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"Hangs" and Bottom Obstructions
LOAN COPY ONLY
of the Mississippi/Alabama Gulf

Loran C

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"Hangs" and Bottom Obstructions of the Mississippi/Alabama Gulf

Loran C

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PREFACE

This book is dedicated to our friends, the fishermen of the Gulf of Mexico without whose cooperation its production would not have been possible. This collection of information is made available from the Sea Grant programs and Cooperative Extension services of Texas A&M University, Mississippi State University and Auburn University.

This book is not nearly complete. It represents the first effort to accumulate and disseminate locations of bottom fishing obstructions in shrimping grounds from the Southwest Pass of the Mississippi River to Alabama. Continuing efforts will be made to obtain additional Loran coordinates of hangs and to revise existing data. Your assistance with this ongoing project will be significantly appreciated.

This information was obtained by fishermen often under stress due to weather, strenuous work, and anticipation of lost fishing gear. It is remarkable that the readings are as accurate as they seem to be.

THE ACCURACY OF THIS BOOK

All readings in this book are actual Loran C coordinates and do not represent conversions from previously obtained Loran A readings.

When working from this book, readings should be compared on charts due to necessary distortions this cataloging technique may impose. Due to ridges and irregular depth curvatures in the Gulf, it is possible for a shallower reading to be found farther offshore than a deeper reading.

Ordinarily, visible obstructions and a very large percentage of announced oil company caps and completions are not included.

Several factors concerning accuracy should be noted. It is extremely difficult to know when a hang has been moved. Also some readings may be mud hangs instead of obstructions and it is sometimes quite difficult to differentiate between the two. Every attempt was made in the accumulation of this information to omit mud hangs, unless a number of vessels could be affected by them. Most mud readings that are intentionally included are so designated.

A hang may have several different, but close, readings. Several fishermen may have reported the same obstruction with slightly different Loran fixes. The variation of these readings is very valuable for confirmation purposes.

If the difference of readings on the X secondary (29000 line) equals 2.0 microseconds or less and corresponding cross readings are similar, the readings are considered the same. Limits are also placed on coordinates of the Y secondary (46000 line). If the difference of readings on the Y secondary equals 0.4 microseconds or less and cross readings are similar, these readings are considered the same. The various readings of a hang will appear adjacent to the original reading at which it was logged.

The gradients of a Loran line are of particular importance when designating several readings as a similar hang; furthermore, the gradients are important when giving an obstruction berth. The amount of area covered by 0.1 of a microsecond on the X secondary equals approximately 50 feet in regions included in this book. The gradients of the Y secondary range from approximately 115 feet for 0.1 microsecond offshore of Mobil Bay to approximately 150 feet per 0.1 microsecond off the Mississippi Sound.

TECHNICAL INFORMATION ON LAYOUT

Each set of facing pages represents 100 microseconds of the X secondary of the 7980 Loran C GRI. The book begins with the 28700 line of the X secondary off of the Southwest Pass of the Mississippi River and progresses east to the 29800 line off of Alabama.

Each page is divided into five columns. Each column represents 10 microseconds of

the X secondary, which is designated at the outside corner of the page. Located vertically along the outer margin of each page are numbers representing the depth of water in fathoms. The cross reading in the form of the Y secondary appears after the initial X coordinates and depth.

THE ⊗ DESIGNATION




Depths listed in this book are obtained by plotting reported hang coordinates on charts. Due to significant depth irregularities, it is impossible to obtain accurate soundings off the Mississippi River from charts. Accurate depths cannot be obtained for inshore areas such as Breton or Chandeleur Sounds. To compensate for this, the designation of ⊗ is used in place of the depth. Special care should be taken with these readings, as no system has been developed to compensate for this problem. In most cases, coordinates are listed in relation to their position to other hangs. The lack of uniformity in depth contours, i.e. shallower readings offshore, deeper readings inshore, presents problems with this cataloguing system. The user of this book is advised to take special precautions to compensate for this irregularity.

ACKNOWLEDGEMENTS

Gratitude is expressed to the following fishermen for donating their time and information for this publication.

