

## Stability Problems Question Tables

---

### ST-0001

Deck cargo	170 Tons
Upper tween deck layer	1800 Tons
Lower tween deck layer	2000 Tons
Hold layer	3200 Tons

### ST-0002

I. Fifty drums of cement. Each drum weighs 600 pounds and is stowed on end. Each drum measures 28 inches in diameter and is 32 inches high.

II. Two reels of 1 inch diameter wire rope. Each reel contains 3000 linear feet of wire weighing 1.55 pounds per linear foot. The tare weight of each reel is 450 pounds. The reels are stowed on the flat and are 36 inches high.

III. Twelve pallets of general supplies. Each pallet measures 8'L x 4'W x 3'H. The pallets are stowed singly and weigh 580 pounds each.

IV. Twelve crates of machine parts and pipe fittings. Each weighs 880 pounds. Each crate measures 8'L x 3'W x 4'H and is stowed singly.

### ST-0003

I. Drill casing - 16 inches in diameter by 30 feet long. Twenty lengths each weighing 1.72 long tons and stowed in a single tier on deck.

II. Six pallets of oak planking - stowed two pallets high. Each pallet weighs 2.2 long tons. Each pallet is 3.0 feet high.

III. Crated piping and machine parts - Eight crates each 8'L x 4'W x 3'H. Each crate is stowed singly and weighs 660 pounds.

IV. Drill pipe - 6 inches in diameter by 30 feet long. One hundred and twenty lengths, each weighing 0.644 long ton. The center of gravity of the pipes is 1.11 feet above the main deck.

## Stability Problems Question Tables

---

### ST-0004

- I. Fifty lengths of drill casing - stowed in a block 8 feet high. Each pipe weighs 326 lbs.
- II. Ten crates of valves - stowed 2 high. Each crate is 36" L x 30" W x 15" H and weighs 1020 lbs.
- III. Fourteen containers of dry stores - stowed 2 high. Each container weighs 2 long tons and measures 6'L x 6'W x 6'H.
- IV. Four anchors - on deck. The center of gravity of each anchor is 9" from the deck and each weighs 6120 lbs.

### ST-0005

Deck	200 Tons
Upper tween deck layer	2800 Tons
Lower tween deck layer	1000 Tons
Hold layer	4300 Tons

### ST-0008

No. 1 Second Deck	140
No. 2 Second Deck	80
No. 2 Third Deck	180
No. 2 Tank Top	360
No. 3 Tank Top	380
No. 4 Second Deck	240
No. 4 Third Deck	280
No. 4 Tank Top	470
No. 5 Upper Level Flat	80
No. 5 Third Deck	260
No. 5 Tank Top	410
No. 6 Second Deck	360

### ST-0010

Deck cargo	200 Tons
Upper tween deck layer	2800 Tons
Lower tween deck layer	3000 Tons
Hold layer	2300 Tons

## Stability Problems Question Tables

---

### ST-0011

Deck cargo	170 Tons
Upper tween deck layer	2800 Tons
Lower tween deck layer	2000 Tons
Hold layer	3200 Tons

### ST-0014

Stores	50 Tons
Lube oil	13 Tons
Cargo	2105 Tons
Fuel oil	1035 Tons
Fresh water	150 Tons
Ballast	100 Tons

### ST-0015

I. Two reels of hoisting wire. Each reel is 8 feet in circumference, 4 feet wide and has 3000 feet of wire. Both reels are stowed on the flat. Wire weighs 1.55 pounds per linear foot. The tare weight of each reel is 500 pounds.

II. Eight pallets of case goods stowed singly. Each pallet is 8'L x 4'W x 4'H and weighs 1 long ton.

III. Twelve steel containers of cement. Each container weighs 1 1/2 tons. Each container is 8'L x 4'W x 4'H. The containers are stowed singly fore and aft.

IV. Ten crates of stewards stores. Each crate measures 4'L x 4'W x 3'H and weighs 420 pounds. Each crate is stowed on deck.

## Stability Problems Question Tables

---

### ST-0018

- I. Twenty drums of lube oil stowed on end. Each drum weighs 436 pounds. Diameter of drums is 24 inches and their height is 30 inches overall.
- II. General supplies – Twenty six boxes stowed 2 high. Each box weighs 360 pounds and measures 6'L x 3'W x 2'H.
- III. One electric generator weighing 2684 lbs. Stowed so the center of gravity is 3.2 feet above the main deck.
- IV. Casing pipe – Twenty nine each. Each pipe weighs 1.7 long tons. The pipe is stacked 3 high across the main deck. The center of gravity of the 10 casings in the 3rd tier is 3.75 feet; the 9 casings in the second tier is 2.3 feet; the 10 casings in the lower tier is 0.833 foot.

### ST-0019

- I. Two danforth mooring anchors. Each anchor weighs 15,750 pounds. The center of gravity is 15 inches above the main deck.
- II. Ninety fathoms of 3-inch diameter wire rope. The weight per linear foot is 18.7 pounds. The center of gravity of the wire is 22 inches above the main deck.
- III. Ten cases of machine parts. Each case measures 6'L x 6'W x 4'H. The total weight of all of the cases is 6000 lbs. Each case is stowed on deck.
- IV. Eight crates of galley stores. Each crate measures 4'L x 3'W x 2.5'H and weighs 380 pounds. Each crate is stowed on deck.

## Stability Problems Question Tables

---

### ST-0020

I. Two reels of hoisting wire. Each reel is 8 feet in circumference and 4 feet wide. Both reels are stowed on the flat and each has 3000 feet of wire. Wire weighs 1.55 pounds per linear foot. Tare weight of each reel is 500 pounds.

II. Eight pallets of case goods stowed singly. Each pallet is 8'L x 4'W x 4'H and weighs 1 long ton.

III. Twelve steel containers of cement. Each container weighs 1 1/2 long tons. Each container is 8'L X 4'W 4'H. The containers are stowed singly fore and aft.

IV. Ten crates of stewards stores. Each crate measures 4'L x 4'W x 3'H and weighs 420 pounds. Each crate is stowed on deck.

### ST-0021

Stores	50 Tons
Lube oil	13 Tons
Cargo	8400 Tons
Fuel oil	3015 Tons
Fresh water	200 Tons
Ballast	450 Tons

### ST-0022

No. 1 Main Deck	60
No. 2 Second Deck	90
No. 2 Tank Top	120
No. 3 Second Deck	90
No. 3 Third Deck	250
No. 3 Tank Top	400
No. 4 Second Deck	110
No. 5 Second deck	50
No. 5 Tank Top	480
No. 5 Upper Reefer	90
No. 6 Second Deck	120
No. 7 Third Deck	250

## Stability Problems Question Tables

---

### ST-0023

Stores	50 Tons
Lube oil	13 Tons
Cargo	1853 Tons
Fuel oil	1324 Tons
Fresh water	130 Tons
Ballast	370 Tons

### ST-0025

Stores	50 Tons
Lube oil	13 Tons
Cargo	8040 Tons
Fuel oil	3115 Tons
Fresh water	200 Tons

### ST-0026

Stores	50 Tons
Lube oil	13 Tons
Cargo	3390 Tons
Fuel oil	2580 Tons
Fresh water	175 Tons
Ballast	345 Tons

### ST-0027

- I. Motor generator - one unit weighing 4850 pounds. The center of gravity is 32 inches above the main deck.
- II. Fifty drums of cement - each drum weighs 400 pounds and is stowed on end. Each drum is 28 inches in diameter and 32 inches high.
- III. Ten pallets of cased lube oil - each pallet measures 8'L x 4'W x 4'H. Each pallet is stowed on deck and weighs 2.7 long tons.
- IV. Drill collars - Ten lengths each 8" in diameter by 30 feet long, stowed in a single layer on deck. Each length weighs 1.15 long tons.

