

CG - M-1-81

COAST GUARD, WASHINGTON, DC

AD A100588

Statistics of Casualties, 1979

DTIC
ELECTE
S JUN 25 1981 D

The U.S. Coast Guard annually presents a statistical summary of commercial vessel casualties that were investigated by Coast Guard marine inspectors during the previous fiscal year. The public, industry, and the Coast Guard have used the findings of these investigations to establish standards and determine the need for legislation to improve the protection of safety of life and property at sea.

The master of a vessel is required by law to report a marine casualty as soon as possible after its occurrence to the Coast Guard Officer in Charge, Marine Inspection. Casualties involving commercial vessels are required to be reported to the Coast Guard whenever the casualty results in any of the following:

- (a) actual physical damage to property in excess of \$1,500;
- (b) material damage affecting the seaworthiness or efficiency of a vessel;
- (c) stranding or grounding (with or without damage);
- (d) loss of life;
- (e) injury causing any person to remain incapacitated for a period in excess of 72 hours, except injury

to harbor workers not resulting in death and not resulting from vessel casualty or vessel equipment casualty.

The statistical summary on the following pages represents casualties to commercial vessels which meet the above criteria. It is important to note that the summary represents casualties reported to Coast Guard Headquarters in fiscal year 1979, which ended September 30, 1979. Statistics concerning noncommercial recreation boating accidents will be published separately in a future issue of the Proceedings.

This summary also includes those casualties serious enough by reason of dollar damage or death/injury to personnel to warrant the convening of a Marine Board of Investigation (specifically, the collision between the USCG CUYA-HOGA and the Argentine M/V SANTA CRUZ on Chesapeake Bay, which resulted in the loss of 11 lives).

Every event involving a vessel or her personnel which meets any of the conditions of a reportable casualty is of great concern to the Coast Guard. A number of report-

able casualties are not investigated by the Coast Guard each year simply because they are not reported. Thus it is of primary importance that the masters of all vessels ensure that all casualties are reported and investigated. With the cooperation of the masters, owners, and agents of commercial vessels, many of the unreported casualties can be investigated.

This statistical tabulation is intended to summarize the casualty experience for the entire commercial fleet. Because this summary is so all-encompassing, the use of the statistics may lead to erroneous conclusions unless the limitations of the data are well understood.

The Information and Analysis Staff of the Office of Merchant Marine Safety will gladly assist in quantifying those limitations for each specific need. Comments and recommendations for changes or improvements to these statistics should be addressed to the Commandant (G-MA/16), U.S. Coast Guard, Washington, DC 20593.

DTIC FILE COPY

166

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

81 5 14 036

December 1980

Accession For	
NTIS GRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By <u>Per Ltr. on File</u>	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
<u>A</u>	