Capt. Mark Bates	O. S. Capt. Vernon
Capt. Vernon Bates, Jr.	O. S. Rhonda Kathleen
Capt. Donnie Collier	O. S. Capt. Ty
Capt. Country	O. S. Lady Hamilton III
Capt. Len Jones	O. S. Rosa
Capt. Tommy Kiff	O. S. Mr. Wayne
Capt. Owen Olano	O. S. Barbara Ann
Capt. Bobby Pendaavis	O. S. Sun Star
Capt. Chuck Peyregne	O. S. Capt. Elwood
Capt. Tommy Schultz	O. S. Reva Rose
Capt. Thomas Silver	O. S. Miss Jeannie
Capt. Chris Steiner	O. S. Cynthia Diane
Capt. Jerry Steiner	O. S. Lady Frances

READING THE CHARTS

- ex — READING THOUGHT TO BE EXACT
-  — BROKEN BOTTOM
- H — HOLE
- TH — TOE HEAD
- Wr — WRECK
- R — ROCK
- Cor — CORAL
- ③ — FATHOM
- ①10' — FEET
- C — CAPPED WELL
- App — APPROXIMATE
- $\left. \begin{array}{l} 62.3 \\ 46759.8 \end{array} \right\}$ — EXTENSION OF BAD BOTTOM 11059.8 THROUGH 11062.3
- $\left. \begin{array}{l} 60.1 \\ 46759.8 \end{array} \right\}$ — DIFFERENT READINGS OF THE SAME HANG (Confirmation)
-  — QUESTIONABLE READING
-  — ACTUAL LORAN C READING TAKEN, NOT A CONVERSION