## Stability Problems Question Tables

---

### ST-0028

No. 1 Main Deck	100
No. 1 Third Deck	60
No. 2 Second Deck	90
No. 3 Second Deck	120
No. 3 Third Deck	30
No. 3 Tank Top	230
No. 4 Second Deck	120
No. 5 Upper Level Flat	110
No. 5 Third Deck	140
No. 5 Upper Reefer	90
No. 5 Third Deck Reefer	110
No. 7 Second Deck	240

### ST-0029

Stores	50 Tons
Lube oil	13 Tons
Cargo	2345 Tons
Fuel oil	1324 Tons
Fresh water	170 Tons
Ballast	400 Tons

### ST-0030

I. Intermediate drill casing - Ten lengths each 16 inches in diameter. Each length weighs 1.7 long tons. The center of gravity above the main deck of the casing stow is 1.8 feet.

II. Crated machine parts and assorted pipe fittings – Six crates stowed two high. Each crate is 4'L x 3.5'W x 3'H. Each crate weighs 840 lbs.

III. Ten each - 55 gallon drums of lube oil stowed on end. Each drum weighs 462 pounds, is 26 inches in diameter and 32 inches high.

IV. Dry stores - Twelve containers stowed two high. Each container weighs 0.9 long ton and measures 6'L x 4'W x 3'H.

## Stability Problems Question Tables

---

### ST-0031

No. 1 Second Deck	80
No. 2 Second Deck	100
No. 2 Third Deck	70
No. 2 Tank Top	340
No. 3 Third Deck	120
No. 3 Tank Top	260
No. 4 Second Deck	70
No. 4 Tank Top	220
No. 5 Second Deck	120
No. 5 Tank Top	380
No. 6 Third Deck	260
No. 7 Second Deck	340

### ST-0032

Stores	50 Tons
Lube oil	13 Tons
Cargo	2860 Tons
Fuel oil	1324 Tons
Fresh water	170 Tons
Ballast	400 Tons

### ST-0033

Stores	50 Tons
Lube oil	13 Tons
Cargo	5390 Tons
Fuel oil	2890 Tons
Fresh water	275 Tons
Ballast	945 Tons

### ST-0034

Stores	50 Tons
Lube oil	13 Tons
Cargo	3035 Tons
Fuel oil	1775 Tons
Fresh water	270 Tons
Ballast	440 Tons



## Stability Problems Question Tables

---

### ST-0035

No. 1 Main Deck	80
No. 2 Third Deck	220
No. 2 Tank Top	315
No. 3 Second Deck	305
No. 3 Third Deck	220
No. 3 Tank Top	480
No. 4 Second Deck	150
No. 4 Third Deck	260
No. 5 Upper Level Flat	120
No. 5 Tank Top	360
No. 6 Second Deck	320
No. 7 Second Deck	440

### ST-0036

I. Fifty drums of cement - each drum weighs 400 pounds and is stowed on end. Each drum is 28 inches in diameter and 32 inches high.

II. Crated piping and valves - Eight crates stowed 2 high. Each crate measures 8'L x 4'W x 2.5'H and weighs 640 pounds.

III. Stewards stores - Twelve containers measuring 6'H x 6'W x 6'L. Each container weighs 960 pounds. The center of gravity of each container is 30 inches above the main deck.

IV. Twenty lengths of drill casing - 16 inches in diameter by 30 feet long. Each length weighs 1.72 long tons and is stowed in a single tier on deck.

### ST-0037

Stores	50 Tons
Lube oil	13 Tons
Cargo	3450 Tons
Fuel oil	1970 Tons
Fresh water	220 Tons
Ballast	440 Tons

## Stability Problems Question Tables

---

### ST-0038

No. 1 Third Deck	80
No. 2 Second Deck	140
No. 2 Tank Top	360
No. 3 Second Deck	40
No. 3 Third Deck	220
No. 3 Tank Top	490
No. 4 Second Deck	80
No. 5 Upper Level Flat	110
No. 5 Third Deck	140
No. 5 Tank Top	550
No. 5 Upper Reefer	85
No. 6 Third Deck	260

### ST-0039

I. One hundred and sixteen lengths of drill pipe. Each pipe weighs 0.644 long ton. The center of gravity is 1.11 feet above the main deck.

II. Ten containers 8'L x 4'W x 3'H containing assorted pipe fittings and machine parts. Each container weighs 1-1/4 long tons, and the center of gravity of each box is 1.35 feet above the main deck.

III. Two 90-fathom lengths of 3-inch diameter wire rope coiled on the main deck. Each foot of wire rope weighs 18.7 pounds. The center of gravity of the coil is 27 inches above the main deck.

IV. Six pallets of oak planking. Each pallet weighs 2-1/2 long tons with a center of gravity of 2.2 feet above the main deck.

## Stability Problems Question Tables

---

### ST-0040

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2824	7.5
FRESH WATER	160	21.0
DRY CARGO	7190	27.0
REEFER CARGO	170	29.2
DECK CARGO	155	55.0

TOTAL FREE SURFACE MOMENTS 15138  
FOR ALL LIQUIDS ON BOARD

### ST-0041

Stores	50 Tons
Lube oil	13 Tons
Cargo	4780 Tons
Fuel oil	1970 Tons
Fresh water	110 Tons
Ballast	390 Tons

### ST-0043

No. 1 Second Deck	140
No. 2 Second Deck	80
No. 2 Third Deck	260
No. 3 Second Deck	180
No. 3 Third Deck	320
No. 3 Tank Top	480
No. 4 Second Deck	90
No. 4 Tank Top	90
No. 5 Second Deck	260
No. 5 Third Deck	380
No. 5 Tank Top	580
No. 6 Third Deck	360

## Stability Problems Question Tables

---

### ST-0045

Stores	50 Tons
Lube oil	13 Tons
Cargo	5880 Tons
Fuel oil	2210 Tons
Fresh water	200 Tons
Ballast	600 Tons

### ST-0046

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	3710	7.5
FRESH WATER	115	21.0
DRY CARGO	7815	27.0
REEFER CARGO	175	29.2
DECK CARGO	120	55.0

TOTAL FREE SURFACE MOMENTS 9640  
FOR ALL LIQUIDS ON BOARD

### ST-0047

Stores	50 Tons
Lube oil	13 Tons
Cargo	7325 Tons
Fuel oil	2210 Tons
Fresh water	200 Tons
Ballast	100 Tons

### ST-0048

Deck cargo	350 Tons
Upper tween deck layer	1700 Tons
Lower tween deck layer	2900 Tons
Hold layer	3400 Tons

### ST-0049

Deck cargo	350 Tons
Upper tween deck layer	1780 Tons
Lower tween deck layer	1990 Tons
Hold layer	3230 Tons

## Stability Problems Question Tables

---

### ST-0050

No. 1 Third Deck	220
No. 2 Second Deck	140
No. 2 Third Deck	80
No. 3 Second Deck	240
No. 3 Third Deck	220
No. 3 Tank Top	280
No. 4 Second Deck	260
No. 4 Third Deck	180
No. 4 Tank Top	210
No. 5 Third Deck	340
No. 6 Second Deck	260
No. 7 Third Deck	240

### ST-0051

Deck cargo	190 Tons
Upper tween deck layer	740 Tons
Lower tween deck layer	1420 Tons
Hold layer	2840 Tons

### ST-0052

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2824	7.5
FRESH WATER	160	21.0
DRY CARGO	7190	27.0
REEFER CARGO	170	29.2
DECK CARGO	155	55.0

TOTAL FREE SURFACE MOMENTS 20972  
FOR ALL LIQUIDS ON BOARD

### ST-0053

Deck cargo	220 Tons
Upper tween deck layer	1950 Tons
Lower tween deck layer	1300 Tons
Hold layer	2750 Tons

## Stability Problems Question Tables

---

### ST-0054

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	1906	7.5
FRESH WATER	140	21.0
DRY CARGO	4286	27.0
REEFER CARGO	125	29.2
DECK CARGO	140	55.0

TOTAL FREE SURFACE MOMENTS 11468  
FOR ALL LIQUIDS ON BOARD

### ST-0055

No. 2 Second Deck	140
No. 2 Third Deck	220
No. 2 Tank Top	140
No. 3 Second Deck	180
No. 3 Third Deck	160
No. 3 Tank top	160
No. 4 Second Deck	110
No. 4 Tank Top	420
No. 5 Upper Level Flat	90
No. 5 Third Deck	170
No. 6 Second Deck	180
No. 6 Third Deck	310