Casualties to Commercial Vessels

October 1, 1978, to September 30, 1979
Fiscal Year 1979

	Collisions crossing, meeting and overtaking	Collisions while anchored, docking, or undocking	Collisions, fog	Collisions with piers and bridges	Collisions: all others	Explosion and/or fire—cargo	Explosion and/or fire—vessels' fuel	Explosion and/or fire—pressure vessels, boilers	Explosion and/or fire—structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, upstairings, and flooding	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total
Number of casualties	337	313	10	650	371	4	9	7	199	430	755	547	1	3	332	940	157	4665
Number of vessels involved	1003	893	26	1280	633	4	13	7	207	722	1382	673	1	3	339	947	506	8156
Number of inspected vessels involved	285	256	8	395	222	3	13	7	50	201	430	76	1	2	216	229	83	2464
Number of un inspected vessels involved	718	637	18	885	411	1	13	7	157	521	952	597	1	1	123	718	423	5695
PRIMARY CAUSE																		
Personnel fault:																		
Pilots—State	17	19		36	4				9	51	2						1	139
Pilots—Federal	4	8		20	3				10	22	1						1	69
Licensed officer—Documented seaman	188	144	4	368	129		1		4	197	275	48			13	6	23	1380
Unlicensed—(ndocumented persons	80	47	3	32	35		1		6	78	83	42			1	18	18	436
All others	12	30	1	39	13	1			10	10	26	14		2	8	2	19	177
Calculated risk				2	2					2	3						11	11
Restricted maneuvering room	2	2		3													3	10
Storms—adverse weather	8	8	2	15	34				26	31	64		1	84	3	18	295	
Unusual currents	1	2		9					4	3	4					1	1	25
Sheer, suction, bank cushion	4	1		1					3	8	1						16	20
Depth of water less than expected				3	3				18	143					1		105	120
Failure of equipment	19	46		64	31	2	4	6	79	44	56	75	1		147	505	23	1105
Unseaworthy—lack of maintenance	1	1															6	6
Floating debris—submerged object				4	65				7	5	23				9	1	4	118
Inadequate tug assistance				9	3												15	15
Fault on part of other vessel or person	665	581	16	643	266		4		8	299	533	211			65	9	243	3543
Unknown—insufficient information	22	11		33	40	1	3	1	99	15	37	183			26	20	154	645
VESSEL TYPE																		
Inspected vessels:																		
Passenger and ferry—large	3	5		6	2				7		6	2			1	9	2	38
Passenger and ferry—small	23	19		9	12				12	25	8	22			7	38	2	177
Freight	57	68	3	95	69	1			2	33	28	27	1	2	108	87	23	664
Cargo Barge	16	14		22	25					10	27	3			9	2	2	130
Tankship	15	36		37	20			5	31	15	83	4			59	73	13	351
Tug Barge	161	92	5	217	61	2			5	114	256	12			18	1	37	981
Public	3	8		2					2						3	1	2	21
Miscellaneous	7	14		9	31				5	9					11	8	2	102
Uninspected vessels:																		
Fishing	103	93	6	26	66	1	4		74	118	145	259			83	256	35	1272
Tug/Towing	323	217	5	496	186		7		47	223	369	139			32	28	36	2109
Foreign	80	120	4	86	41				15	34	112	4			10	23	29	558
Other	212	207	3	274	118		2		21	146	227	195			1	18	11	1756
GROSS TONNAGE																		
300 tons or less	529	455	16	514	341	1	11		140	351	504	520		1	136	339	214	4072
Over 300 to 1,000 tons	201	151	6	328	94				21	196	307	117			29	12	192	1649
Over 1,000 to 10,000 tons	180	156	4	291	133	3	2		22	119	283	29			66	52	50	1390
Over 10,000 tons	93	131	4	147	85			7	24	56	188	7	1	2	129	144	50	1048
LENGTH																		
Less than 100 feet	455	381	12	397	267	1	9		120	295	424	457			109	318	190	3415
100 to less than 300 feet	449	320	6	676	266	2	4		52	348	615	204			82	46	357	3328
300 to less than 500 feet	35	55	4	47	30				8	26	56	3			27	13	18	320
500 feet and over	84	137	4	160	70	1		7	27	53	187	9	3	2	141	170	43	1096
AGE																		
Less than 10 years	471	371	10	524	290	1	5	2	72	307	534	167	1	1	148	203	147	3254
10 to less than 20 years	290	205	6	348	128	2	4	1	45	202	318	107			1	75	87	1906
20 to less than 30 years	93	125		179	68	1	2	3	28	98	188	120			1	48	74	1083
30 years and over	159	192	10	329	149		2	1	62	115	242	219			88	183	183	1834

Casualties to Commercial Vessels -- Continued

October 1, 1978 to September 30, 1979
Fiscal Year 1979

LOCATION OF CASUALTY

Location	Collision resulting, meeting and overtaking	Collision while underway, docking, or undocking	Collision, fog	Collision with pier and bridge	Collision, all others	Explosion and/or fire—cargo	Explosion and/or fire—space's fuel	Explosion and/or fire—pressure vessels, boilers	Explosion and/or fire—structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, capsizing, and flooding	Heavy weather damage	Fire damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total
Inland—Atlantic	20	53	1	225	61	2	2	44	34	212	74	60	85	27	800	2129		
Inland—Gulf	100	114	3	191	89	2	2	49	38	200	109	47	22	21	20	2129		
Ocean—Atlantic	20	32	1	42	49	2	2	26	30	64	67	20	27	21	20	419		
Ocean—Gulf	9	13	2	14	34	2	2	12	26	20	77	20	20	20	20	419		
Ocean—Pacific	29	18	2	11	18	1	1	22	22	10	57	20	20	20	20	419		
Great Lakes	14	17	1	11	31	2	2	20	20	20	20	20	20	20	20	419		
Western Rivers	5	11	2	11	18	1	1	20	20	20	20	20	20	20	20	419		
Ocean—other	51	44	2	182	24	2	2	4	4	14	26	20	20	20	20	419		
Foreign waters	1	3	1	3	3	2	2	2	2	4	19	2	2	2	2	419		

TIME OF DAY

Time of Day	Collision resulting, meeting and overtaking	Collision while underway, docking, or undocking	Collision, fog	Collision with pier and bridge	Collision, all others	Explosion and/or fire—cargo	Explosion and/or fire—space's fuel	Explosion and/or fire—pressure vessels, boilers	Explosion and/or fire—structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, capsizing, and flooding	Heavy weather damage	Fire damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total
Daylight	146	165	7	351	180	3	3	101	179	383	290	1	2	201	341	76	2473	
Nighttime	152	106	3	259	144	2	2	80	204	312	289	1	2	78	146	61	1760	
Twilight	19	22	1	40	45	2	2	18	48	54	58	1	2	20	53	20	432	

