

U.S. Department of
Homeland Security

United States
Coast Guard



Commanding Officer
United States Coast Guard
Marine Safety Center

2100 2ND ST SW, STOP 7102
WASHINGTON, DC 20593-7102
Staff Symbol: MSC-1
Phone: (202) 475-3401
Fax: (202) 475-3920
Email: msc@uscg.mil

16710/P015931
Serial: H2-1002642
October 15, 2010

Bruce A. Culver, Naval Architect
Attn: Mr. Bruce Culver



Subj: SEA VENTURE, O.N. 525572
Marine Construction and Design Company Inc., Hull No. 208
102'-3" x 32' x 14'-9" Fishing Trawler/Processor (C)
Oceans
Stability

Ref: (a) Bruce A. Culver, Naval Architect, "Stability Booklet F/V Sea Venture," sheets 1-37,
dated September, 2010

Dear Mr. Culver:

We reviewed reference (a), submitted with your letter dated September 20, 2010, for compliance with the applicable requirements of 46 CFR Subchapter C. Accordingly, reference (a) is **"Returned for Revision."** Such calculations must be resubmitted after revision for our review. The following comments apply:

1. Reference (a) contains two vessel drawings; a general arrangement of the hold and a drawing illustrating all of the watertight bulkheads, closures, and sea valves. Both of these drawings show two seawater ballast tanks, port and starboard, between frames F and J. However, reference (a) does not address these seawater ballast tanks. Further, based on correspondence with the Officer in Charge, Marine Inspection (OCMI), it appears that these tanks have not been completely disconnected. Please update reference (a) to incorporate these tanks into the stability calculations or confirm that the seawater ballast tanks will not to be used, and ensure that they are disconnected to the satisfaction of the OCMI.

2. We note that two different sets of stability criteria are being used to assess the stability of the vessel. As this is an uninspected fishing vessel, only the criteria of 46 CFR 28, Subpart E, should be applied. Please update reference (a) and resubmit.

3. Appendix C of reference (a) is not clear as to what downflooding points were considered for this vessel. Based on correspondence with the OCMI, it appears that the aft-most hatch cover on the main deck, located between frames M and P, should be treated as a downflooding point. Please provide a list of the downflooding points on the vessel, clearly indicating the longitudinal, transverse, and vertical location of all the points, and update reference (a) as necessary.

16710/P015931
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4. Due to what appears to be two different hull models being used in the analysis, we note that there are major inconsistencies between volumes and centers of gravity of the tanks, holds, and loads between the cod fishing and crabbing loading conditions presented in reference (a). Please update reference (a), ensuring that a single hull model is used for the evaluation of the vessel's stability for all loading conditions.

5. Please provide a copy of the lines plan or hull offsets to enable us to verify the geometry of the submitted GHS hull file.

6. Based on the information submitted in reference (a), we have a general concern about the vessel's ability to meet the stability criteria per 46 CFR 28.570. The addition of the 20 foot van on the deck, just aft of the pilothouse, to carry extra bait during cod fishing presents an added stability concern. This concern should be addressed through the resolution of the above comments.

Should you have any questions about this review, please contact the project officer, Ms. Cecily Lowenstein, at the phone number listed above.

Sincerely,



Lieutenant Commander, U.S. Coast Guard
Chief, Major Vessel Branch
By direction

Copy: Commander, Coast Guard Sector Puget Sound, Prevention Department

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Email: msc@uscg.mil

16710/P015931
Serial: H2-1101074
April 21, 2011

Bruce A. Culver, Naval Architect
Attn: Mr. Bruce Culver
1441 N. Northlake Way
Seattle, WA 98103

Subj: SEA VENTURE, O.N. 525572
Marine Construction and Design Company Inc., Hull No. 208
102'-3" x 32' x 14'-9" Fishing Trawler/Processor (C)
Oceans
Stability

Ref: (a) Bruce A. Culver, Naval Architect, "Stability Booklet F/V Sea Venture," sheets 1-37,
dated February 12, 2011
(b) Bruce A. Culver, "Ice Loads," 1 sheet, dated April 15, 2011
(c) Bruce A. Culver Naval Architect letter dated March 31, 2011

Dear Mr. Culver:

We reviewed references (a) and (b), submitted on March 1 and April 15, 2011, for compliance with the applicable requirements of 46 CFR Subchapter C. Accordingly, references (a) and (b) are **"Returned for Revision."** Such calculations must be resubmitted after revision for our review. The following comments apply:

1. We note that reference (b) was provided to demonstrate how the ice loads for the subject vessel were determined. The calculations provided do not identify the estimated deck areas used to determine the ice loads; however, based on our independent calculations we find the indicated 9.89 long tons to be a conservative estimate. In future submissions of reference (a), please provide the horizontal and vertical deck areas and calculations for ice loading.