## Stability Problems Question Tables

---

### ST-0056

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	1906	7.5
FRESH WATER	140	21.0
DRY CARGO	4286	27.0
REEFER CARGO	125	29.2
DECK CARGO	140	55.0
 TOTAL FREE SURFACE MOMENTS FOR ALL LIQUIDS ON BOARD		 4157

### ST-0057

DB 1 CL 48.2	DB 7 P	94.6
DB 1A CL 81.9	DB 7 S	94.6
DB 4 CL 224.1	DT 2 P	100.7
DB 4 P 128.1	DT 2 S	100.7
DB 4 S 128.1	DT 3 P	86.1
DB 5 CL 196.2	DT 3 S	86.1
DB 5 P 178.0	DT 4 P/S	110.0
DB 5 S 180.0	DT 5 P/S	108.4
DB 6 CL 242.3	DIS/WATER	24.9

### ST-0058

Deck cargo	250 Tons
Upper tween deck layer	1520 Tons
Lower tween deck layer	1410 Tons
Hold layer	2070 Tons

## Stability Problems Question Tables

---

### ST-0059

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2608	7.5
FRESH WATER	80	21.0
DRY CARGO	5469	27.0
REEFER CARGO	225	29.2
DECK CARGO	113	55.0

TOTAL FREE SURFACE MOMENTS 15585  
FOR ALL LIQUIDS ON BOARD

### ST-0060

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2824	7.5
FRESH WATER	80	21.0
DRY CARGO	4286	27.0
REEFER CARGO	225	29.2
DECK CARGO	155	55.0

TOTAL FREE SURFACE MOMENTS 15585  
FOR ALL LIQUIDS ON BOARD

### ST-0062

Deck cargo	320 Tons
Upper tween deck layer	1320 Tons
Lower tween deck layer	1010 Tons
Hold layer	1670 Tons



## Stability Problems Question Tables

---

### ST-0063

DB 1 CL	48.2	DB 6 CL	242.3
DB 1A CL	81.9	DB 7 P	94.6
DB 3 P	55.6	DB 7 S	94.6
DB 3 S	55.6	DT 3 P	86.1
DB 4 CL	224.1	DT 3 S	86.1
DB 4 P	128.1	DT 4 P/S	120.0
DB 4 S	128.1	DT 5 P/S	108.4
DB 5 CL	196.2		

### ST-0064

DB 2 P	71.2	DB 5 P	178.0
DB 2 S	71.2	DB 5 S	180.0
DB 3 CL	220.0	DB 6 CL	242.3
DB 3 P	55.6	DB 6 P	87.0
DB 3 S	55.6	DB 6 S	87.0
DB 4 CL	224.1	DB 7 P	94.6
DB 4 P	128.1	DB 7 S	94.6
DB 4 S	128.1	DT 4 P/S	110.0
DB 5 CL	196.2	DT 5 P/S	108.4

### ST-0065

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	3710	7.5
FRESH WATER	115	21.0
DRY CARGO	7815	27.0
REEFER CARGO	175	29.2
DECK CARGO	120	55.0

TOTAL FREE SURFACE MOMENTS 17706  
FOR ALL LIQUIDS ON BOARD

### ST-0066

Deck cargo	280 Tons
Upper tween deck layer	1320 Tons
Lower tween deck layer	1260 Tons
Hold layer	1420 Tons

## Stability Problems Question Tables

---

### ST-0067

DB 1 CL	48.2	DB 6 P	87.0
DB 1A CL	81.9	DB 6 S	87.0
DB 2 P	71.2	DB 7 P	94.6
DB 2 S	71.2	DB 7 S	94.6
DB 4 CL	224.1	DT 3 P	86.1
DB 4 P	128.1	DT 3 S	86.1
DB 4 S	128.1	DT 4 P/S	120.0
DB 5 CL	196.2		

### ST-0068

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2824	7.5
FRESH WATER	80	21.0
DRY CARGO	4286	27.0
REEFER CARGO	225	29.2
DECK CARGO	155	55.0

TOTAL FREE SURFACE MOMENTS 17604  
FOR ALL LIQUIDS ON BOARD

### ST-0069

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2710	7.5
FRESH WATER	115	21.0
DRY CARGO	7815	27.0
REEFER CARGO	175	29.2
DECK CARGO	120	55.0

TOTAL FREE SURFACE MOMENTS 17706  
FOR ALL LIQUIDS ON BOARD

## Stability Problems Question Tables

---

### ST-0070

Deck cargo	210 Tons
Upper tween deck layer	1220 Tons
Lower tween deck layer	910 Tons
Hold layer	870 Tons

### ST-0071

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	3670	7.5
FRESH WATER	140	21.0
DRY CARGO	5965	27.0
REEFER CARGO	265	29.2
DECK CARGO	115	55.0

TOTAL FREE SURFACE MOMENTS 20219  
FOR ALL LIQUIDS ON BOARD

### ST-0073

Deck cargo	320 Tons
Upper tween deck layer	820 Tons
Lower tween deck layer	910 Tons
Hold layer	270 Tons

### ST-0074

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2608	7.5
FRESH WATER	80	21.0
DRY CARGO	5469	25.2
REEFER CARGO	225	29.2
DECK CARGO	113	55.0

TOTAL FREE SURFACE MOMENTS 18585  
FOR ALL LIQUIDS ON BOARD

## Stability Problems Question Tables

---

### ST-0075

DB 1 CL	48.2	DB 6 CL	242.3
DB 1A CL	81.9	DB 6 P	87.0
DB 3 P	55.6	DB 6 S	87.0
DB 3 S	55.6	DB 7 P	94.6
DB 4 CL	224.1	DB 7 S	94.6
DB 4 P	128.1	DT 3 P	86.1
DB 4 S	128.1	DT 3 S	86.1
DB 5 CL	196.2	DT 4 P/S	120.0

### ST-0076

Deck cargo	250 Tons
Upper tween deck layer	1320 Tons
Lower tween deck layer	310 Tons
Hold layer	370 Tons

### ST-0077

DB 1 CL	48.2	DB 4 S	128.1
DB 2 P	71.2	DB 5 CL	196.2
DB 2 S	71.2	DB 6 CL	242.3
DB 3 P	55.6	DB 7 P	94.6
DB 3 S	55.6	DB 7 S	94.6
DB 4 CL	224.1	DT 5 P/S	108.4
DB 4 P	128.1		

### ST-0078

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2024	7.5
FRESH WATER	160	21.0
DRY CARGO	7090	27.4
REEFER CARGO	170	29.2
DECK CARGO	155	55.0

TOTAL FREE SURFACE MOMENTS 15538  
FOR ALL LIQUIDS ON BOARD

## Stability Problems Question Tables

---

### ST-0080

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	1906	7.5
FRESH WATER	140	21.0
DRY CARGO	4826	27.3
REEFER CARGO	125	29.2
DECK CARGO	140	55.0

TOTAL FREE SURFACE MOMENTS 14168  
FOR ALL LIQUIDS ON BOARD

### ST-0083

DB 1 CL	48.2	DB 7 S	94.6
DB 2 P	71.2	DT 2 P	100.0
DB 2 S	71.2	DT 2 S	100.0
DB 3 P	55.6	DT 3 P	86.0
DB 3 S	55.6	DT 3 S	86.0
DB 4 CL	224.1	DT 4 P/S	120.0
DB 5 CL	196.2	DT 5 P/S	108.4
DB 6 CL	242.3	DT 6 P	201.0
DB 7 P	94.6	DT 6 S	201.0

### ST-0085

DB 1 CL	48.2	DB 7 P	94.6
DB 1A CL	81.9	DB 7 S	94.6
DB 2 P	71.2	DT 1A CL	150.0
DB 2 S	71.2	DT 2 P	50.0
DB 3 CL	227.6	DT 2 S	50.0
DB 3 P	55.6	DT 6 P	201.2
DB 3 S	55.6	DT 6 S	201.2
DB 4 CL	224.1		
DB 4 P	128.1		
DB 4 S	128.1		
DB 5 CL	180.0		
DB 6 CL	242.3		