ESTIMATE LOSSES IN THOUSANDS OF DOLLARS

Loss Type	Collision resulting, meeting and overtaking	Collision while underway, docking, or undocking	Collision, fog	Collision with pier and bridge	Collision, all others	Explosion and/or fire—cargo	Explosion and/or fire—space's fuel	Explosion and/or fire—pressure vessels, boilers	Explosion and/or fire—structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, capsizing, and flooding	Heavy weather damage	Fire damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total
Vessel	32476	10175	4486	16103	8055	125	482	589	41212	32978	404	4432	8	947	8062	16458	22972	
Cargo	789	1224	268	3834	437	1285	827	1285	827	15	15135	1844	1844	1844	1844	1844	49177	
Property	2719	12511	110	34433	1425	5	1	3215	1299	61	1800	1	1	325	346	3140	67499	

VESSELS TOTALLY LOST

Loss Type	Collision resulting, meeting and overtaking	Collision while underway, docking, or undocking	Collision, fog	Collision with pier and bridge	Collision, all others	Explosion and/or fire—cargo	Explosion and/or fire—space's fuel	Explosion and/or fire—pressure vessels, boilers	Explosion and/or fire—structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, capsizing, and flooding	Heavy weather damage	Fire damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total
Inspected	2	17	2	7	13	1	1	4	2	25	1	1	1	4	4	4	26	
Uninspected	18	17	2	7	13	1	1	36	33	1	155	1	1	4	4	4	501	

Death/Injuries Due to a Vessel Casualty

October 1, 1978 to September 30, 1979
Fiscal Year 1979

Primary Cause	Collision resulting, meeting and overtaking	Collision while underway, docking, or undocking	Collision, fog	Collision with pier and bridge	Collision, all others	Explosion and/or fire—cargo	Explosion and/or fire—space's fuel	Explosion and/or fire—pressure vessels, boilers	Explosion and/or fire—structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, capsizing, and flooding	Heavy weather damage	Fire damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total
Number of casualties	24	7	2	5	9	3	1	34	4	3	37	11	8	8	161	130		
Number of suspected vessels involved	17	1	2	2	3	1	1	20	4	3	34	7	3	3	130	130		
Number of persons deceased/injured	24/21	4/6	1/1	2/12	8/12	2/1	1/1	33/30	6/6	2/2	104/12	8/8	4/4	5/5	100/110	130/130		
Personnel (all)	24	7	2	5	9	3	1	34	4	3	37	11	8	8	161	130		
Pilot—State	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Pilot—Federal	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Unlicensed off-duty—Documented seaman	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Unlicensed—Undocumented persons	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
All others	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Calculated risk	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Restricted maneuvering room	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Storm—adverse weather	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Unusual currents	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Deaths/Injuries Due to a Vessel Casualty -- Continued

October 1, 1972, to September 30, 1979
Fiscal Year 1979

	Collisions crossing, meeting and overtaking	Collisions while anchored, docking, or unloading	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire--cargo	Explosion and/or fire--vessel's fuel	Explosion and/or fire--pressure vessels, boilers	Explosion and/or fire--structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, capsizing, and flooding	Heavy weather damage	Cargo damage	Material failure--structure and equipment	Material failure--machinery and engineering equipment	Casualty not otherwise classified	Total
Sheer action, bank cushion	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Depth of water less than expected	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Failure of equipment	.....	.....	.....	.....	1	1	1	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	35
Unseaworthy--lack of maintenance	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Floating debris--submerged object	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Inadequate life assistance	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Fault on part of other vessel or person	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Unknown--insufficient information	8	1	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18
	.....	.....	.....	1	1	1	.....	1	11	1	1	28	.....	.....	2	2	2	51
VESSEL TYPE																		
Inspected vessels:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Passenger and ferry--large	1/1	.....	.....	1/8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1/10
Passenger and ferry--small	1/3	2	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Freight	7/2	.....	.....	.....	1/1	.....	.....	4/6	.....	.....	.....	.....	.....	.....	3	1	.....	8
Large Barge	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Tugboat	1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Tow Barge	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Public	7/2	.....	.....	.....	2/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Miscellaneous	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Uninspected vessels:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Fishing	7/2	3	1	.....	4/1	.....	.....	3/6	6/4	1/1	77/4	.....	.....	.....	.....	.....	.....	92
Tug Towing	7/4	2	.....	.....	1/4	.....	.....	.....	.....	.....	12/3	.....	.....	.....	.....	.....	.....	19
Foreign	1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Other	21/7	3	1	.....	1/5	.....	.....	7/3	.....	.....	14/4	.....	.....	.....	.....	.....	.....	51
PARTICULARS OF PERSON DECEASED/INJURED																		
Papers of deceased/injured:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
License--Coast Guard	1/5	2	.....	7/2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
Document--Coast Guard	7/3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11
No license or document	22/13	2/6	1/1	2/10	6/6	3/1	1	16/17	6/4	2/2	97/9	.....	.....	.....	5/4	4/2	4	170
Other--unknown--foreign	1	.....	.....	.....	.....	.....	.....	7/8	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
Status or capacity of vessel:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Passenger	7/8	7/2	1	8	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
Longshoreman--harbor worker	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Crewmember	17/13	2/3	1	1/3	6/7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	157
Other	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
Activity engaged in:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Off duty	4/2	7/2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21
Deck department duties	6/9	1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30
Engine department duties	3/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Steward department duties	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Handling cargo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Fishing	4/1	2/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14
Drills	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Passenger	5/8	7/2	1	8	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
Other and unknown	2/2	1	1	3	1/2	2/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61
Location of vessel:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Great Lakes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
Western Rivers	7/8	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
Inland	15/12	5	1	1/11	1/10	2/1	1	14/24	3/2	2/2	63/8	.....	.....	.....	.....	.....	.....	111
Ocean	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42
Foreign and other	2/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
PART OF BODY INVOLVED																		
Head	9/7	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17
Back	7/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
Chest	7/8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14
Extremities	7/3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32
Illness	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Drowning	13/1	4	1	2	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	148
Unspecified and miscellaneous	2/2	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25

