent actions:**

- 2.9 The skipper was helped by the owner and the deck hand to the salon thus avoiding the need to negotiate stairs to his cabin. It was also a better location for he Skipper to maintain contact with the crew. He was made comfortable and examined by the owner, a medical doctor. Appropriate medical treatment and first aid was provided, and his condition was regularly checked whilst on passage
- 2.10 The decision was taken to continue the planned passage to the port of Mindelo in the Cape Verde Islands, approximately 400 NM distant.
- 2.11 Photographs were taken of the failed weld area and contact was made with the builders with respect to a possible repair/ modification to the seat to be made on arrival.
- 2.14 On arrival at Cape Verde the Owner arranged for the skipper to be transferred to a medical facility for further diagnosis and treatment. As a medical practitioner herself she insisted on a CT scan in preference to the proposed chest X-Ray. It was this scan that discovered that the skipper had sustained a fracture to one rib and that lung capacity on the left side was reduced.
- 2.15 It was proposed that the Skipper recuperate in Cape Verde and then complete the passage as planned. The skipper however, believing his recovery would need 4-8 weeks, elected to be repatriated to his home in South Africa to complete his recovery there and this was arranged by the owner
- 2.16 Arrangements were made to repair and modify the helm seat whilst the vessel was in Cape Verde and additional stiffening to the existing seat support pillar together with an additional pillar on the starboard side if the seat were fitted. The new arrangements providing additional support at the expense of the original design flexibility to allow the seat to rotate. The understandable use of the existing components prevented metallurgical analysis of the failed weld.
- 2.17 The incident was reported to the Jersey Administration by the Skipper on 26<sup>th</sup> May 2021 and a Marine Casualty Investigation was commenced on behalf of the Minister led by Ports of Jersey Maritime Standards

# **Subsequent Events**

- 2.18 The deck crewman from the voyage was also repatriated due to the delays in Cape Verde. Due to the difficulty in recruiting a replacement Skipper and crew member during COVID the completion of the delivery voyage has been delayed and as of 16Aug21 SKYLARKS remains in Cape Verde.
- 2.19 The builders commenced an investigation with the contractor that fabricated the seat in order to identify possible changes to reduce risk of a similar failure in future.
- 2.22 The Jersey Administration investigation received the full support of the Owner, the builder, and the skipper throughout.

#### **2.3** CREW

- 2.3.1 At the time of the incident the vessel was crewed by a professional delivery skipper (48-years-old) holding an RYA Yachtmaster Offshore CoC and a deck hand (holding an RYA Coastal Skipper CoC).
- 2.3.2 The crew were assisted by the owner who was both a medical doctor and the holder of an RYA Day skipper CoC. Both crew members were experienced with the operation of the type of vessel concerned. As the vessel was a private leisure vessel (and both under 24m in length and under 150GT) there were no mandatory crew qualifications applicable to the voyage concerned under the Jersey Flag.
- 2.3.3 The owner had discussed with the skipper the desirability of adding a First Mate, as originally intended in her initial delivery planning; and a potential candidate holding an RYA Yachtmaster Ocean was identified. The skipper however advised that this was unnecessary, as he had assessed both the appointed deck crew and the owner had sufficient knowledge. His decision was influenced by the fact that the vessel only had three cabins, all double berth. He considered that having a fourth person sleeping in the Salon would not have been appropriate.

# 2.4 CASUALTY VESSEL DETAILS

Type: Catamaran sailing vessel (Maverick 440 Class): Private leisure vessel (non-commercial)

Name: SKYLARKS Registration Number: 750398

MMSI: 232031746 IRCS: MIKE7

Registered Length: 12.5m Length Overall: 12.5m

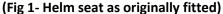
Beam: 7m Draft: 2m

Net Tonnage: 21.30 Gross Tonnage: 21.30

Engine Make/Model: 2 x Yanmar 3JH40-CR diesel Max continuous engine power: 58.8kW Year of Build: 2020 Date of Registration: 14<sup>th</sup> Jan2021