## Stability Problems Question Tables

---

### ST-0086

DB 1 CL	48.2	DB 6 CL	242.3
DB 1A CL	81.9	DB 7 P	94.6
DB 2 P	71.2	DB 7 S	94.6
DB 2 S	71.2	DT 1 CL	125.3
DB 3 CL	227.6	DT 1A CL	257.6
DB 3 P	55.6	DT 2 P	80.0
DB 3 S	55.6	DT 2 S	80.0
DB 4 CL	224.1	DT 6 P	201.2
DB 4 P	128.1	DT 6 S	201.2
DB 4 S	128.1	DT 7 P	128.8
		DT 7 S	128.8

### ST-0088

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2608	8.5
FRESH WATER	80	20.0
DRY CARGO	5469	25.5
REEFER CARGO	225	28.2
DECK CARGO	113	55.0

TOTAL FREE SURFACE MOMENTS 17531  
FOR ALL LIQUIDS ON BOARD

### ST-0091

DB 1 CL	48.2	DB 7 P	94.6
DB 1A CL	81.9	DB 7 S	94.6
DB 2 P	71.2	DT 1 CL	125.3
DB 2 S	71.2	DT 1A CL	257.6
DB 3 CL	227.6	DT 2 P	78.5
DB 3 P	55.6	DT 2 S	78.5
DB 3 S	55.6	DT 6 P	201.2
DB 4 CL	224.1	DT 6 S	201.2
DB 4 P	128.1	DT 7 P	128.8
DB 4 S	128.1	DT 7 S	128.8
DB 6 CL	242.3	DT 8 P	50.5
		DT 8 S	50.5

## Stability Problems Question Tables

---

### ST-0093

DB 4 CL	224.1	DT 2 P	100.7
DB 4 P	128.1	DT 2 S	100.7
DB 4 S	128.1	DT 3 P	86.1
DB 5 CL	180.0	DT 3 S	86.1
DB 5 P	178.0	DT 4 P/S	105.0
DB 5 S	180.0	DT 5 P/S	108.4
DB 6 CL	242.3		
DB 6 P	87.0		
DB 6 S	87.0		
DIS/WATER	20.0		

### ST-0095

DB 2 P	71.2	DB 6 CL	242.3
DB 2 S	71.2	DB 6 P	87.0
DB 3 CL	227.6	DB 6 S	87.0
DB 3 P	55.6	DB 7 P	90.0
DB 3 S	55.6	DB 7 S	90.0
DB 4 CL	224.1	DT 3 P	86.1
DB 4 P	128.1	DT 3 S	86.1
DB 4 S	128.1	DT 6 P	201.2
DB 5 CL	196.2	DT 6 S	201.2
DB 5 P	178.0	DT 4 P/S	100.0
DB 5 S	180.0	DT 5 P/S	108.4
		DIS/WATER	20.0

## Stability Problems Question Tables

---

### ST-0096

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2608	8.5
FRESH WATER	80	20.0
DRY CARGO	5469	25.5
REEFER CARGO	225	28.2
DECK CARGO	113	55.0

TOTAL FREE SURFACE MOMENTS 18993  
FOR ALL LIQUIDS ON BOARD

### ST-0097

DB 1 CL	48.2	DT 2 P	100.0
DB 1A CL	81.9	DT 2 S	100.0
DB 2 P	71.2	DT 3 P	86.0
DB 2 S	71.2	DT 3 S	86.0
DB 3 P	55.6	DT 4 P/S	120.0
DB 3 S	55.6	DT 5 P/S	108.4
DB 5 CL	196.2	DT 6 P	201.0
DB 7 P	94.6	DT 6 S	201.0
DB 7 S	94.6		

### ST-0098

DB 2 P	71.2	DB 5 CL	196.2
DB 2 S	71.2	DB 5 P	178.0
DB 3 CL	220.0	DB 5 S	180.0
DB 3 P	55.6	DB 6 CL	242.3
DB 3 S	55.6	DB 6 P	87.0
DB 4 CL	224.1	DB 6 S	87.0
DB 4 P	128.1	DB 7 P	94.6
DB 4 S	128.1	DB 7 S	94.6
		DT 4 P/S	110.0
		DT 5 P/S	108.4



## Stability Problems Question Tables

---

### ST-0099

DB 1 CL	48.2	DB 5 CL	180.0
DB 1A CL	81.9	DB 5 P	178.0
DB 2 P	71.2	DB 5 S	180.0
DB 2 S	71.2	DB 6CL	242.3
DB 3 CL	227.6	DB 7 P	94.6
DB 3 P	55.6	DB 7 S	94.6
DB 3 S	55.6	DT 6 P	201.2
DB 4 P	128.1	DT 7 P	128.8
DB 4 S	128.1	DT 7 S	128.8

### ST-0100

DB 4 CL	224.1	DB 6 CL	200.0
DB 4 P	128.1	DB 6 P	87.0
DB 4 S	128.1	DB 6 S	87.0
DB 5 CL	196.2	DT 1A CL	257.6
DB 5 P	178.0	DT 5 P/S	108.4
DB 5 S	180.0		

### ST-0101

No. 1 Second Deck	60
No. 1 Third Deck	70
No. 2 Second Deck	40
No. 2 Tank Top	100
No. 3 Third Deck	60
No. 3 Tank Top	70
No. 4 Second Deck	50
No. 4 Tank Top	80
No. 5 Second Deck	60
No. 5 Tank Top	60
No. 6 Second Deck	100
No. 7 Third Deck	80

## Stability Problems Question Tables

---

### ST-0103

DB 3 CL	180.0	DT 2 P	80.0
DB 3 P	55.6	DT 2 S	80.0
DB 3 S	55.6	DT 3 P	86.1
DB 4 CL	224.1	DT 3 S	86.1
DB 4 P	128.1	DT 6 P	201.2
DB 4 S	128.1	DT 6 S	201.2
DB 5 CL	180.0		
DB 5 P	178.0		
DB 5	80.0		

### ST-0104

DB 1 CL	48.2	DT 2 P	100.0
DB 1A CL	81.9	DT 2 S	100.0
DB 2 P	71.2	DT 3 P	86.0
DB 2 S	71.2	DT 3 S	86.0
DB 3 P	55.6	DT 4 P/S	120.0
DB 3 S	55.6	DT 5 P/S	108.4
DB 5 CL	196.2	DT 6 P	201.0
DB 7 P	87.0	DT 6 S	201.0
DB 7 S	87.0		

### ST-0105

No. 1 Second Deck	70
No. 1 Third Deck	70
No. 2 Third Deck	80
No. 2 Tank Top	65
No. 3 Third Deck	55
No. 3 Tank Top	80
No. 4 Second Deck	50
No. 4 Tank Top	90
No. 5 Upper Level Flat	70
No. 5 Tank Top	70
No. 6 Second Deck	80
No. 6 Third Deck	60

## Stability Problems Question Tables

---

### ST-0106

DB 1 CL	48.2	DB 5 CL	196.2
DB 1A CL	81.9	DB 6 CL	242.3
DB 2 P	71.2	DB 6 P	87.0
DB 2 S	71.2	DB 6 S	87.0
DB 3 CL	227.6	DB 7 P	94.6
DB 4 CL	224.1	DB 7 S	94.6
DB 4 P	128.1	DT 4 P/S	120.0
DB 4 S	128.1		

### ST-0107

No. 1 Third Deck	150
No. 2 Tank Top	100
No. 3 Third Deck	75
No. 3 Tank Top	50
No. 4 Second Deck	80
No. 4 Third Deck	100
No. 5 Third Deck	90
No. 5 Tank Top	100
No. 6 Third Deck	120

### ST-0108

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2608	8.5
FRESH WATER	80	20.0
DRY CARGO	5469	25.5
REEFER CARGO	225	28.2
DECK CARGO	113	55.0

TOTAL FREE SURFACE MOMENTS 15585  
FOR ALL LIQUIDS ON BOARD

## Stability Problems Question Tables

---

### ST-0109

No. 1 Third Deck	90
No. 2 Third Deck	80
No. 2 Tank Top	100
No. 3 Second Deck	50
No. 3 Third Deck	80
No. 3 Tank Top	75
No. 4 Tank Top	100
No. 5 Third Deck	80
No. 5 26'-6" Flat REEFER	50
No. 5 Third Deck REEFER	60
No. 6 Second Deck	100
No. 7 Second Deck	80

