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THIS REPORT FOLLOWS FROM A GENERAL INSPECTION OF THE YACHT
"AVALANCH" EX "STORCH" CARRIED OUT ON SUNDAY 1st DECEMBER
1996.

THE VESSEL WAS SEEN WHILE LAID UP ASHORE AND UNDER COVER AT
THE BRITISH KIEL YACHT CLUB PREMISES.

TYPE:

100 sq.M. Sloop rigged sailing yacht of round bilge and long
keel configuration.

GENERAL PARTICULARS:

| | |
|-------------------|---------------------------|
| <u>LOA:</u> | 56' |
| <u>LWL:</u> | 39.1' |
| <u>BEAM:</u> | 11.2' |
| <u>DEPTH:</u> | 7.7' |
| <u>DRAFT:</u> | 7.5' |
| <u>SAIL AREA:</u> | 952 sq. ft. |
| <u>BUILT:</u> | Warnemunde, Germany, 1936 |

CONSTRUCTION:

Semi composite, timber on part steel frames with external
lead ballast.

CONDITION:EXTERNALHull

Hull lines were fair with no evidence of stress related problems.

The hull is totally GRP sheathed to deck level. This sheathing
was in overall very good condition and with no indication of any
separation from the underlying structure.

Rudder

The timber rudder was in good condition as far as could be
examined (the long rudder stock is not accessible) well

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supported by the bearing pintle and one strap pintle, and free in movement.

Deck

The main deck of Iroko over ply was in very good condition.

Planks are laid to the curve of the deck line and set in PRC or similar synthetic compound: all well executed.

Toe Rail, Capping and Belting

A substantial toe rail is fitted complete with Elm capping.

This is all in sound condition and secure.

The all round belting (rubbing strip) fitted at deck edge level and finished off with brass strip cope was sound, secure and in good condition.

Hatches, Cockpit and Coachroof

Access hatches are of mahogany construction, all well fitting and in good condition.

The cockpit is strongly constructed and in good condition.

The coachroof and doghouse, of mahogany, are well formed and in sound condition; decking is similar to main deck but of lighter ply underlay.

INTERNAL

Much of the inner hull is not accessible for examination due to extensive lining and domestic furnishings however where examined, the timber condition of all original structural components was satisfactory for the age of the vessel.

There have been some repairs or modifications to the timber framing in the past but again the extent and reason for such is not able to be determined.

With regard to the steel framing and floors however, all are in general poor condition throughout and their contribution to hull stiffening is consequently drastically reduced.

All other components which contribute to structural integrity - i.e. bulkheads and much of the domestic joinery - has been well fitted and is in very good order.

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CONCLUSION:

This vessel is cosmetically very well presented and is quite elaborate inside considering her usage.

If the present system of maintenance and utilisation is continued it seems reasonable to expect the vessel to last for a long time yet.

However hull integrity is much dependent on the GRP sheathing and any failure here could have serious consequences.

The true general condition can be judged by looking at sister ship "KRANICH" which is now completely stripped out and which on examination in 1987 I considered to be a better prospect than "AVALANCHE".

SUMMARY:

1. There has been no significant deterioration since last examined in 1987.
2. Providing the dependency on the stabilisation and stiffening imparted by the sheathing is appreciated, the continuing use of the vessel is acceptable, however -
3. Hard driving in bad conditions should not be encouraged and young "Skippers" should be made aware of this.
4. A decision to use the boat to destruction or to repair and rebuild her should be decided upon soon.
"KRANICH" apparently came close to the former and hopefully will provide a complete and instructive demonstration of the latter.

FINALLY:

I enclose a detail structural content giving scantlings where possible.

Assessment of steel work is as 1987.


CAPTAIN JOHN SMITH

5th DECEMBER 1996

"AVALANCHE" ex "STORCH"

CENTRELINE:

All oak; set up with mild steel bolts.

Other than the keel, the backbone is made up from 5" sided timber jointed and scarphed as required.

MAIN FRAMES:

Consist of 2" steel angles set at 2' centres with double angles worked in at stress areas.

TIMBERS:

Two oak timbers sided $1\frac{1}{2}$ " moulded $2\frac{1}{4}$ " are set between each pair of steel frames.

FLOORS:

These consist of a deep plate to every pair of steel frames and a forced angle set midway between.

PLANKING:

The mahogany planking is in long lengths, $1\frac{1}{8}$ " finished.

STRINGERS:

Are of pitch pine. These members are 2" x 6" made up by scarphing to extend over 70% of boat length.

CLAMP AND SHELF:

The clamp is in pitch pine with scantlings $2\frac{1}{2}$ " x $5\frac{1}{2}$ ".

An additional beam shelf 2" x 4" is rivetted to it for a distance of 6'9" in way of the mast area.

Fastenings are all mild steel pins rivetted over copper roves.

Note - It is common U.K. practice to call the sheer clamp the beam shelf and the stiffening in way of the chain plates the clamp.

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DECK BEAMS:

Mainly sided 2" and moulded 3", the beams are set at 14" centres. Generally they are pitch pine but heavier oak beams are fitted around the mast area and cockpit.

HANGING KNEES

These consist of six pairs of shaped steel plates rivetted to main frames and through bolted to the sides of main beams.

LODGING KNEES:

Are oak crooks, 2½" thick and fitted six per side.

CARLINS:

Of pitch pine - 2½" x 4" and running over 50% of the boat's length.

CUT BEAMS:

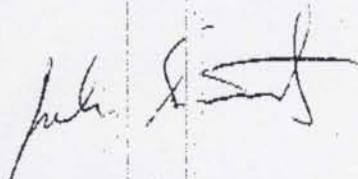
Are of oak, ½" x 1½" set at 14" centres and partly set into the underside of the carlins.

MAST:

Hollow Spruce 63'9", maximum section 11" x 7"

BOOM:

Hollow Spruce 23'2" of rectangular section.

CAPTAIN JOHN SMITH

5th DECEMBER 1996

"AVALANCHE" ex "STORCH"

FRAMES AND FLOORS, ETC.

FRAMES:

| | | |
|---|---|----|
| 1 | - | U |
| 2 | - | 5% |
| 3 | - | 5% |
| 4 | - | 3% |
| 5 | - | O |
| 6 | - | O |

ALL OTHER FRAMES REQUIRE THOROUGH INVESTIGATION.

FLOORS:

| | | |
|---|---|----|
| 1 | - | U |
| 2 | - | U |
| 3 | - | 3% |
| 4 | - | 5% |
| 5 | - | C |
| 6 | - | C |
| 7 | - | 5% |
| 8 | - | C |

THEN ALL (K T) -

| | | |
|----|---|-----------|
| 31 | - | 0% |
| 32 | - | OK |
| 33 | - | NO ACCESS |
| 34 | - | OK |
| 35 | - | EMENTED |
| 36 | - | EMENTED |
| 37 | - | OK |
| 38 | - | OK |
| 39 | - | OK |
| 40 | - | US |
| 41 | - | OK |
| 42 | - | OK |
| 43 | - | OK |


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TIMBERS:

1 - ALL OK
24 ROT PORT AND STARBOARD OVER LOWER 10%

REMAINDER OK

TWO AFTER HANGING KNEES - US


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