Deaths/Injuries Due to a Vessel Casualty -- Continued

October 1, 1973 to September 30, 1974
Fiscal Year 1974

[illegible]

Deaths on Board Commercial Vessels Not Involving a Vessel Casualty -- Continued

October 1, 1978, to September 30, 1979
Fiscal Year 1979

October 1, 1974, to September 30, 1979																								
Fiscal Year 1979																								

PART OF BODY INVOLVED

Personnel Injuries on Board Commercial Vessels Not Involving a Vessel Casualty

October 1, 1978, to September 30, 1979
Fiscal Year 1979

October 1, 1978, to September 30, 1979																								
Fiscal Year 1979																								
	Natural cause	Homicide	Suicide	Disappearance	Slips and falls--ladders	Slips and falls--gangways	Slips and falls--on deck	Slips and falls--other	Falls from vessel--into water	Falls into holds or tanks	Struck by objects; falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns (other than electrical) and scalds	Electrical shock and burns	Caught in lines, chains, or wire ropes	Pinching or crushing	Heavy weather	Overexertion, sprains, and strains	Cuts, lacerations, bruises, and punctures	Altercations and misconduct	Unknown or insufficient information	Total
Number of injuries	5			111	17	251	136	18	5	306	4	114	50	43	6	80	47	3	205	64	47	46	1536	
Number of uninspected vessels involved	1			12	15	14	12	1	1	45			5	8	4	27	6		19	10	6	12	197	
Number of inspected vessels involved	4			99	17	236	122	4	4	261	4	109	42	39	6	33	41	3	186	54	41	34	1339	
CAUSE OF INJURY																								
Intoxication					1	2	1						1					1			1			10
Physical deficiency or handicap	5				1		1						1											3
Unsafe movement or posture				12		10	26	1		11			1			1	4	4		87	4	1	3	104
Psychological--immaturity, insanity, unsafe practice				21		8	2	1	1	48			7	6	11		15	5		12	5		3	104
Violation of law or regulation																								0
Human errors				57	12	141	67	5	2	177			73	38	26	3	37	35	1	75	3		16	803
Decks slippery or cluttered				8	3	57	1						3											82
Weather conditions				5		13	3						16	12	1		2	1	2	6	4			83
Poor maintenance or housekeeping				1									5											10
Inadequate lighting							2						1											3
Inadequate rails or guards							1																	7
Failure of equipment				2	1	3	8	11	1	31			2		3	1	1	1		1	2			64
Inadequate supervision				1									3											4
Inadequate life preservers																								0
Inadequate tools or equipment																								0
Inadequate protective equipment																								0
Improper use of tools or equipment				1									1											3
Miscellaneous causes						1	2				2				2	1				5	7	1	31	42

Personnel Injuries on Board Commercial Vessels Not Involving a Vessel Casualty -- **Continued**