# 3.0 Still photos







(Fig 2 – Cockpit general view – Original seat)



(Fig2: Base plate following failure)



(Fig 3: Crack on underside of base plate)



(Fig 4, 5, & 6: bottom of seat support pillar following failure)



Fig 7 Helm seat as modified (from Port side)



(Fig 8 Helm seat as modified from Aft)

### 4.0 FINDINGS

# 4.1 Failure of the Helm seat pillar support weld

- 4.2 The seat -mounting was constructed with a stainless-steel base and a stainless-steel tube pillar. A second stainless-steel tube, with a stainless-steel plate at the top onto which the actual seats are mounted, fitted over the first to enable the seat to rotate. A locking pin, when inserted, stopped the seat from rotating. (Fig 1) The failure involved a complete fracture of the weld between the seat mounting pillar and the base plate (see Figs 2 to 6)
- 4.3 The builders were notified of the accident, by the owners, and tried to ascertain the cause of the failure. From the photos received they were unfortunately not able to determine why the welding at the base of the seat pillar broke. Their consultant engineer reported that the failure could have been caused by a number of factors, but that no definite cause could be identified.
- This was the vessel's maiden voyage and apart from a squall on 6<sup>th</sup> May no adverse weather was experienced during the crossing. The Owner maintains that she discussed with the skipper that the helm seat was 'rather wobbly' after the squall but no action was taken at the time. The Skipper denies that the seat was any more 'wobbly' after the squall.
- 4.5 It is possible that had an inspection been carried out at this point damage to the weld might have been identified and complete failure averted.

### 4.7 Weather

- 4.8 At the time of the incident the weather was fine the slight seas and low swell the wind was ENE'ly 8 knots
- 4.9 The only significant adverse weather SKYLARK's had encountered since departing Cape Town occurred during the passage was the squall on  $6^{th}$  May

#### 4.10 First Aid and medical response

- 4.11 The skipper was seated at the helm when the seat support failed and fell heavily onto his left side, his calls awoke both the crew member and the owner, and the skipper was assisted into the Salon. He was in great pain. The owner, a qualified medical doctor, provided appropriate treatment and first aid. The decision was made to continue to the next intended port in Cape Verde, a voyage lasting 5 days, during which his condition was monitored
- 4.12 On arrival at Cape Verde the skipper was transferred to a medical facility for further assessment and treatment including a CT scan insisted on by the owner. This confirmed a fracture to one rib and reduced capacity on the left lung.
- 4.13 The Owner proposed that the skipper remain in Cape Verde to recuperate and then resume the voyage to Gibraltar. The skipper elected to be repatriated to his home in South Africa to recuperate and the owner arranged for this to be done. There was some question raised subsequently as to the desirability of the Skipper having flown long-haul with a known lung injury.

#### 4.14 Subsequent Modifications to the seat

- 4.15 The subsequent modifications to the Helm seat, along the lines proposed by the skipper, were carried out in Cape Verde. They increased support but at the expense of the ability of the seat to rotate
- 4.16 This is the first failure of this type of the seat in the fourteen years that seats of this design have been fitted to the 24 vessels of this type constructed by the SKYLARKS builders. They are in discussions with the company that manufactures the seats involved to determine what changes if any are needed to prevent a recurrence.

#### 4.17 Crewing:

- 4.18 As a Jersey Registered pleasure vessel, not in commercial use, and both under 24m and under 150GT, the manning is at the discretion of the owner. From the legal perspective SKYLARKS's was properly manned, but in practice both in numbers and experience it was at the minimum that could have been considered desirable.
- 4.19 As the intended voyage involved a passage more than 150NM from shore, guidance in the Jersey Manning Policy Manual would have recommended that the skipper should hold a Yacht Master Ocean CoC and that there be a First Mate holding a Yachtmaster Offshore CoC, in addition an additional yacht Rating should be carried giving a minimum of two, and a total complement of 4 persons. This would have been mandatory if the vessel had been commercially coded. (The Owner was suitably qualified to have filled the additional yacht rating position). The vessel's insurers confirmed to the owner that they were content with 3 crew and the skipper holding a Yachtmaster Offshore CoC.
- 4.20 It was unfortunate that the skipper, who himself did not hold a Yachtmaster Ocean but only a Yachtmaster Offshore, dissuaded the owner from carrying the First Mate who had been identified in the original planning.
- 4.21 Once the skipper was incapacitated this meant that watchkeeping, in a two-watch system, devolved upon two relatively inexperienced crew members. Although one held an RYA coastal skipper and the other an RYA day skipper certificate. Following his injury, the skipper continued to advise and monitor the crew to the extent possible given his incapacity.