FATHOMS

28700

0 - 9.9

10 - 19.9

20 - 29.9

30 - 39.9

40 - 49.9

1

2

28707.0 (3) 46861.9

28733.9 (14) 46857.8

3

28707.8 (3) 46860.4 28718.9 (3) 46862.8

28746.5 (3) 46845.9

4

28707.7 (4) 46858.0 28718.1 (3) 46857.6

5

6

28733.0 (1) 46797.0

7

8

28714.2 (4) 46792.7

28721.7 (1) 46792.8

28745.8 (1) 46795.6

9

28710.7 (9) 46795.6 28725.0 (9) 46792.6

28740.8 (1) 46795.6

10

28701.4 (1) 46802.4

28739.6 (1) 46787.6

11

12

28734.7 (1) 46764.4

13

28744.8 (1) 46785.4

14

28745.3 (2) 46784.9

15

16

28714.8 (1) 46787.9

17

28736.6 (1) 46755.7

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28726.9 (25) 46777.6

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28726.9 (25) 46779.6

26

28725.4 (1) 46764.8

28745.0 (1) 46750.0

27

28

28719.9 (1) 46773.5 28721.9 (1) 46767.2

28733.6 (2) 46748.3

29

28737.2 (1) 46747.3

30

31

28700.8 (3) 46775.0

32

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34

28703.4 (1) 46750.6

35

28702.1 (1) 46751.6

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28702.8 (1) 46751.2

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28737.3 (1) 46786.0

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28730.4 (4) 46727.4

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28727.1 (1) 46705.9

28741.8 (1) 46722.6

50-59.9	60-69.9	70-79.9	80-89.9	90-99.9	FATHOMS
	28765.3 (8) 46851.6 SW PASS AREA ←	28778.3 (8) 46763.3	28783.8 (8) 46845.3 28782.7 (2) 46846.7	28791.1 (8) 46879.4	1
28750.9 (2) 46854.6	28765.3 46761.7	28771.1 (8) 46768.9	28786.9 (2) 46846.4	28791.1 (8) 46859.8	2
28756.0 (2) 46851.8	28769.6 (8) 46770.3	28776.0 (2) 46845.2	28787.3 (8) 46763.2	28796.0 (8) 46843.9	3
28756.7 (3) 46845.8	28767.0 (8) 46769.9	28775.2 (3) 46823.7	SW PASS AREA	28799.5 (8) 46843.4	4
28755.6 (8) 46765.7	28762.7 (8) 46819.4	28779.4 (5) 46784.6		28796.8 (14) 46818.6	5
28759.3 (6) 46802.8	28765.6 (6) 46789.6	28770.5 (5) 46802.0		28792.1 (5) 46799.4	6
28751.6 (6) 46823.4	28767.0 (8) 46769.9	28775.0 (8) 46777.0		28790.4 (8) 46774.5	7
		28772.4 (5) 46762.0			8
		28777.1 (6) 46759.8			9
28758.6 (10) 46755.0					10
					11
					12
28755.0 (8) 46768.8				28791.1 (8) 46759.8	13
28759.1 (14) 46777.3	28761.5 (14) 46777.2				14
	28760.3 (14) 46776.6				15
	28765.0 (8) 46776.6				16
28750.8 (17) 46777.3					17
28750.9 (18) 46778.0					18
	28760.0 (8) 46772.0				19
			28786.4 (8) 46757.1		20
	28760.3 (21) 46752.5				21
					22
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					24
	28765.3 (8) 46751.6				25
	SW PASS AREA				26
	28766.0 (8) 46751.0				27
	28761.8 (8) 46750.4				28
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	28762.1 (8) 46746.2				30
28756.3 (8) 46744.3					31
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	28766.9 (8) 46725.1				49
	28764.0 (8) 46716.6				50

28900

FATHOMS

0 - 9, 9 10 - 19, 9 20 - 29, 9 30 - 39, 9 40 - 49, 9

1		28913.1 (X) 46791.1	28922.3 (X) 46888.5	28938.6 (X) 46907.3 28932.4 (X) 46889.5	28945.1 (X) 46882.
2		28914.8 (X) 46787.9		28930.3 (2) 46777.1	
3		28918.1 (X) 46783.4	28923.5 (3) 46778.5	28936.3 (3) 46773.5	
4			28920.0 (X) 46775.0	28930.9 (4) 46773.1	
5		28918.4 (5) 46772.8	28927.4 (5) 46772.9 28924.5 (5) 46771.5 28924.0 (5) 46771.1 28927.2 (5) 46771.1		28946.1 (5) 46768.
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13				28932.0 (12) 46767.1	
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15		28916.8 (15) 46766.3			
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22				28932.0 (21) 46761.1	
23			28924.0 (22) 46760.0		
24					
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30		28900.2 (30) 46757.5			
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46				28936.3 (45) 46748.1	
47					
48					
49					
50		28916.8 (X) 46706.3		28937.6 (X) 46723.4	

50 - 59, 9	60 - 69, 9	70 - 79, 9	80 - 89, 9	90 - 99, 9	FATHOMS
	28965.2 (X) 46988.5	28979.0 (X) 46913.2	28988.6 (X) 47907.3	28993.2 (X) 46928.4	1
	28968.5 (X) 46907.0	28978.7 (X) 46902.9	28987.3 (X) 46933.3	28990.3 (X) 46915.5	2
		28979.9 (X) 46901.0	28980.3 (X) 46906.5	28991.0 (X) 46909.0	3
		28975.0 (X) 46896.5	28980.9 (X) 46900.6	28990.2 (X) 46908.8	4
		28975.2 (X) 46890.6	28984.4 (X) 46883.7	28992.5 (X) 46885.2	5
		28974.8 (X) 46883.2		28990.9 (X) 46882.0	6
	↑ BRETON SOUND AREA ↑				7
28950.3 (X) 46775.6		28972.9 (X) 46774.1		28991.7 (X) 46779.5	8
28950.3 (X) 46773.6	28963.5 (X) 46764.7	28977.2 (X) 46777.1	28987.6 (X) 46774.6	28996.7 (X) 46779.5	9
28950.4 (X) 46771.6		28977.2 (X) 46773.9	28985.7 (X) 46773.1		10
		28971.3 (X) 46773.8			11
		28970.4 (X) 46766.4		28997.6 (X) 46774.6	12
		28979.8 (X) 46768.9		28992.8 (X) 46771.3	13
					14
				28993.3 (X) 46767.6	15
					16
					17
					18
					19
					20
					21
			28982.8 (X) 46764.6		22
				28992.4 (X) 46765.5	23
					24
					25
					26
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					29
					30
					31
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					35
	28968.3 (X) 46755.3			28991.0 (X) 46760.1	36
					37
					38
					39
					40
			28987.2 (X) 46754.2		41
	28964.2 (X) 46749.8		28980.8 (X) 46754.0		42
					43
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					49
					50