2. Reference (a) does not contain any information in the "Instructions to the Master," indicating how and when the aft fuel tank can be used. Reference (c), item number 4, indicates that there is an item in the "Instructions to the Master." Please address this issue, ensuring that reference (a) is updated to indicate that the aft fuel tank may only be filled when the vessel is not carrying crab pots.

3. As identified in reference (a), we note that the engine room air intake at the aft end of the pilothouse is the only downflooding point considered for this vessel.

16710/P015931
Serial: H2-1101074
April 21, 2011

Subj: SEA VENTURE, O.N. 525572; Stability

4. We note that the free surface considered in reference (a) is the true free surface calculated by GHS, and is not calculated in accordance with 46 CFR 28.540. Please provide calculations demonstrating that the true free surface calculated by GHS for each loading condition is more conservative than required by 46 CFR 28.540 or update the calculations to comply with 46 CFR 28.540. Additionally, the tank sounding tables of reference (a) must be revised to include free surface data, as required by 46 CFR 28.530(e)(7).


5. Please provide calculations demonstrating compliance with 46 CFR 28.575 (Severe wind and roll) and 46 CFR 28.580 (Unintentional flooding).

6. We remain concerned about the vessel's stability with the addition of the 20 foot van on the deck, just aft of the pilothouse, to carry extra bait during cod fishing. This concern should be addressed through the resolution of the above comments.

Should you have any questions about this review, please contact the project officer, Ms. Cecily Lowenstein, at the phone number listed above.

Sincerely,




Lieutenant Commander, U.S. Coast Guard
Chief, Major Vessel Branch
By direction

Copy: Commander, Coast Guard Sector Puget Sound, Prevention Department

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16710/P015931
Serial: H2-1102280
July 21, 2011



Subj: SEA VENTURE, O.N. 525572
Marine Construction and Design Company Inc., Hull No. 208
102'-3" x 32' x 14'-9" Fishing Trawler/Processor (C)
Oceans
Stability Test Procedure

Ref: (a) [REDACTED], "Stability Test Procedure F/V Sea Venture," sheets 1-6, undated
(b) Phone message from [REDACTED] to Ms. Cecily Lowenstein, July 20, 2011

Dear [REDACTED]

We reviewed reference (a), submitted with your e-mail dated July 19, 2011, for compliance with the applicable requirements of 46 CFR Subchapter C and reference (b) in accordance with the guidance of Navigation and Vessel Inspection Circular 5-86 (NVIC) "Voluntary Standards for US Uninspected Commercial Fishing Vessels" and U.S. Coast Guard Guidance for the Alternate Compliance and Safety Agreement Program (ACSA), dated October 2010. Based on our review we find that the information contained in reference (a) appears technically acceptable as meeting the requirements of 46 CFR 28.535 in accordance with Section B of the ACSA and ASTM Standard F1321-90, "Standard Guide for Conducting a Stability Test (Lightweight Survey and Inclining Experiment) to Determine the Light Ship Displacement and Centers of Gravity of a Vessel." In accordance with the ACSA, the approval authority for the subject vessel's stability is retained by the cognizant Officer in Charge, Marine Inspection (OCMI). As such, you must provide Sector Puget Sound a copy of reference (a). The following comments apply:

1. Per reference (b) we note the stability test of the subject vessel has been scheduled for August 1, 2011 in Dutch Harbor, Alaska. If you have not already made arrangements to have the stability test witnessed by personnel from the cognizant OCMI, it is recommended that you do so immediately. We further recommend you keep that office informed as to any changes in the date and time of the test.

2. The stability test shall be conducted in accordance with reference (a) and the ASTM Standard. The final responsibility for the test being conducted properly and to the satisfaction of the OCMI rests with the owner's representative. Any deviation from the procedures in reference (a) and the ASTM Standard may result in the test being disallowed. The final results of the test, with a copy of all rough field notes bearing the initials of the Coast Guard witness, should be submitted to the OCMI and our office for review.