### ST-0111

No. 1 Second Deck	75
No. 1 Third Deck	80
No. 2 Third Deck	60
No. 2 Tank Top	90
No. 3 Second Deck	80
No. 3 Third Deck	75
No. 4 Third Deck	90
No. 4 Tank Top	60
No. 5 Second Deck	50
No. 5 26'-6" Flat	50
No. 5 Third Deck	50
No. 5 26'-6" Flat REEFER	70
No. 6 Second Deck	75
No. 6 Third Deck	60
No. 7 Third Deck	80

## Stability Problems Question Tables

---

### ST-0116

DB 1 CL	48.2	DB 6 CL	200.0
DB 1A CL	81.9	DB 6 P	87.0
DB 2 P	71.2	DB 6 S	87.0
DB 2 S	71.2	DT 1A CL	257.6
DB 4 CL	224.1	DT 4 P/S	50.0
DB 4 P	128.1	DT 5 P/S	108.4
DB 4 S	128.1	DIS/WATER	10.0
DB 5 CL	196.2		
DB 5 P	178.0		
DB 5 S	180.0		

### ST-0118

DB 1 CL	48.2	DB 7 P	94.6
DB 1A CL	81.9	DB 7 S	94.6
DB 2 P	71.2	DT 2 P	100.7
DB 2 S	71.2	DT 2 S	100.7
DB 4 P	128.1	DT 6 P	201.2
DB 4 S	128.1	DT 6 S	201.2
DB 5 CL	196.2	DT 7 P	128.8
DB 5 P	178.0	DT 7 S	128.8
DB 5 S	180.0	DT 4 P/S	110.0
DB 6 CL	200.0	DT 5 P/S	108.4
DB 6 P	87.0	DIS/WATER	20.0
DB 6 S	87.0		

### ST-0119

DB 1 CL	48.2	DB 6 CL	242.3
DB 1A CL	81.9	DB 6 P	87.0
DB 2 P	71.2	DB 6 S	87.0
DB 2 S	71.2	DB 7 P	94.6
DB 3 CL	227.6	DB 7 S	94.6
DB 3 P	55.6	DT 1 CL	125.3
DB 3 S	55.6	DT 1A CL	257.6
DB 4 CL	224.1	DT 6 P	201.2
DB 4 P	128.1	DT 6 S	201.2
DB 4 S	128.1	DT 4 P/S	120.0
DB 5 CL	196.2	DT 5 P/S	108.4
DB 5 P	150.0	DIS/WATER	20.0
DB 5 S	150.0		

## Stability Problems Question Tables

---

### ST-0121

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2608	8.5
FRESH WATER	80	20.0
DRY CARGO	5469	25.5
REEFER CARGO	225	28.2
DECK CARGO	113	55.0

TOTAL FREE SURFACE MOMENTS 20454  
FOR ALL LIQUIDS ON BOARD

### ST-0122

DB 1 CL	48.2	DB 6 P	87.0
DB 1A CL	81.9	DB 6 S	87.0
DB 2 P	71.2	DB 7 P	94.6
DB 2 S	71.2	DB 7 S	94.6
DB 4 P	128.1	DT 2 P	100.7
DB 4 S	128.1	DT 2 S	100.7
DB 5 CL	196.2	DT 7 P	128.8
DB 5 P	178.0	DT 7 S	128.8
DB 5 S	180.0	DT 4 P/S	110.0
DB 6 CL	200.0	DT 5 P/S	108.4
		DIS/WATER	20.0

### ST-0124

Deck cargo	180 Tons
Upper tween deck layer	800 Tons
Lower tween deck layer	800 Tons
Hold layer	2300 Tons

## Stability Problems Question Tables

---

### ST-0125

No. 1 Second Deck	80
No. 1 Third Deck	75
No. 2 Third Deck	60
No. 2 Tank Top	94
No. 3 Second Deck	101
No. 3 Tank Top	57
No. 4 Third Deck	75
No. 4 Tank Top	83
No. 5 Tank Top	90
No. 5 26'-6" Flat (Reefer)	30
No. 5 Third Dk Reefer	30

### ST-0126

Deck cargo	250 Tons
Upper tween deck layer	2800 Tons
Lower tween deck layer	3200 Tons
Hold layer	3200 Tons

### ST-0127

DB 4 CL	224.1	DT 2 P	100.7
DB 4 P	128.1	DT 2 S	100.7
DB 4 S	128.1	DT 3 P	86.1
DB 5 CL	180.0	DT 3 S	86.1
DB 5 P	178.0	DT 4 P/S	105.0
DB 5 S	180.0	DT 5 P/S	108.4
DB 6 CL	242.3	DIS/WATER	20.0
DB 6 P	87.0		
DB 6 S	87.0		

### ST-0128

Deck cargo	300 Tons
Upper tween deck layer	2700 Tons
Lower tween deck layer	3650 Tons
Hold layer	2650 Tons

## Stability Problems Question Tables

---

### ST-0129

DB 4 CL	224.1	DB 6 CL	200.0
DB 4 P	128.1	DB 6 P	87.0
DB 4 S	128.1	DB 6 S	87.0
DB 5 CL	196.2	DT 1A CL	257.6
DB 5 P	178.0	DT 5 P/S	108.4
DB 5 S	180.0		

### ST-0130

No. 1 Second Deck	70
No. 1 Third Deck	70
No. 2 Third Deck	80
No. 2 Tank Top	65
No. 3 Third Deck	55
No. 3 Tank Top	80
No. 4 Second Deck	50
No. 4 Tank Top	90
No. 5 Upper Level Flat	70
No. 5 Tank Top	70
No. 6 Second Deck	80
No. 6 Third Deck	60

### ST-0131

No. 1 Second Deck	160
No. 2 Third Deck	85
No. 2 Tank Top	70
No. 3 Second Deck	80
No. 3 Tank Top	75
No. 4 Second Deck	40
No. 4 Tank Top	120
No. 5 26'-6", Flat	150
No. 6 Second Deck	85
No. 6 Third Deck	70

### ST-0132

No. 1 Second Deck	420
No. 2 Third Deck	410
No. 3 Third Deck	406
No. 4 Third Deck	418
No. 5 Tank Top	421
No. 6 Third Deck	412



## Stability Problems Question Tables

---

### ST-0133

DB 2 P	71.2	DB 5 CL	196.2
DB 2 S	71.2	DB 5 P	178.0
DB 3 CL	227.6	DB 5 S	180.0
DB 3 P	55.6	DB 6 CL	242.3
DB 3 S	55.6	DB 6 P	87.0
DB 4 CL	150.0	DB 6 S	87.0
DB 4 P	100.0	DB 7 P	94.6
DB 4 S	90.0	DB 7 S	94.6
		DT 1 CL	125.3
		DT 1A CL	257.6

### ST-0135

No. 1 Second Deck	90
No. 1 Third Deck	70
No. 2 Third Deck	80
No. 2 Tank Top	85
No. 4 Second Deck	100
No. 4 Third Deck	75
No. 4 Tank Top	60
No. 5 Tank Top	100
No. 5 Upper (Reefer)	75
No. 5 Third Deck Reefer	70
No. 6 Second Deck	40
No. 6 Third Deck	40
No. 7 Second Deck	100
No. 7 Third Deck	50

### ST-0136

DB 4 CL	224.1	DB 7 P	90.0
DB 4 P	128.1	DB 7 S	90.0
DB 4 S	128.1	DT 1 CL	125.3
DB 5 CL	196.2	DT 1A CL	257.6
DB 5 P	178.0	DT 4 P/S	100.0
DB 5 S	180.0	DT 5 P/S	108.4
DB 6 CL	242.3	DIS/WATER	24.9
DB 6 P	87.0		
DB 6 S	87.0		

## Stability Problems Question Tables

---

### ST-0137

DB 1 CL	48.2	DB 6 P	87.0
DB 1A CL	81.9	DB 6 S	87.0
DB 2 P	71.2	DB 7 P	94.6
DB 2 S	71.2	DB 7 S	94.6
DB 4 P	128.1	DT 2 P	100.7
DB 4 S	128.1	DT 2 S	100.7
DB 5 CL	196.2	DT 6 P	201.2
DB 5 P	178.0	DT 6 S	201.2
DB 5 S	180.0	DT 4 P/S	110.0
DB 6 CL	200.0	DT 5 P/S	108.4
		DIS/WATER	20.0

