


EQUITABLE SHIPYARDS, INC.
NEW ORLEANS, LA.

TEST MEMORANDUM

CONTRACT STATEN ISLAND FERRY DEPT ALL
ANDREW J. BARBERI HULL 1713-1714

TITLE SEA TRIAL AGENDA	TEST MEMO NUMBER M-36
-------------------------------	------------------------------

PREPARED BY <u>G.G. Haddock</u> CHECKED BY <u>B.W. Hewett</u>	APPROVED  CHIEF ENGINEER
--	--

SUBMITTED TO	TEST MEMO APPROVALS					
	INITIAL ISSUE	APPROVAL DATE BY	RESUB DATE	APPROVAL DATE BY	RESUB DATE	APPROVAL DATE BY
OWNER	12-9-80	TELEX 12-11-80	5-4-81	VERBAL 5-4-81		

REVISIONS				
SHEET	REV. NO.	DESCRIPTION	APPROVAL	
			OWNER	ESI
	1	GENERAL REVISION - HAND CORRECTED 5/4/81		

FOR U.S. COAST GUARD
FOR AMERICAN BUREAU OF SHIPPING

FOR OWNER _____
FOR BUILDER _____

HULL 1713
ANDREW J. BARBERI

CRASH STOPS

DATE: 5/7/81

The vessel shall be in free route speed with 800 RPM on all the engines and 92% pitch on both propellers.

The applicable ahead/astern pitch control levers in the command pilot house are to be shifted from 92% pitch ahead to 92% astern in a rapid, smooth motion, pitch is to be as indicated at the propeller.

The head reach is to be measured in vessel lengths by throwing markers overboard.

In order to gather data for USCG CFR 46-78,21-1 crash stops at half speed are to be made.

1. Going ahead in New York Direction
 - A. Crash stop using both propellers
 - B. Crash stop using New York propeller only. S.I. Propeller at 0 pitch
 - C. Crash stop using Staten Island propeller only, New York Propeller at 0 pitch.
2. Going ahead in Staten Island Direction
 - A. Crash stop using both propellers
 - B. Crash stop using S.I. propeller only, N.Y. propeller at 0 pitch.
 - C. Crash stop using N.Y. propeller only, S.I. propeller at 0 pitch.
3. Going ahead in New York direction, 1/2 speed *
 - A. Crash stop using both propellers
4. Going ahead in Staten Island direction, 1/2 speed
 - A. Crash stop using both propellers

CRASH STOP	TIME TO STOP	HEAD REACH	HEADING START	HEADING STOP	
S.I #1A 0-0	43 sec.	420'	60	80	FULL
S.I #1B 0-20	36 sec.	410'	210	215	FULL
S.I #1C 600x80	35 sec.	240'	210	212	1/2
#2A 800x92	44 sec.	420'	85	90	FULL
#2B	34 sec.	390-'	85	95	FULL
#2C	31 sec.	240'	97	105	
#3A					
#4A					

* 1/2 Speed will be 500 Eng RPM and 80% pitch on both propellers.

ANDREW J. BARBERI
HULL 1713

TURNING CIRCLES

Turns are to be made as follows:

1. Starboard in New York direction
2. Port in New York direction
3. Starboard in Staten Island direction
4. Port in Staten Island direction

The vessel is to be in free route at 800 RPM and 100% pitch ahead. Both propellers will be used for steering in the turns. Hard over will be 50% athwartship pitch for the purpose of the turning circles.

Turning circles, port and starboard, from one pilot house are to be made at half speed to gather data in accordance with 46 CFR 78-21-1.

TURNING CIRCLE

ANDREW J. BARBERI
HULL 1713
N.Y. PH

DATE: 5/7/81

	NY PORT	NY STBD	S.I. PORT	S.I. STBD.	N.Y. PORT	N.Y. STBD.
BASE COURSE	180	0	0	0		
ATHWARTSHIP PITCH BOW						
ATHWARTSHIP PITCH STERN						
PROPELLER RPM START						
PROPELLER RPM FINISH						
DEPTH OF WATER						
SEA CONDITION						
WIND DIRECTION	45		45			
WIND VOLICITY	10K					
DRAFT FORWARD	12'-6					
DRAFT AFT	12'-6					
ADVANCE TO 90° HEADING CHANGE	½ SHIP	½ SHIP	½ SHIP			
DIAMETER OF CIRCLE	1 SHIP length	1 SHIP	SHIP			
SECONDS TO 90° HEADING CHANGE	29	29	36	30		
SECONDS TO 180° HEADING CHANGE	52	51	1'01"	54"		
SECONDS TO 270° HEADING CHANGE	1'13"	1'09"	1'27"	1'20"		
SECONDS TO 360° HEADING CHANGE	2'03"	2'00"	2'23"	1'45"		
HLUBACK TEST	1'22"	1'-20"				

TURNING CIRCLE

ANDREW J. BARBERI
HULL 1713

DATE: 5/7/81

S.I.P.H.

			1		SI $\frac{1}{2}$ SPEED	SI $\frac{1}{2}$ SPEED
	NY PORT	NY STBD	S.I. PORT	S.I. STBD	N.Y. PORT	N.Y. STBD
BASE COURSE			190	180	0	
ATHWARTSHIP PITCH BOW			100	100		
ATHWARTSHIP PITCH STERN			100	100		
PROPELLER RPM START			800			
PROPELLER RPM FINISH						
DEPTH OF WATER						
SEA CONDITION			2'	2'		
WIND DIRECTION			45°	45°		
WIND VOLICITY			10K	10K		
DRAFT FORWARD						
DRAFT AFT						
ADVANCE TO 90° HEADING CHANGE						
DIAMETER OF CIRCLE			$\frac{1}{2}$ ship length	$\frac{1}{2}$ ship length		
SECONDS TO 90° HEADING CHANGE			42	39	36	35
SECONDS TO 180° HEADING CHANGE			56	60	1'-0"	1'-2"
SECONDS TO 270° HEADING CHANGE			1'21"	1'20"	1-34	1'31"
SECONDS TO 360° HEADING CHANGE			1'40"	1'40"	2'0"	1'58
STOP SWING					2'11"	2'11"

HLUBACK MEASUREMENT

1'25

1'24