October 1, 1978, to September 30, 1979
 Fiscal Year 1979

October 1, 1978, to September 30, 1979																								
Fiscal Year 1979																								
	Natural cause	Home-made	Struck	Threatened	Slips and falls--ladders	Slips and falls--gangways	Slips and falls--on deck	Slips and falls--other	Falls from vessel--into water	Falls into holds or tanks	Struck by objects falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, trapped into objects	Operating machinery and tools	Burns (other than electrical) and scalds	Electrical shock and burns	Caught in lines, chains, or wire ropes	Pinching or crushing	Heavy weather	Depression, sprains, and strains	Cuts, lacerations, bruises, and other injuries	Allegations and misconduct	Unknown or insufficient information	Totals
TYPES OF VESSELS INVOLVED																								
Inspected vessels																								
Passenger and ferry--large	1				1		9	4			4	1								5				26
Passenger and ferry--small	1						6	2																19
Freight ship and barge	2				74	13	162	92	3	2	183	1	9	29	18	1	16	26		145	45	32	24	965
Tanker ship and barge					11	2	46	19		1	34			8	7	19	3	6		27	6	7	9	212
Public					7		3	1		1	7			5	3	1				4	3	2		41
Miscellaneous					3		10	4	1		30	2	5	3	1	2		3		4	4			74
Uninspected vessels																								
Fishing	1				3		5	5			19		1	3	1		19	4		2	5	1	4	75
Tugs					5		6	5			20		1	1	1		6	2		13	4	4	4	73
Foreign							1	2			2			1	2					1		1	2	12
Miscellaneous					4		3	2	11	1	4			3						3	1			37
TIME OF DAY																								
Daytime	3				71	4	161	94	12	2	215	3	82	40	31	4	41	36		152	46	25	30	1052
Nighttime	1				34	17	67	35	3	1	89	1	24	9	8	2	15			28	16	22	4	360
Totals	2				6	1	19	5	1	1	22		6	3	4		3	2		24	8	2	12	123
PARTICULARS OF PERSON INVOLVED																								
Papers of person injured																								
License--Coast Guard	1				17	1	25	19	1	1	47	1	13	11	16	2	5	3	1	30	9	6	7	217
Document--Coast Guard	2				81	16	206	99	3	3	301		93	29	20	2	28	37	1	180	45	30	29	1081
No license or document	2				13		25	16	12	1	86	3	9	8	2	27	7	1	14	10	3	8	223	
Other--unknown--foreign							1	2			2			1	2				1				2	10
Status or capacity of vessel																								
Passenger	1				6		8	4			2	1	1						1					24
Longshoreman--harbor worker																								3
Crew member	4				103	17	228	129	6	9	308	1	110	45	40	8	58	44	2	291	82	47	44	1450
Other					2		5	3	10		16	2	3	5	3		2	3		4	2			61
Activity engaged in																								
Off duty	1				14	15	22	17		1	5		11		1		2	4		15	3	10		125
Deck department duties					40	2	113	70	4	3	188		61	16	6		40	13	1	88	27	5	15	702
Engine department duties	2				35		56	26		1	81		25	28	28	3	1	9	1	57	14	2	6	337
Steward department duties					9		41	10			17		7		3	2		11		24	8	10	8	151
Handling cargo					1		3				2									1				8
Fishing	1						8	1			12			1		1	16	2		1	2			45
Drills	1						3		11		5		4							3	1			21
Passenger	1				6		8				2													21
Other and unknown					6		17	6	1		14	4	5	4	5		1	8		6	9	12	15	115
Location																								
Great Lakes					7		8	7			15		3	3	2		3	1		12	8			63
Western Rivers					5		8	3	2	1	9		2	1	2		3	1						40
Inland	2				35	6	71	30	2	2	106	3	26	10	19	3	35	16	2	43	12	14	22	473
Oceans	1				24		81	31		1	70	1	34	8	11	2	9	13	1	68	18	7	7	367
Foreign and other	2				42	11	85	59	12	1	186		49	20	9	1	12	16		94	30	23	17	581
PART OF BODY INVOLVED																								
Head					21	3	60	50			79		19	2	10	1	1	2	1	17	4	30	5	263
Back					27	1	42	13	10	3	10		10	1					1	88	1			286
Chest					12	2	31	22	4	1	17		10	3	5		2	2	1	3	3	4		156
Extremities					47	11	125	74	2	2	192	2	62	44	20	2	86	42		74	95	12	30	843
Wrist	5																							8
Drowning																								1
Unspecified and miscellaneous					4		4	7			8	1	3		8	3	1	1		1	1	1	18	34

Statistics of Casualties

1978

Annually the U.S. Coast Guard presents a statistical summary of commercial vessel casualties that were investigated by Coast Guard marine inspectors during the previous fiscal year. The public, industry, and the Coast Guard have used the findings of these investigations to establish standards and determine the need for legislation to improve the protection of safety of life and property at sea.