FATHOMS

29000

0 - 9.9

10 - 19.9

20 - 29.9

30 - 39.9

40 - 49.9

1	29005.8 (4) 46890.0	29017.3 (8) 46923.2	29023.0 (X) 46908.0	29032.0 (X) 46919.8	29043.8 (X) 46922.0
2	29007.1 (4) 46878.6	29019.4 (8) 46882.3	29029.0 (X) 46901.0	29033.5 (3) 46885.5	29044.5 (X) 46915.0
3	29006.5 (X) 46877.7		29023.2 (X) 46884.35	29035.54 (X) 46882.70	29042.0 (X) 46912.2
4			29029.4 (X) 46882.2	29033.0 (X) 46881.0	29045.0 (X) 46911.0
5			29020.2 (X) 46882.5	29034.1 (4) 46875.8	29045.5 (8) 46908.5
6			29027.12 (X) 46882.37	29036.3 (4) 46873.1	29047.0 (X) 46907.5
7			29026.2 (4) 46879.3	29033.6 (X) 46849.0	29047.6 (3) 46881.7
8			29021.0 (4) 46875.7		29043.5 (X) 46880.7
9			29024.5 (4) 46872.9		29044.1 (3) 46880.9
10					29043.7 (X) 46876.5

↑ BRETON SOUND AREA ↑

12	29002.9 (7) 46780.1	29018.1 (4) 46783.4			29041.7 (11) 46782.5
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29005.6 (X) 46773.5

29031.0 (X) 46773.5

29038.4 (34) 46769.9

50

29100

FATHOMS

0 - 9.9

10 - 19.9

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40 - 49.9

1		29117.6 (X) 46904.6	29129.5 (11) 46834.1 29129.4 (16) 46831.4	29133.1 (X) 46911.0	
2	29107.1 (2) 46891.8	29118.6 (X) 46885.8		29133.0 (3) 46881.2 29137.8 (2) 46829.7	
3	29100.0 (3) 46873.0	29115.1 (X) 46885.1			
4	29107.6 (X) 46821.5	29119.6 (4) 46876.9			
5	29104.9 (X) 46835.3	29111.1 (7) 46843.4			
6	29100.0 (5) 46865.0	29110.3 (7) 46842.2		29131.7 (5) 46879.6	
7	29109.3 (7) 46853.9	29113.7 (7) 46838.3	29124.6 (7) 46867.1	29133.0 (5) 46875.5	29144.2 (X) 46881.2
8		29110.7 (4) 46835.0	29125.8 (8) 46846.0	29137.7 (5) 46869.7	29140.7 (7) 46867.5
9		29111.7 (3) 46834.4	29129.9 (8) 46817.6 29120.3 (8) 46809.0	29135.0 (7) 46859.0 29135.0 (8) 46859.9 29133.0 (8) 46856.0	
10			29125.5 (8) 46854.2	29135.1 (8) 46853.9	29145.1 (10) 46832.5
11			29121.3 (8) 46811.3	29135.1 (9) 46851.1	29146.7 (10) 46831.5
12			29126.3 (X) 46811.3	29135.1 (9) 46851.1	29146.2 (10) 46829.8
13				29131.7 (9) 46839.7	29148.3 (10) 46822.8
14				29133.6 (10) 46849.0	29147.1 (11) 46849.4
15			29128.4 (14) 46808.5	29136.3 (12) 46842.3	29148.0 (11) 46847.0
16				29131.0 (12) 46840.9	29146.0 (X) 46853.0
17				29132.7 (12) 46812.5	29145.0 (12) 46845.6
18			29128.0 (16) 46805.5	29135.1 (14) 46813.9	29140.0 (12) 46844.1
19				29135.3 (15) 46811.9	29140.0 (12) 46840.1
20					29145.9 (12) 46839.5
21					29149.9 (12) 46822.6
22					29147.8 (5) 46817.9
23				29131.7 (22) 46804.9	29147.3 (22) 46810.0
24					
25					
26				29138.9 (25) 46802.7	
27	29107.1 (27) 46791.8		29125.8 (26) 46799.0		
28					
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30					29140.6 (X) 46802.9
31					
32					
33					
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36					
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42	29103.6 (32) 46782.5				
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49					
50					