### ST-0138

Stores	50 Tons
Lube oil	13 Tons
Cargo	8240 Tons
Fuel oil	3200 Tons
Fresh water	240 Tons
Ballast	0 Tons

### ST-0139

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2608	7.5
FRESH WATER	80	21.0
DRY CARGO	5469	27.0
REEFER CARGO	225	29.2
DECK CARGO	113	55.0

TOTAL FREE SURFACE MOMENTS 22273  
FOR ALL LIQUIDS ON BOARD

### ST-0141

Deck cargo	300 Tons
Upper tween deck layer	1800 Tons
Lower tween deck layer	2900 Tons
Hold layer	3100 Tons

## Stability Problems Question Tables

---

### ST-0142

DB 2 P	71.2	DB 5 CL	196.2
DB 2 S	71.2	DB 5 P	178.0
DB 3 CL	220.0	DB 5 S	180.0
DB 3 P	55.6	DB 6 CL	242.3
DB 3 S	55.6	DB 6 P	87.0
DB 4 CL	224.1	DB 6 S	87.0
DB 4 P	128.1	DB 7 P	94.6
DB 4 S	128.1	DB 7 S	94.6
		DT 4 P/S	110.0
		DT 5 P/S	108.4

### ST-0143

Deck cargo	180 Tons
Upper tween deck layer	3000 Tons
Lower tween deck layer	3500 Tons
Hold layer	2500 Tons

### ST-0144

Stores	50 Tons
Lube oil	13 Tons
Cargo	2105 Tons
Fuel oil	1860 Tons
Fresh water	108 Tons
Ballast	0 Tons

### ST-0145

DB 1 CL	48.2	DB 6 CL	200.0
DB 1A CL	81.9	DB 6 P	87.0
DB 2 P	71.2	DB 6 S	87.0
DB 2 S	71.2	DB 7 P	94.6
DB 4 CL	224.1	DB 7 S	94.6
DB 4 P	128.1	DT 2 P	100.7
DB 4 S	128.1	DT 2 S	100.7
DB 5 CL	196.2	DT 4 P/S	110.0
DB 5 P	178.0	DT 5 P/S	108.4
DB 5 S	180.0	DIS/WATER	20.0

## Stability Problems Question Tables

---

### ST-0146

Deck cargo	300 Tons
Upper tween deck layer	3000 Tons
Lower tween deck layer	1500 Tons
Hold layer	2500 Tons

### ST-0147

Stores	50 Tons
Lube oil	13 Tons
Cargo	3036 Tons
Fuel oil	2636 Tons
Fresh water	154 Tons
Ballast	204 Tons

### ST-0148

DB 1 CL	48.2	DB 5 P	178.0
DB 1A CL	81.9	DB 5 S	180.0
DB 2 P	71.2	DB 6 CL	200.0
DB 2 S	71.2	DB 6 P	87.0
DB 3 CL	227.6	DB 6 S	87.0
DB 4 CL	224.1	DT 2 P	100.7
DB 4 P	128.1	DT 2 S	100.7
DB 4 S	128.1	DT 4 P/S	110.0
DB 5 CL	196.2	DT 5 P/S	108.4
		DIS/WATER	20.0

### ST-0149

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	1906	7.5
FRESH WATER	160	21.0
DRY CARGO	7815	27.0
REEFER CARGO	125	29.2
DECK CARGO	155	55.0

TOTAL FREE SURFACE MOMENTS 17899  
FOR ALL LIQUIDS ON BOARD

## Stability Problems Question Tables

---

### ST-0150

DB 1 CL	48.2	DB 5 P	178.0
DB 1A CL	81.9	DB 5 S	180.0
DB 2 P	71.2	DB 6 CL	200.0
DB 2 S	71.2	DB 6 P	87.0
DB 3 CL	227.6	DB 6 S	87.0
DB 4 CL	224.1	DT 1A CL	257.6
DB 4 P	128.1	DT 2 P	100.7
DB 4 S	128.1	DT 2 S	100.7
DB 5 CL	196.2	DT 4 P/S	110.0
		DT 5 P/S	108.4
		DIS/WATER	20.0

### ST-0151

DB 1 CL	48.2	DB 5 P	178.0
DB 1A CL	81.9	DB 5 S	180.0
DB 2 P	71.2	DB 6 CL	200.0
DB 2 S	71.2	DB 6 P	87.0
DB 3 CL	227.6	DB 6 S	87.0
DB 4 CL	224.1	DT 1A CL	257.6
DB 4 P	128.1	DT 2 P	100.7
DB 4 S	128.1	DT 2 S	100.7
DB 5 CL	196.2	DT 4 P/S	110.0
		DT 5 P/S	108.4
		DIS/WATER	20.0

### ST-0153

Stores	50 Tons
Lube oil	13 Tons
Cargo	7212 Tons
Fuel oil	2485 Tons
Fresh water	98 Tons
Ballast	0 Tons

## Stability Problems Question Tables

---

### ST-0155

DB 1 CL	48.2	DB 6 CL	200.0
DB 1A CL	81.9	DB 6 P	87.0
DB 2 P	71.2	DB 6 S	87.0
DB 2 S	71.2	DT 1A CL	257.6
DB 4 P	128.1	DT 2 P	100.7
DB 4 S	128.1	DT 2 S	100.7
DB 5 CL	196.2	DT 4 P/S	110.0
DB 5 P	178.0	DT 5 P/S	108.4
DB 5 S	180.0	DIS/WATER	20.0

### ST-0156

DB 1 CL	48.2	DB 6 CL	200.0
DB 1A CL	81.9	DB 6 P	87.0
DB 2 P	71.2	DB 6 S	87.0
DB 2 S	71.2	DT 1A CL	257.6
DB 3 P	55.6	DT 2 P	100.7
DB 3 S	55.6	DT 2 S	100.7
DB 4 P	128.1	DT 7 P	128.8
DB 4 S	128.1	DT 7 S	128.8
DB 5 CL	196.2	DT 4 P/S	110.0
DB 5 P	178.0	DT 5 P/S	108.4
DB 5 S	180.0	DIS/WATER	20.0

### ST-0157

DB 1 CL	48.2	DB 5 P	178.0
DB 1A CL	81.9	DB 5 S	180.0
DB 2 P	71.2	DB 6 CL	200.0
DB 2 S	71.2	DT 2 P	100.7
DB 3 P	55.6	DT 2 S	100.7
DB 3 S	55.6	DT 6 P	201.2
DB 4 P	128.1	DT 6 S	201.2
DB 4 S	128.1	DT 4 P/S	110.0
DB 5 CL	196.2	DT 5 P/S	80.0
		DIS/WATER	20.0

## Stability Problems Question Tables

---

### ST-0158

DB 1 CL	48.2	DB 7 P	94.6
DB 1A CL	60.0	DB 7 S	94.6
DB 2 P	71.2	DT 1A CL	251.6
DB 2 S	71.2	DT 2 P	100.7
DB 4 CL	224.1	DT 2 S	100.7
DB 4 P	105.0	DT 3 P	86.1
DB 4 S	105.0	DT 3 S	86.1
DB 5 CL	196.2	DT 6 P	165.0
DB 6 CL	200.0	DT 6 S	165.0
DB 6 P	87.0	DT 7 P	128.8
DB 6 S	87.0	DT 7 S	128.8

### ST-0159

No. 1 Main Deck	60
No. 1 Third Deck	80
No. 2 Second Deck	70
No. 2 Tank Top	220
No. 3 Second Deck	50
No. 4 Third Deck	110
No. 4 Tank Top	350
No. 5 26'-6" Flat CL	110
No. 5 26'-6" Flat P/S REEFER	80
No. 6 Second Deck	90
No. 6 Third Deck	110
No. 7 Third Deck	80