The master of a vessel is required by law to report a marine casualty as soon as possible after its occurrence to the Coast Guard Officer in Charge, Marine Inspection. Casualties involving commercial vessels are required to be reported to the Coast Guard whenever the casualty results in any of the following:

- (a) actual physical damage to property in excess of \$1,500;
- (b) material damage affecting the seaworthiness or efficiency of a vessel;
- (c) stranding or grounding (with or without damage);
- (d) loss of life;
- (e) injury causing any person to

remain incapacitated for a period in excess of 72 hours, except injury to harbor workers not resulting in death and not resulting from vessel casualty or vessel equipment casualty.

The statistical summary on the following pages represents casualties to commercial vessels which meet the above criteria. It is important to note that the summary represents casualties reported to Coast Guard Headquarters in fiscal year 1978, which ended September 30, 1978. Statistics concerning noncommercial recreation boating accidents can be found in CG-357, Boating Statistics, published by the Office of Boating Safety.

During this particular fiscal year period, there were no casualties that warranted the convening of a Marine Board of Investigation.

Every event involving a vessel or her personnel which meets any of the conditions of a reportable casualty is of great concern to the Coast Guard. A number of reportable casualties are not investigated

by the Coast Guard each year simply because they are not reported. Thus it is of primary importance that the masters of all vessels ensure that all casualties are reported and investigated. Through the cooperation of the masters, owners, and agents of commercial vessels many of the unreported casualties can be investigated.

This statistical tabulation is intended to summarize the casualty experience for the entire commercial fleet. Because this summary is so all-encompassing, the use of the statistics may lead to erroneous conclusions unless the limitations of the data are well understood.

The information and analysis Staff of the Office of Merchant Marine Safety will gladly assist in quantifying those limitations for each specific need. Comments and recommendations for changes or improvements to these statistics should be addressed to Commandant (G-MA/83), U.S. Coast Guard, Washington, DC 20590.

Statistical Summary of Casualties to Commercial Vessels

1 October 1977 to 30 September 1978 Fiscal Year 1978		Collisions, crossing, meeting and overtaking	Collisions while anchored, docking, or unloading	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire--cargo	Explosion and/or fire--vessel's fuel	Explosion and/or fire--pressure vessels, boilers	Explosion and/or fire--structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, capsizing, and flooding	Heavy weather damage	Cargo damage	Material failure--structure and equipment	Material failure--machinery and engineering equipment	Casualty not otherwise classified	Total
Number of casualties		109	233	1	618	367	8	11	13	178	428	399	323	5	15	284	370	106	4268
Number of vessels involved		894	688	2	1244	585	11	12	13	193	700	908	631	7	16	349	602	243	7118
Number of inspected vessels involved		230	186	1	336	174	7	1	12	42	208	237	67	6	14	210	298	64	2131
Number of uninspected vessels involved		664	502	1	888	411	4	11	1	151	492	671	564	3	2	139	304	179	4987
PRIMARY CAUSE																			
Personnel faults:																			
Pilots--State		16	18		30	5					7	31	2			1		4	114
Pilots--Federal		5	2		20	2					7	11							48
Licensed officer--Documented seaman		140	118	1	369	118	1	1	1	5	122	195	83			10	9	25	1202
Unlicensed--Undocumented persons		76	31		26	82				5	90	95	68			4	3	7	447
All others		16	19		32	12	2			13	12	38	13		2	12	2	17	190
Calculated risk		1				1					4	1						2	9
Restricted maneuvering room		1			2						3	3						1	17
Storms--adverse weather		4	8		30	22					35	32	94	8	13	100	2	14	362
Unusual currents					7	3					3	8				1		2	26
Sheer, suction, bank cushion		9	1		3	1					3	3						1	20
Depth of water less than expected											30	129							166
Failure of equipment		19	37		53	21	3	3	9	62	37	37	76			109	348	10	1024
Unseaworthy--lack of maintenance		1			2						3	1	102	1		17		1	128
Floating debris--submerged object		1			9	78					6	2	21			4	1	2	124
Inadequate tug assistance		1	2		5	1					1	2							16
Fault on part of other vessel or person		586	637	1	642	244	3	1	15	277	316	167	2	1	77	33	140	2922	
Unknown--insufficient information		16	12		11	24	2	7	2	95	13	9	76			14	8	18	307
TYPE OF VESSEL																			
Inspected vessels:																			
Passenger and ferry--large		2	4		19	11				2	2	4	2			6	14	1	67
Passenger and ferry--small		22	15		9	22		1		11	24	9	28			10	85	6	242
Freight		36	44	1	111	39	1		8	12	39	73	9	1	14	107	98	18	611
Cargo barge		1	1		2	3				3	3	1						2	20
Tugs		14	34		41	23			4	8	19	45	7			44	74	3	319
Tank barge		142	78		163	64	5		6	114	123	19	1			38	12	34	799
Public		8	4		3	1				1	1	1	1			1	9	1	31
Miscellaneous		3	6		3	11				2	4	1	1			4	6		62
Uninspected vessels:																			
Fishing		117	80	1	25	70		5		68	127	172	224			44	221	26	1180
Tug/Towing		273	163		471	173	2	1		42	175	243	148	2	1	44	42	31	1811
Foreign		80	100		63	38		1	10	34	76	12				13	22	19	469
Other		194	159		329	130	2	4	31	156	160	207		1	1	38	19	103	1527
GROSS TONNAGE																			
300 tons or less		484	361	2	435	331	4	9		140	319	375	507	2	1	110	358	83	3363
Over 300 to 1,000 tons		173	86		392	75	3	2		16	183	203	95			40	20	81	1373
Over 1,000 to 10,000 tons		130	123		231	114	3	1	3	26	140	173	37	2	4	78	44	40	1213
Over 10,000 tons		83	116		146	65	1		10	11	36	157	12	3	11	121	138	37	987
LENGTH																			
Less than 100 feet		409	298		364	233	4	8		130	273	331	460			83	334	68	3017
100 to less than 300 feet		384	245	2	443	227	5	3		43	344	379	167	3	1	100	67	133	2744
300 to less than 500 feet		31	29		68	42	2	1	6	21	38	12	1	1	27	23	5	290	
500 feet and over		70	116		169	63	2		12	12	60	160	12	3	14	139	176	37	1043
AGE																			
Less than 10 years		462	282	1	546	279	5	4	4	76	303	389	153	2	7	135	275	103	3028
10 to less than 20 years		172	173	1	299	122	1	4	3	37	196	241	170	3	2	88	110	61	1483
20 to less than 30 years		87	96		202	71	3	1	1	28	73	123	123		2	44	77	36	949
30 years and over		173	137		197	113	2	3	5	52	126	153	203	2	5	82	140	43	1438