16710/P015931
Serial: H2-1102280
July 21, 2011

Subj: SEA VENTURE, O.N. 525572; Stability

3. We are concerned that the proposed schedule indicates your intent to survey the vessel on a different day than the incline test. Our experience indicates that, especially with respect to tankage and stores, the condition of an operational vessel may change significantly during a twelve hour pier-side availability. As such, all efforts should be made to conduct the entire stability test in one continuous effort. However, should a two day stability test be necessary, this is acceptable provided the following conditions are met:

- a. The reading of vessel freeboards must be conducted on the same day the vessel is surveyed for tankage and weights to add/deduct,
- b. The vessel must be fully prepared for the inclining (incline weights and pendulum setup) at the time of the above mentioned freeboard readings, and
- c. A second set of freeboard readings must be taken prior to the inclining on the second day to confirm the condition of the vessel from the previous day's survey.

4. We note your indication that the vessel will be essentially complete prior to the stability test. In the event that significant amounts of trash and temporary materials remain aboard the vessel, the test may be postponed until the vessel is complete. We require that you provide a final detailed list of lightship weights to add, subtract, or relocate, including their weight and centers of gravity, to the Coast Guard witness at the time of the survey evaluation. If the combined aggregate total of weights to add and remove, neglecting any tankage and essential personnel, exceeds 2% of the lightship weight, the vessel may be considered not properly prepared and the stability test may be postponed. The weight and vertical and longitudinal location of all items that need to be added, removed or relocated must be clearly identified in such a way to enable the Coast Guard reviewer to determine the exact location of items from the recorded data.

5. Per reference (a) and the guidance of the ASTM Standard, the number of slack tanks should generally be limited to one pair of port and starboard tanks or one centerline tank for each type of consumable. We note that reference (a) indicates that the following tanks will be slack at the time of the stability test: FO Day Tank, starboard FO Wing Tank #1 and starboard FO Wing Tank #2, and find this acceptable as this is being done to correct vessel list. The liquid level of any deep tank should be 20% to 80% full, or 40% to 60% full for all other tanks. An accurate measurement of tank contents, including verification that any full tanks are pressed, should be made at the time of the survey. The specific gravity of any liquid on board must also be provided with the test results. Any cross connections, including those via manifolds, must be closed and remain closed throughout the stability test. All empty tanks and voids shall be open and ready for inspection and have a gas free certificate where appropriate. The verification of tank and void loadings shall be to the satisfaction of the Coast Guard witness.

6. All bilges and voids must be dry at the time of the stability test. Should any water actually be present in the bilges at the time of the stability test, we will not allow a free surface correction associated with water in the vessel's bilges to be applied to the inclining results.

16710/P015931
Serial: H2-1102280
July 21, 2011

Subj: SEA VENTURE, O.N. 525572; Stability

7. As the incline is to be conducted using concrete/cement weights, they must be certified either in the presence of the attending inspector or by a licensed weighing facility within two weeks prior to the stability test.

8. A minimum of five freeboard readings, both port and starboard, are required. Freeboard readings should be plotted on an expanded vertical scale in the presence of our inspector to ensure the data is adequate to determine a waterline. Draft readings may only be used as a check of the required freeboard readings.

9. On-board personnel should be limited to individuals essential to the administering of the stability test, and the combined weight must remain constant throughout the process.

10. Please identify each downflooding point, including the vertical, longitudinal and transverse locations, and include with your final submission to our office.

11. The persons responsible for conducting the stability test must provide a hydrometer of the appropriate scale to measure the specific gravity of the water at the time of the test.

12. The vessel should be moored as described in the ASTM standard.

13. We note that two digital protractors will be used in place of two of the required pendulums. The digital inclinometers must have a precision of at least +/- 0.01 degrees with an accuracy of at least +/- 0.05 degrees. Manufacturer's data or certification for the inclinometer must also be submitted.

Should you have any questions about the above comments please contact me at the phone number listed above.

Sincerely,



C. L. LOWENSTEIN
U.S. Coast Guard
By direction

Copy: Commander, Coast Guard Sector Anchorage, Prevention Department

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Staff Symbol: MSC-1
Phone: (202) 475-3401
Fax: (202) 475-3920
Email: msc@uscg.mil

16710/P015931
Serial: H2-1104943
December 27, 2011



Subj: SEA VENTURE, O.N. 525572
Marine Construction and Design Company Inc., Hull No. 208
102'-3" x 32' x 14'-9" Fishing Trawler/Processor (C)
Exposed Waters
Structures