R 2" BELL

ING BOAT

FATHOMS	29200				
	0 - 9.9	10 - 19.9	20 - 29.9	30 - 39.9	40
1			29227.5 (8) 46970.0		
2					
3					
4					
5					
6					
7					
8			29225.8 (7) 46891.0		
9		29219.8 (9) 46873.1			
10					
11					
12			29229.3 (10) 46870.7		
13					
14					
15					
16			29221.0 (5) 46858.0		
17		29213.0 (6) 46857.0			
18					
19					
20					
21					
22					
23				29233.0 (22) 46855.0	
24	29204.6 (24) 46843.8	29211.9 (8) 46847.7	29229.2 (23) 46850.1		29245.8
25				29238.2 (24) 46850.8	29248.0
26					29243.5
27		29213.4 (26) 46843.8			3.2
28		29211.9 (26) 46842.7		29235.0 (27) 46847.6	
29				29233.0 (27) 46847.6	
30					
31					
32	29207.4 (32) 46835.4		29223.3 (31) 46838.7	29234.1 (31) 46839.6	
33					29241.5
34		29219.0 (34) 46827.9			29246.5
35					29246.5
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44		29215.7 (8) 46797.6			
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FATHOMS

29300

0 - 9, 9

10 - 19, 9

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40 - 49, 9

1	29301.9 (X) 47057.3	29315.0 (X) 47053.0	29329.0 (X) 47046.4	29335.5 ^{6.5} (X) 47067.2	29345.0 (X) 47059.8
2	29300.0 (X) 47051.1	29313.0 (X) 47047.5	29328.6 (X) 47041.3	29334.7 (X) 47065.8	29348.2 (X) 47046.4
3	29301.41 (X) 47049.60	29313.0 (X) 46995.1	29329.6 ^{8.6} (X) 47023.9	29333.1 (X) 47050.1	29341.4 (X) 47030.0
4	29307.8 (X) 46988.7		29328.6 (X) 47023.09	29336.6 (X) 47049.1	29340.3 (X) 47027.6
5			29322.9 (X) 47019.6	29333.6 ^{1.8} (X) 47048.6	
6			29320.7 (X) 47017.7	29336.6 ^{1.4} (X) 47047.0	
7			29327.4 (X) 47004.3	29334.1 (X) 47003.8	
8			29328.8 (X) 47003.0	29332.2 (X) 46996.5	

↑ CHANDELEUR SOUND AREA ↑

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29347.4 (17) 46881.5

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29335.0 (32) 46847.6 29343.2 (32) 46850.9
 29324.0 (33) 46841.0

29345.2 (35) 46834.8

29338.3 (37) 46824.0
 29309.8 (38) 46813.7 29326.0 (38) 46822.5 29339.6 (38) 46822.1

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29302.2 (44) 46804.3 29312.0 (44) 46802.7

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FATHOMS

29400

0 - 9, 9

10 - 19, 9

20 - 29, 9

30 - 39, 9

40 - 49, 9

1	29402.7 (X) 47071.9			29438.7 (X) 47071.0	
2	29408.6 (X) 47066.5				
3	29408.6 (3) 47064.6				
4	29405.2 (4) 47056.5		29429.3 (4) 47061.8 ⁷	29438.0 (4) 47062.8 ⁶⁰	29447.9 (4) 47070.3
5	29406.6 (5) 47041.3		29421.3 (4) 46983.3		29441.75 (X) 47062.5 ⁷
6	29407.5 (X) 46925.93		29423.7 (6) 47042.9	29433.1 (6) 47050.1	29447.1 (X) 46997.9
7			29420.0 (6) 47042.4	29435.9 (X) 47044.5	
8		29413.9 (8) 46948.5		29438.0 (X) 47000.0	29444.5 (8) 46972.3
9		29411.3 (8) 46925.0		29433.5 (9) 46960.1	29447.0 (9) 46956.0 ¹
10				29433.7 (9) 46955.3	29449.4 (9) 46952.3
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17					29440.0 (16) 46905.0
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28					29441.7 (X) 46886.7
29					
30					29449.0 (29) 46875.6
31					29446.4 (31) 46869.2
32					29444.7 (31) 46867.7
33		29419.1 (33) 46832.8	29423.4 (33) 46844.1 ⁰		
34			29425.0 (33) 46842.5 ⁰		
35	29407.4 (35) 46834.8	29414.5 (35) 46831.1			
36		29419.3 (36) 46829.9			
37					
38		29417.0 (38) 46826.6			
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40			29425.0 (40) 46819.0		
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50				29439.5 (55) 46818.3	