THIS INFORMATION IS UNCLASSIFIED
DATE 03-10-2010 BY 10400 RDD

Statistical Summary of Casualties to Commercial Vessels - Continued

1 October 1977 to 30 September 1978 Fiscal Year 1978		Collisions, crossing, meeting and overtaking	Collisions while anchored, docking, or undocking	Collisions, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—pressure vessels, boilers	Explosion and/or fire—structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, capsizings, and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total
LOCATION OF CASUALTY																			
Inland—Atlantic		34	52	.....	105	63	2	3	2	21	87	172	89	.....	2	31	54	14	734
Inland—Gulf		123	80	.....	133	70	3	3	2	33	69	100	79	.....	.....	24	23	27	778
Inland—Pacific		22	36	.....	55	64	.....	2	.....	35	71	99	69	.....	.....	29	106	6	596
Ocean—Atlantic		17	8	.....	6	13	.....	.....	.....	14	23	15	31	.....	.....	52	94	6	509
Ocean—Gulf		18	13	.....	15	62	.....	.....	.....	22	10	16	53	.....	.....	11	15	4	327
Ocean—Pacific		28	8	.....	13	21	.....	.....	.....	20	36	14	69	.....	.....	64	200	6	494
Great Lakes		5	2	.....	68	14	.....	.....	.....	3	23	38	7	.....	.....	40	64	5	260
Western Rivers		51	27	.....	189	32	.....	.....	.....	16	77	130	95	.....	.....	14	5	36	672
Ocean—other		6	14	.....	17	19	.....	.....	.....	14	18	7	7	.....	.....	9	15	.....	121
Foreign waters		5	10	.....	17	5	.....	.....	.....	2	4	9	4	.....	.....	8	.....	2	75
TIME OF DAY																			
Daylight		140	137	.....	323	203	4	8	7	104	175	304	293	.....	3	161	393	54	2513
Nighttime		130	98	.....	260	110	2	2	4	69	217	244	167	.....	10	83	136	40	1588
Twilight		19	18	.....	35	34	.....	1	2	11	34	34	63	.....	2	40	41	12	367
ESTIMATED LOSSES (\$1000s)																			
Vessel		16311	4908	5	13295	9190	2714	6776	233	17375	41305	774	32477	38	23	4482	10044	2599	148973
Cargo		2678	293	0	1777	998	80	35	10	2967	4142	10	2140	35	655	14323	180	465	31090
Property		1225	1442	0	11699	4377	9999	7	10	671	665	40	1275	0	40	475	649	716	33490
VESSELS TOTALLY LOST																			
Inspected		5	1	.....	1	.....	.....	.....	.....	4	4	.....	10	.....	.....	.....	1	.....	24
Uninspected		12	5	.....	7	5	2	1	.....	35	28	4	97	.....	.....	3	.....	4	154