### ST-0160

No. 1 Third Deck	80
No. 2 Second Deck	70
No. 2 Tank Top	120
No. 3 Second Deck	50
No. 3 Tank Top	410
No. 4 Tank Top	350
No. 5 26'-6" Flat CL	110
No. 5 26'-6" Flat P/S REEFER	80
No. 5 Tank Top	180
No. 6 Second Deck	90
No. 6 Third Deck	180
No. 7 Third Deck	140

## Stability Problems Question Tables

---

### ST-0161

No. 1 Second Deck	60
No. 2 Second Deck	70
No. 2 Tank Top	120
No. 3 Second Deck	180
No. 3 Tank Top	410
No. 4 Second Deck	140
No. 5 Upper Level Flat	110
No. 5 Tank Top	180
No. 6 Second Deck	90
No. 6 Third Deck	70
No. 7 Second Deck	130
No. 7 Third Deck	140

### ST-0162

No. 1 Second Deck	60
No. 2 Second Deck	120
No. 2 Tank Top	140
No. 3 Second Deck	180
No. 4 Second Deck	140
No. 4 Tank Top	320
No. 5 Second Deck	70
No. 5 Tank Top	180
No. 6 Second Deck	90
No. 6 Third Deck	70
No. 7 Second Deck	130
No. 7 Third Deck	140

### ST-0163

No. 1 Main Deck	70
No. 2 Second Deck	120
No. 2 Third Deck	130
No. 3 Second Deck	180
No. 3 Tank Top	430
No. 4 Tank Top	320
No. 5 Tank Top	320
No. 6 Second Deck	70
No. 6 Third Deck	180
No. 7 Second Deck	120
No. 7 Third Deck	140



## Stability Problems Question Tables

---

### ST-0164

No. 1 Main Deck	70
No. 2 Second Deck	120
No. 2 Third Deck	130
No. 3 Second Deck	180
No. 3 Tank Top	430
No. 4 Tank Top	320
No. 5 Tank Top	320
No. 6 Second Deck	70
No. 6 Third Deck	180
No. 7 Second Deck	120
No. 7 Third Deck	140

### ST-0165

No. 1 Main Deck	120
No. 2 Third Deck	120
No. 3 Second Deck	80
No. 3 Tank Top	320
No. 5 Second Deck	90
No. 5 Third Deck	210
No. 5 Tank Top	450
No. 7 Second Deck	110
No. 7 Third Deck	140

### ST-0166

No. 1 Main Deck	90
No. 1 Second Deck	100
No. 2 Second Deck	160
No. 2 Third Deck	130
No. 3 Tank Top	380
No. 4 Tank Top	320
No. 5 Tank Top	360
No. 5 26'-6" Flat P/S REEFER	110
No. 6 Second Deck	120
No. 6 Third Deck	110
No. 7 Second Deck	120
No. 7 Third Deck	140

## Stability Problems Question Tables

---

### ST-0167

DB 1 CL	48.2	DT 6 P	201.2
DB 2 P	65.0	DT 6 S	201.2
DB 2 S	65.0		
DB 3 CL	227.6		
DB 4 CL	224.1		
DB 5 CL	196.2		
DB 5 P	178.0		
DB 5 S	180.0		
DB 6 CL	220.0		
DB 7 P	90.0		
DB 7 S	90.0		

### ST-0168

No. 1 Main Deck	90
No. 1 Second Deck	100
No. 2 Second Deck	160
No. 2 Third Deck	130
No. 3 Second Deck	180
No. 3 Tank Top	380
No. 4 Tank Top	320
No. 5 Second Deck	160
No. 5 26'-6" Flat P/S REEFER	110
No. 5 Tank Top	360
No. 6 Second Deck	110
No. 7 Second Deck	120
No. 7 Third Deck	140

### ST-0169

No. 1 Main Deck	120
No. 2 Second Deck	120
No. 2 Third Deck	130
No. 3 Tank Top	380
No. 4 Tank Top	320
No. 5 26'-6" Flat P/S REEFER	110
No. 6 Second Deck	120
No. 6 Third Deck	110
No. 7 Second Deck	120
No. 7 Third Deck	140

## Stability Problems Question Tables

---

### ST-0170

DB 1 CL	48.2	DB 6 CL	242.3
DB 1A CL	81.9	DB 6 P	87.0
DB 2 P	71.2	DB 6 S	87.0
DB 2 S	71.2	DB 7 P	66.2
DB 3 CL	227.6	DB 7 S	58.4
DB 3 P	55.6	DT 1	84.2
DB 3 S	55.6	DT 1A CL	235.6
DB 4 CL	224.1	DT 3 P	86.1
DB 4 P	128.1	DT 3 S	86.1
DB 4 S	128.1	DT 6 P	201.2
DB 5 CL	196.2	DT 6 S	201.2
		DT 7 P	128.8
		DT 7 S	128.8

### ST-0171

DB 1 CL	48.2	DB 6 P	87.0
DB 1A CL	81.9	DB 6 S	87.0
DB 2 P	71.2	DB 7 P	94.6
DB 2 S	71.2	DB 7 S	94.6
DB 3 CL	227.6	DT 2 P	100.7
DB 4 CL	224.1	DT 2 S	100.7
DB 4 P	128.1	DT 3 P	86.1
DB 4 S	128.1	DT 3 S	86.1
DB 5 CL	180.0	DT 6 P	201.2
DB 5 P	178.0	DT 6 S	201.2
DB 5 S	180.0	DT 7 P	128.8
DB 6 CL	212.0	DT 7 S	128.8

## Stability Problems Question Tables

---

### ST-0172

DB 1 CL	48.2	DB 7 P	94.6
DB 1A CL	81.9	DB 7 S	94.6
DB 2 P	71.2	DT 1 CL	125.3
DB 2 S	71.2	DT 1A CL	235.6
DB 3 CL	214.4	DT 2 P	100.7
DB 4 CL	224.1	DT 2 S	100.7
DB 4 P	128.1	DT 3 P	86.1
DB 4 S	128.1	DT 3 S	86.1
DB 6 CL	212.0	DT 6 P	201.2
DB 6 P	87.0	DT 6 S	201.2
DB 6 S	87.0	DT 7 P	128.8
		DT 7 S	128.8

### ST-0173

DB 1 CL	48.2	DB 7 P	94.6
DB 1A CL	81.9	DB 7 S	94.6
DB 2 P	71.2	DT 1 CL	125.3
DB 2 S	71.2	DT 1A CL	235.6
DB 3 CL	227.6	DT 3 P	86.1
DB 3 P	55.6	DT 3 S	86.1
DB 3 S	55.6	DT 6 P	201.2
DB 4 CL	224.1	DT 6 S	201.2
DB 4 P	128.1	DT 7 P	128.8
DB 4 S	128.1	DT 7 S	128.8
DB 5 CL	170.4		
DB 6 CL	212.0		

### ST-0174

DB 1 CL	48.2	DB 6 P	87.0
DB 1A CL	81.9	DB 6 S	87.0
DB 2 P	71.2	DB 7 P	94.6
DB 2 S	71.2	DB 7 S	94.6
DB 3 CL	227.6	DT 1 CL	125.3
DB 3 P	55.6	DT 1A CL	235.6
DB 3 S	55.6	DT 3 P	86.1
DB 4 CL	208.6	DT 3 S	86.1
DB 4 P	128.1	DT 6 P	201.2
DB 4 S	128.1	DT 6 S	201.2
DB 5 CL	180.4	DT 7 P	128.8
DB 6 CL	212.0	DT 7 S	128.8

## Stability Problems Question Tables

---

### ST-0176

DB 1 CL	48.2	DB 7 P	94.6
DB 1A CL	81.9	DB 7 S	94.6
DB 2 P	71.2	DT 1 CL	125.3
DB 2 S	71.2	DT 1A CL	235.6
DB 3 CL	227.6	DT 3 P	86.1
DB 3 P	55.6	DT 3 S	86.1
DB 3 S	55.6	DT 6 P	201.2
DB 4 CL	208.6	DT 6 S	201.2
DB 4 P	128.1	DT 7 P	128.8
DB 4 S	128.1	DT 7 S	128.8
DB 5 CL	170.4		
DB 6 CL	212.0		