ROCKS

50 - 59.9	60 - 69.9	70 - 79.9	80 - 89.9	90 - 99.9	FATHOMS
		29470.0 ^{2.9} (8) 47075.0 ^{3.3}	29483.4 (8) 47083.4		1
		29472.9 (8) 47070.3			2
29451.8 (3) 47028.5		29477.2 (8) 47069.1	29483.4 (8) 47068.0		3
29450.9 (8) 47018.2		29473.9 (8) 47088.2	29483.7 (8) 47069.1		4
		29477.1 ^{1.3} (8) 47070.1 ^{1.3}	29487.0 (8) 47070.0		5
	29461.6 (6) 47062.3	29476.9 (6) 47068.0	29484.5 (6) 47059.2	29496.5 (6) 47071.8	6
		29477.3 (6) 47061.8	29488.9 (6) 47035.5	29490.1 (6) 47059.0	7
		29472.9 (6) 47061.8		29494.0 (7) 47050.1	8
29452.0 (9) 46959.9		29479.2 (6) 47052.5	29489.3 (9) 46917.2		9
29453.0 (9) 46953.0	29469.5 (10) 46964.5				10
29453.7 (11) 46947.5		29478.1 (10) 46978.1		29490.6 (11) 46987.8	11
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		29474.4 (16) 46913.0			16
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				29493.7 (18) 46922.3	18
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				29493.5 (26) 46894.0	26
				29494.0 (27) 46887.8	27
				29491.0 (29) 46884.6	28
29459.7 (29) 46880.4			29480.4 (29) 46859.7	29493.7 (29) 46885.7	29
		29478.6 (30) 46852.2		29496.8 (30) 46856.3	30
		29475.6 (31) 46860.6	29483.6 (31) 46854.5	29491.4 (31) 46857.2	31
	29464.4 (32) 46857.7	29476.8 (31) 46856.3	29489.5 (32) 46847.7	29491.4 (32) 46851.2	32
				29498.5 (32) 46848.5	33
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FATHOMS