# 5.0 CONCLUSION

- 5.1 The Skipper of SKYLARKS sustained a rib fracture and a reduction to the lung capacity on the left side as a result of a fall sustained when the weld of the supporting column of the helm seat failed totally.
- 5.2. Due to the subsequent and understandable repair and modification of the seat, carried out by the owners in Cape Verde, only photographic evidence of the failure of the welding at the base of the seat pillar was available.
- 5.3 From the photos available, the builders were unfortunately not able to determine precisely why the failure occurred. A consultant engineer concluded that the failure could have been caused by a number of factors, but no definite cause could be identified.
- The builders had constructed a total of 23 similar catamarans over a period of 14 years with the same helm seat configuration and this is the only reported failure of this nature. The builders have been proactive in their response to this incident and are working with contractor that manufactured the seat to explore improvements to prevent such a failure in future.
- 5.5 The seat was been repaired by the owners in Cape Verde; gussets being added to the base of the original pillar together with an additional support pillar to starboard. This modification however prevents the seat from being able to rotate as was possible in the original design (see Figs 1, 7 & 8)
- 5.6 It is probable that the weld failure commenced or became significant during the squall experienced on 6<sup>th</sup> May, and signs might have been evident if it had been inspected immediately after the squall.
- 5.7 There are no requirements under STCW (the international convention for Standards of Training Certification and Watchkeeping) for the manning of private leisure vessels under 500GT and the manning for such vessels is, and should remain, at the discretion of the owner.
- 5.8 On this occasion the owner prudently appointed a professional delivery skipper but was unfortunately then dissuaded by him from similarly appointing the suitably qualified First Mate as she had originally intended. The vessel sailed with three rather than the recommended four persons aboard for the voyage, which caused difficulties when the skipper was incorporated.

# 6.0 RECOMMENDATIONS

6.1 In view of the actions already taken by the owner and by the builder there are no additional recommendations in this case.

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#### **SHIP PARTICULARS**

Vessel's name **SKYLARKS** Jersey Classification society N/A

IMO number N/A (Official Number 750398) Type Pleasure Vessel (non-commercial)

Catamaran hulled sailing vessel (Maverik 440)

Registered owner Private Manager(s) Private

Glass Reinforced Plastic Construction

Length overall 12.50 m Registered length 12.50m Gross tonnage 21.30 Minimum safe manning N/A Authorised cargo N/A

**VOYAGE PARTICULARS** 

Cape Town. South Africa, and Ascension Island Port of departure

Port of arrival Gibraltar (Intended final).

Mindelo, Cape Verde Islands (actual)

Type of voyage Ocean passage

Cargo information No cargo or passengers. 2 crew & Owner Manning

Date and time

Type of marine casualty or incident

Location of incident Place on board Injuries/fatalities

Damage/environmental impact

Ship operation Voyage segment

External & internal environment

Persons on board

13<sup>th</sup> May 2021 0330 UTC Less Serious Marine Casualty 09 46 067 N 026 03.000 W

Conning position, main deck Starboard aft Fracture of Rib, partial collapse of left lung Failure of flying bridge helm seat no pollution

On passage (repositioning voyage)

On passage.

Night, good visibility, light breeze (ENE 8 kts) slight sea

& low swell

3 (Owner, Skipper & one deck hand)

# TYPE OF INVESTIGATION:

MARINE ACCIDENT (Article 165 of Shipping (Jersey) Law 2002)