### ST-0175

DB 1 CL	48.2	DB 7 P	94.6
DB 1A CL	81.9	DB 7 S	94.6
DB 2 P	71.2	DT 1 CL	125.3
DB 2 S	71.2	DT 1A CL	235.6
DB 3 CL	227.6	DT 3 P	86.1
DB 3 P	55.6	DT 3 S	86.1
DB 3 S	55.6	DT 6 P	201.2
DB 4 CL	208.6	DT 6 S	201.2
DB 4 P	128.1	DT 7 P	128.8
DB 4 S	128.1	DT 7 S	128.8
DB 5 CL	196.2		
DB 6 CL	212.0		
DB 6 P	87.0		
DB 6 S	87.0		

## Stability Problems Question Tables

---

### ST-0177

DB 1 CL	48.2	DB 7 P	66.2
DB 1A CL	81.9	DB 7 S	58.4
DB 2 P	71.2	DT 1 CL	125.3
DB 2 S	71.2	DT 1A CL	235.6
DB 3 CL	227.6	DT 3 P	86.1
DB 3 P	55.6	DT 3 S	86.1
DB 3 S	55.6	DT 6 P	201.2
DB 4 CL	224.1	DT 6 S	201.2
DB 4 P	87.0	DT 7 P	128.8
DB 4 S	87.0	DT 7 S	128.8
DB 5 CL	196.2		
DB 6 CL	242.3		
DB 6 P	87.0		
DB 6 S	87.0		

### ST-0178

DB 1 CL	48.2	DB 7 P	44.6
DB 1A CL	81.9	DB 7 S	20.8
DB 2 P	71.2	DT 1 CL	125.3
DB 2 S	71.2	DT 1A CL	235.6
DB 3 CL	140.6	DT 3 P	86.1
DB 3 P	55.6	DT 3 S	86.1
DB 3 S	55.6	DT 6 P	201.2
DB 4 CL	224.1	DT 6 S	201.2
DB 4 P	87.0	DT 7 P	128.8
DB 4 S	87.0	DT 7 S	128.8
DB 5 CL	170.4		
DB 6 CL	212.0		

## Stability Problems Question Tables

---

### ST-0179

DB 1 CL	40.0	DT 6 P	201.2
DB 2 P	65.0	DT 6 S	201.2
DB 2 S	65.0	DT 7 P	110.0
DB 3 CL	227.6	DT 7 S	110.0
DB 4 CL	224.1		
DB 4 P	128.1		
DB 4 S	128.1		
DB 5 CL	196.2		
DB 5 P	170.0		
DB 5 S	170.0		
DB 6 CL	242.3		

### ST-0180

DB 1 CL	48.2	DB 7 P	44.6
DB 1A CL	81.9	DB 7 S	94.6
DB 2 P	71.2	DT 1 CL	125.3
DB 2 S	71.2	DT 1A CL	235.6
DB 3 CL	140.6	DT 3 P	86.1
DB 3 P	55.6	DT 3 S	86.1
DB 3 S	55.6	DT 6 P	201.2
DB 4 CL	224.1	DT 6 S	201.2
DB 4 P	87.0	DT 7 P	128.8
DB 4 S	87.0	DT 7 S	128.8
DB 5 CL	170.4		
DB 6 CL	212.0		

### ST-0181

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	1664	7.5
FRESH WATER	160	21.0
DRY CARGO	7190	27.0
REEFER CARGO	170	29.2
DECK CARGO	155	55.0

TOTAL FREE SURFACE MOMENTS 15138  
FOR ALL LIQUIDS ON BOARD

## Stability Problems Question Tables

---

### ST-0182

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	1870	7.5
FRESH WATER	210	21.0
DRY CARGO	4882	27.0
REEFER CARGO	170	29.2
DECK CARGO	452	55.0
TOTAL FREE SURFACE MOMENTS FOR ALL LIQUIDS ON BOARD		17555

### ST-0183

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2335	7.5
FRESH WATER	190	21.0
DRY CARGO	5440	27.0
REEFER CARGO	225	29.2
DECK CARGO	377	55.0
TOTAL FREE SURFACE MOMENTS FOR ALL LIQUIDS ON BOARD		15322



## Stability Problems Question Tables

---

### ST-0184

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2685	7.5
FRESH WATER	190	21.0
DRY CARGO	5440	27.0
REEFER CARGO	225	29.2
DECK CARGO	365	55.0

TOTAL FREE SURFACE MOMENTS 16854  
FOR ALL LIQUIDS ON BOARD

### ST-0185

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2685	7.5
FRESH WATER	190	21.0
DRY CARGO	5440	27.0
REEFER CARGO	225	29.2
DECK CARGO	185	55.0

TOTAL FREE SURFACE MOMENTS 17324  
FOR ALL LIQUIDS ON BOARD

## Stability Problems Question Tables

---

### ST-0186

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2246	7.5
FRESH WATER	190	21.0
DRY CARGO	3556	27.0
REEFER CARGO	180	29.2
DECK CARGO	120	55.0

TOTAL FREE SURFACE MOMENTS 12366  
FOR ALL LIQUIDS ON BOARD

### ST-0187

DB 1 CL	40.0	DT 6 P	201.2
DB 2 P	65.0	DT 6 S	201.2
DB 2 S	65.0	DT 7 P	128.8
DB 3 CL	227.6	DT 7 S	128.8
DB 4 CL	224.1		
DB 4 P	128.1		
DB 4 S	128.1		
DB 5 CL	196.2		
DB 5 P	178.0		
DB 5 S	180.0		
DB 6 CL	242.3		

### ST-0188

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2145	6.7
FRESH WATER	190	21.0
DRY CARGO	3710	26.4
REEFER CARGO	180	29.2
DECK CARGO	120	55.0

TOTAL FREE SURFACE MOMENTS 12088  
FOR ALL LIQUIDS ON BOARD

## Stability Problems Question Tables

---

### ST-0189

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2045	6.7
FRESH WATER	240	21.0
DRY CARGO	3112	25.8
REEFER CARGO	90	29.2
DECK CARGO	80	55.0

TOTAL FREE SURFACE MOMENTS 11542  
FOR ALL LIQUIDS ON BOARD

### ST-0190

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2845	7.3
FRESH WATER	180	21.0
DRY CARGO	3188	25.3
REEFER CARGO	40	29.2
DECK CARGO	257	55.0

TOTAL FREE SURFACE MOMENTS 11980  
FOR ALL LIQUIDS ON BOARD

### ST-0191

No. 1 Third Deck	40
No. 2 Second Deck	30
No. 2 Third Deck	50
No. 2 Tank Top	80
No. 3 Tank Top	80
No. 4 Tank Top	220
No. 5 Tank Top	110
No. 5 Third Deck REEFER	40
No. 6 Second Deck	160
No. 6 Third Deck	80

## Stability Problems Question Tables

---

### ST-0192

ITEM	TONS	KG
CREW and STORES	50	43.7
LUBE OIL	13	25.8
F.O. & SALT WATER	2845	7.3
FRESH WATER	180	21.0
DRY CARGO	3188	25.3
REEFER CARGO	40	29.2
DECK CARGO	60	55.0

TOTAL FREE SURFACE MOMENTS 12600  
FOR ALL LIQUIDS ON BOARD

### ST-0193

No. 1 Third Deck	60
No. 2 Second Deck	50
No. 2 Third Deck	90
No. 2 Tank Top	40
No. 3 Second Deck	120
No. 3 Tank Top	70
No. 5 Second Deck	120
No. 5 Tank Top	280
No. 6 Second Deck	30

### ST-0194

No. 1 Second Deck	80
No. 2 Second Deck	110
No. 2 Tank Top	70
No. 3 Tank Top	90
No. 4 Third Deck	35
No. 5 Second Deck	60
No. 5 Tank Top	220
No. 6 Second Deck	40
No. 6 Third Deck	70
No. 7 Second Deck	100

## Stability Problems Question Tables

---

### ST-0195

No. 1 Second	75
No. 2 Tank Top	120
No. 3 Second Deck	60
No. 3 Third Deck	100
No. 3 Tank Top	80
No. 4 Third Deck	150
No. 5 Upper Level Flat	120
No. 5 Tank Top	90
No. 5 Third Deck REEFER	80
No. 6 Third Deck	40
No. 7 Second Deck	125