

VOLVO OCEAN RACE - SAIL DAMAGE REPORT

DATE	07/04/2015
TEAM	TEAM SCA
REPORT MADE BY	Nathan Quirk – Head of Boatyard Sail loft
SAIL	FRO-R
DATE AND LEG DAMAGE SUSTAINED	Leg 5 Volvo Ocean Race
CONDITION (1 (unusable) - 10 (new))	1 – Unusable

DESCRIPTION OF DAMAGE

The FRO-R has sustained major damage which extends vertically up the sail behind the luff tape from inside the reinforced tack area to a point 2.5m below the top ¼ stripe. From there the break continues horizontally across the sail to the leech. The leech tape and line are both broken.

The break is not clean and the cloth has been severely damaged up either side of the tear. In places up the luff the tear and damage to cloth extends up to 800mm aft into the sail.

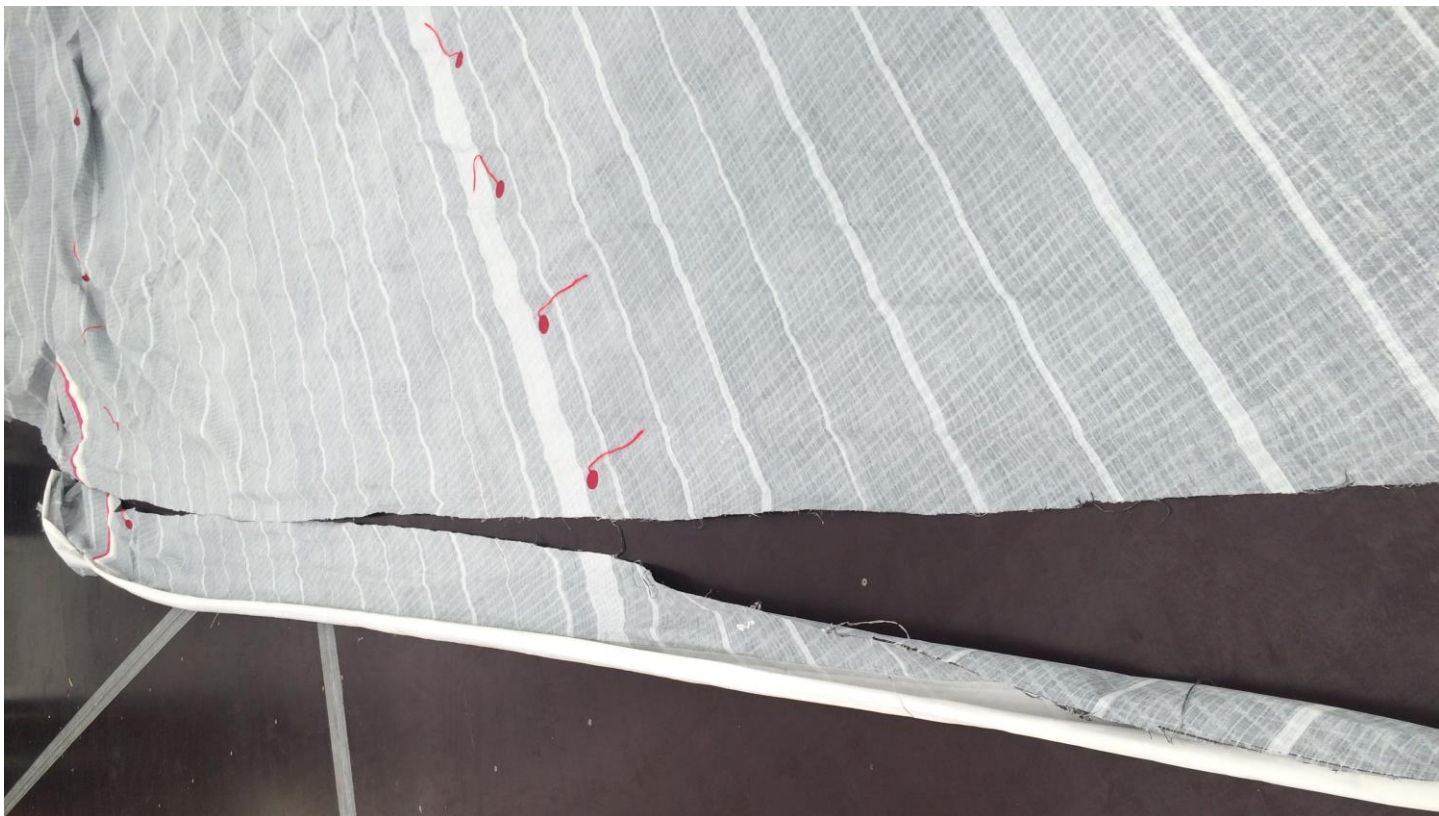
Cause of initial failure is unknown, however the team reported the sail broke on the luff first behind the luff tape. The bottom section of the sail then fell into the water where it stayed for over an hour while the team attempted to retrieve it.

The top section was subject to severe flogging until it could be retrieved and as result the cloth is badly damaged to a point where its structural integrity is questionable.