29500

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		29518.5 ^{3.0} (5) 47062.0			
6	29500.3 ^{0.0} (6) 47058.0	29516.3 ^{0.0} (6) 47060.7 ^{SHIP 1.5}	29527.3 ^{0.0} (7) 47065.6	29537.9 ^{0.0} (6) 47075.6	
7	29500.0 ^{0.0} (7) 47050.80	29513.0 ^{0.0} (8) 47047.5	29527.6 ^{0.0} (7) 47061.6		
8	29504.0 ^{0.0} (8) 47041.0	29510.4 ^{0.0} (8) 47038.7	29521.0 ^{0.0} (7) 47056.7	29535.6 ^{0.0} (8) 47054.1 ^{0.0}	
9	29505.0 ^{0.0} (9) 47015.0	29517.4 ^{0.0} (9) 47030.4	29529.4 ^{0.0} (11) 47036.4	29539.6 ^{0.0} (50) 47036.5 ^{0.0}	
10		29516.9 ^{0.0} (9) 47030.3 ^{SHIP 1.0}	29527.0 ^{0.0} (11) 47025.0	29535.9 ^{0.0} (11) 47044.5	
11	29500.0 ^{0.0} (11) 46971.7	29512.5 ^{0.0} (10) 47004.3	29522.0 ^{0.0} (11) 47010.9	29534.1 ^{0.0} (11) 47030.6	29549.1 ^{0.0} (11) 47026.2
12	29500.5 ^{0.0} (12) 46962.3	29512.5 ^{0.0} (11) 47009.3	29520.0 ^{0.0} (11) 47000.9		29545.0 ^{0.0} (12) 47003.0
13	29500.0 ^{0.0} (12) 46960.0				29545.0 ^{0.0} (13) 46990.0
14					29541.7 ^{0.0} (13) 46988.5
15			29528.8 ^{4.0} (15) 46961.3	29531.8 ^{0.0} (15) 46974.0	29540.5 ^{0.0} (16) 46960.0
16	29502.0 ^{0.0} (16) 46929.0			29534.8 ^{0.0} (16) 46955.8	29542.7 ^{0.0} (16) 46956.5 ^{STEEL HOLE}
17					29543.3 ^{0.0} (17) 46959.2
18	29502.2 ^{0.0} (18) 46944.4		29522.2 ^{0.0} (18) 46944.4		29549.0 ^{0.0} (17) 46957.0
19	29505.6 ^{0.0} (18) 46930.7			29530.9 ^{0.0} (19) 46936.2	
20	29502.0 ^{0.0} (19) 46931.7				
21					29542.0 ^{0.0} (21) 46931.0
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26	29502.0 ^{0.0} (26) 46890.0				29542.7 ^{5.0} (26) 46898.1
27	29508.9 ^{0.0} (27) 46886.8				29543.3 ^{0.0} (26) 46898.0
28					29542.6 ^{0.0} (27) 46897.9
29				29538.3 ^{0.0} (29) 46875.0	
30					
31		29511.0 ^{0.0} (31) 46872.9		29532.7 ^{0.0} (31) 46869.3	
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48					29544.5 ^{0.0} (48) 46822.9 ^{ROCKS}
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FATHOMS	29700				
	0 - 9.9	10 - 19.9	20 - 29.9	30 - 39.9	40
1					
2			29729.5 (8) 47089.6		
3			29727.7 (8) 47083.8		
4			29727.6 (8) 47083.0		
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7		29713.6 (3) 47067.0			
8		29713.0 (7) 47064.7		29734.2 (7) 47066.4	29745
9				29736.6 (8) 47062.2	29744
10			29726.8 (9) 47059.4	29732.3 (8) 47061.4	29743
11		29715.0 (11) 47039.0	29729.8 (11) 47039.6	29730.0 (11) 47037.0	29741
12					29749
13					29741
14			29729.8 (13) 47032.9		29742
15					29748
16					
17					
18	29706.0 (18) 46999.0	29718.0 (17) 47012.4	29726.0 (17) 47011.0		
19	29706.0 (18) 46999.0	29711.3 (18) 46992.6	29722.0 (18) 46999.0		
20			29729.4 (18) 46987.1		
21		29712.2 (20) 46961.1			
22			29727.7 (21) 46962.4		
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29		29713.0 (28) 46864.9			
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37				29730.1 (36) 46845.6	
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45	29707.0 (45) 46839.0		29723.0 (45) 46841.4		
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FATHOMS	29800				
	0 - 9.9	10 - 19.9	20 - 29.9	30 - 39.9	40 - 49.9
1	29809.5 (8) 47078.0		29829.2 (8) 47103.6	29831.7 (8) 47104.2	
2	29801.9 (8) 47078.9				
3	29807.0 (8) 47076.0				
4	29802.0 (8) 47076.0				
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9					
10		29815.5 (11) 47058.1			
11		29815.8 (11) 47049.4	29826.4 (11) 47050.2		29847.8 (11) 47049.8
12	29807.0 (12) 47035.0			29838.4 (12) 47031.0	29840.0 (12) 47040.0
13	29804.6 (12) 47031.7				
14					
15		29818.6 (15) 47022.6			
16					
17		AIRPLANE 29817.0 (17) 47012.5 ⁰	29827.0 ⁶⁵ (17) 47016.3 ^{7.05}		
18			29822.5 (17) 47012.5	29838.4 (18) 46994.7	
19		29812.7 (19) 46964.0	29824.2 (19) 46961.2		
20			29821.8 (20) 46943.4		
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44					29843.8 (44) 46843.8
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50	29802.2 (52) 46824.1		29820.2 (52) 46824.1		