Ref: (a) [REDACTED] Document No. 111072-110-1, Rev. A, "F/V Sea
Venture Upper Deck Strength Calculations," sheets 1-6, dated December 16, 2011
(b) [REDACTED] "01 Deck Report," sheets 1-15, dated December 21, 2011
(c) Bruce Culver Dwg. No. 101-1, Rev. -, "Freezer Factory," 1 sheet, dated December
12, 2005
(d) [REDACTED] Dwg. No. 11072, "Longline Pot Arrangement," 1 sheet, undated
(e) [REDACTED] Dwg., "Overhang Area," 1 sheet, undated

Dear [REDACTED]

We reviewed references (a) through (e), submitted with your e-mails dated December 16 and 22, 2011, for compliance with the guidance of Navigation and Vessel Inspection Circular 5-86 (NVIC) "Voluntary Standards for US Uninspected Commercial Fishing Vessels" and U.S. Coast Guard Guidance for the Alternate Compliance and Safety Agreement Program (ACSA), dated October 2010. Based on our review we find that the information contained in references (a) through (e) appear technically acceptable. In accordance with the ACSA, the approval authority for the subject vessel's stability is retained by the cognizant Officer in Charge, Marine Inspection (OCMI). As such, you must provide Sector Puget Sound a copy of references (a) through (e).

We note that the upper deck above the factory space aft of frame F, has adequate strength to support six tiers of 19 longline pots weighing 192 pounds per pot or three tiers of single pots with 13 pots on the first tier and six pots on the two upper tiers weighing 850 pounds per pot. The total deck load is not to exceed 21,250 pounds.

16710/P015931
Serial: H2-1104943
December 27, 2011

Subj: SEA VENTURE, O.N. 525572; Structures

Should you have any questions about the above comment please contact the project officer Ms. Cecily Lowenstein at the phone number listed above.

Sincerely,



W. R. ARGUIN JR
Commander, U.S. Coast Guard
Chief, Hull Division
By direction

Copy: Commander, Coast Guard Sector Puget Sound, Prevention Department
Commander, Coast Guard Sector Anchorage, Prevention Department

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WASHINGTON, DC 20593-7102
Staff Symbol: MSC-1
Phone: (202) 475-3401
Fax: (202) 475-3920
Email: msc@uscg.mil

16710/P015931
Serial: H2-1201367
March 19, 2012

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Subj: SEA VENTURE, O.N. 525572
Marine Construction and Design Company Inc., Hull No. 208
102'-3" x 32' x 14'-9" Fishing Trawler/Processor (C)
Exposed Waters
Lightship Characteristics

Ref: (a) [REDACTED] Document No. 111072-843-03, Rev. -, "F/V Sea
Venture Lightship Calculations Booklet," sheets 1-19, dated 2/2012
(b) [REDACTED], "Stability Test Notes " sheets 1-21, dated 8/1/ 2011
(c) [REDACTED] Dwg. No. 8991-100-1, "Sponson Lines and Offsets," 1 sheet, dated 9/8/1989

Dear [REDACTED]:

We reviewed references (a) through (c), submitted with your e-mails dated February 21 and March 9, 2012, for compliance with 46 CFR Subchapter C and U.S. Coast Guard Guidance for the Alternate Compliance and Safety Agreement Program (ACSA), dated October 2010. Based on our review we find that the information contained in references (a) and (b) appears technically acceptable. In accordance with ACSA, the approval authority for the subject vessel's stability is retained by the cognizant Officer in Charge, Marine Inspection (OCMI). As such, you must provide Sector Puget Sound a copy of references (a) and (b). Other submittals related to the subject vessel will be addressed under separate correspondence.

Based on our review we concur with the following lightship values established by reference (a):

Displacement	286.18	Long Tons (LT)
VCG	13.58	Feet Above the Baseline
LCG	45.96	Feet Aft of Frame 0
TCG	0.32	Feet Port of Centerline

We note that the vessel is fitted with 0.87 LT of concrete ballast in the lazarette starting at frame M and extending aft 8 feet. The concrete has a width of 34 inches and is 2 inches thick at frame M, tapering to nothing aft. No fixed ballast or any other such weights shall be added, removed, altered, or relocated without the authorization and supervision of the cognizant OCMI.

16710/P015931
Serial: H2-1201367
March 19, 2011

Subj: SEA VENTURE, O.N. 525572; Lightship Characteristics

Should you have any questions regarding this project, please feel free to contact the project officer, Ms. Cecily Lowenstein at the phone number listed at the top of this letter.

Sincerely,

[REDACTED]

[REDACTED]

[REDACTED], U.S. Coast Guard
Chief, Major Vessel Branch
By direction

Copy: Commander, Coast Guard Sector Puget Sound, Prevention Department
Commander, Coast Guard Sector Anchorage, Prevention Department