REINFORCED TACK SECTION



LOOK UP SAIL FROM TACK



LOOKING DOWN LEECH FROM HEAD



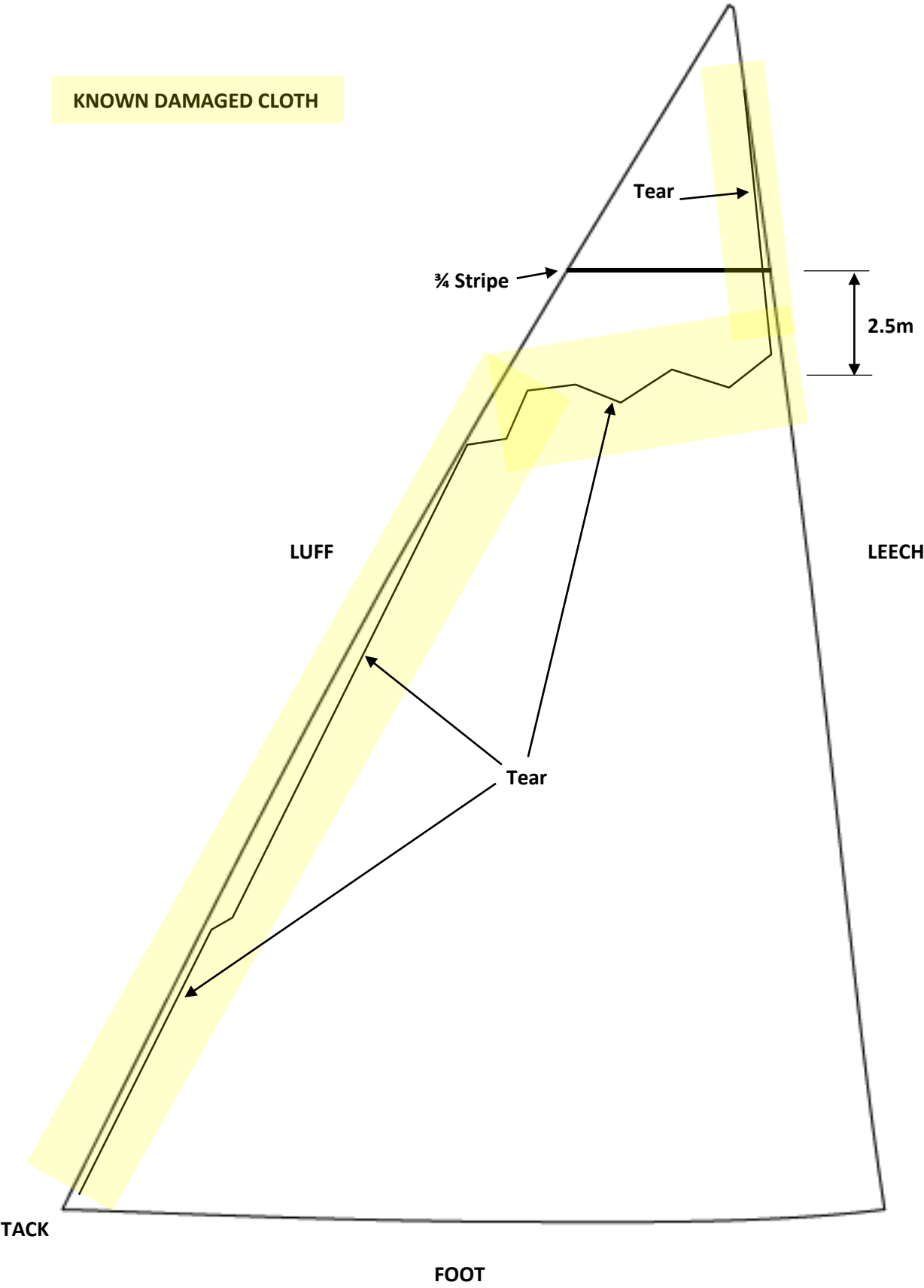
HORIZONTAL BREAK 2.5m BELOW $\frac{3}{4}$ STRIPE



LEECH END OF HORIZONTAL BREAK



GRAPHIC OF DAMAGED



POSSIBLE REPAIR OPTIONS

Given the size of the tear and the area of damaged cloth it is not possible to repair SCA's FRO-R to standard where it would be suitable for use in the remaining legs of the 2014/15 Volvo Ocean Race.

Due to the jagged nature of the tear it is impossible to determine the condition of the cloth either side of the break. In addition to this, the remaining sections of the sail have been exposed to prolonged periods of flogging and being dragged in the water whilst being retrieved. As such the cloth has been badly damaged and distorted to a point where the structural integrity of the cloth cannot be guaranteed.

Any attempt to repair SCA's FRO-R would only make it suitable for training or delivery purposes only.

Prior to the start of the VOR, two prerace VO65 FRO-Ps sustained similar breakages in the Round Britain and Island Race. Repairs were attempted on both sails with limited success. Neither sail has been used more than a few hours since being repaired, however both have been observed and deemed not usable for racing.

FRO-R (race) vs FRO-P (prerace)

The FRO-P, version #1 for VO65 is identical in shape to the FRO-R. The same mold and finishing were used in the construction of both sails.

The only change made in the design of the FRO-R was shortening the luff 80mm. If the FRO-P were to be substituted in as a race sail, the luff would need to be shorten 80mm to match other FRO-Rs and make the sail rule compliant.

Additional leech flat tapes would also need to be applied the leech.

CONCLUSION

The SCA FRO-R is NOT repairable for purpose of being used for further racing in the Volvo Ocean Race.

CONTACT

Any comments or questions relating to this damage report, please see contact details below.

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