Statistical Summary of Deaths/Injuries Due to a Vessel Casualty

1 October 1977 to 30 September 1978 Fiscal Year 1978		Collisions, crossing, meeting and overtaking	Collisions while anchored, docking, or undocking	Collisions, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—pressure vessels, boilers	Explosion and/or fire—structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, capsizings, and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total
Number of Casualties		27	4	0	5	4	6	1	1	21	3	5	59	0	1	4	5	4	134
Number of inspected vessels involved		21	4	0	3	4	3	1	0	17	3	4	55	0	1	4	3	0	129
Number of uninsured vessels involved		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Number of persons deceased/injured		15/32	8/0	0/0	1/4	0/11	4/7	0/1	0/1	14/22	4/2	4/2	119/15	0/0	0/1	7/8	3/6	0/5	179/119
PRIMARY CAUSE																			
Personnel fault:																			0
Pilot—State		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Pilot—Federal		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22
Licensed officer—Documented seaman		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23
Unlicensed—Undocumented persons		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
All others		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Calculated risk:		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Restricted maneuvering room		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Storm—adverse weather		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22
Unusual currents		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1

Statistical Summary of Deaths/Injuries Due to a Vessel Casualty - Continued

1 October 1977 to 30 September 1978 Fiscal Year 1978		Collisions, crossing, meeting and overtaking	Collisions while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—pressure vessels, boilers	Explosion and/or fire—structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, capsizing, and flooding	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total
Shear, suction, bank cushion		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Depth of water less than expected		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Failure of equipment		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26
Unseaworthy—lack of maintenance		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
Floating debris—submerged objects		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Inadequate tug assistance		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Fault on part of other vessel or person		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23
Unknown—insufficient information		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27
VESSEL TYPE																			
Inspected vessels:																			
Passenger and ferry—large		.....	.....	.....	1/1	1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0/2
Passenger and ferry—small		.....	.....	.....	1/1	1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0/2
Freight		3/2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9/12
Cargo barge		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0/0
Towship		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0/10
Tank barge		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0/0
Public		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3/3
Miscellaneous		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0/0
Uninspected vessels:																			
Fishing		1/7	.....	.....	1/1	1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25/19
Tug/Towing		1/1	1/1	.....	1/1	1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20/18
Foreign		1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0/12
Other		6/13	7/7	.....	1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54/31
PARTICULARS OF PERSON DECEASED/INJURED																			
Papers of deceased/injured:																			
Licensed by Coast Guard		3/1	.....	.....	1/1	1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12/7
Documented by Coast Guard		5/6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16/24
No license or document		7/28	8/1	.....	1/5	1/10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66/81
Other—unknown—foreign		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5/7
Status or capacity on vessel:																			
Passenger		1/15	3/1	.....	1/1	1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24/26
Longshoreman—harbor worker		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/1
Crewmember		10/16	3/1	.....	1/5	1/7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30/89
Other		1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4/5
Activity engaged in:																			
Off duty		1/3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6/11
Deck department duties		4/7	3/1	.....	1/6	1/3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53/68
Engine department duties		3/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5/12
Steward department duties		1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/1
Handling cargo		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2/1
Fishing		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24/10
Drills		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2/1
Passenger		1/15	4/1	.....	1/1	1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18/23
Other and unknown		3/2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70/13
Location:																			
Great Lakes		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3/6
Western Rivers		1/3	4/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16/8
Inland		9/19	2/1	.....	1/5	1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23/75
Ocean		1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21/20
Foreign and unspecified		5/9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16/12
PART OF BODY INVOLVED																			
Head		1/6	3/1	.....	1/1	1/3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8/16
Back		1/6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/1
Chest		1/3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/1
Extremities		1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/1
Illness		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/1
Drowning		10/1	4/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/1
Unspecified and miscellaneous		3/9	1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34/28

THIS PAGE IS NOT TO BE USED FOR
FROM COPY OF THE ORIGINAL

October 1977 to 30 September 1978
Fiscal Year 1978

March-April 1979

Statistical Summary of Deaths on Board Commercial Vessels Not Involving a Vessel Casualty - Continued

1 October 1977 to 30 September 1978 Fiscal Year 1978		Natural cause	Homicide	Suicide	Disappearance	Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, banded into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching or crushing	Heavy weather	Overexertion, strains and sprains	Cuts, lacerations, lacerations, and punctures	Altercations and misconduct	Unknown or insufficient information	Total
PART OF BODY INVOLVED																									
Head		1	1	.....	.....	.....	3	.....	.....	6	.....	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36
Back		1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Chest		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
Extremities		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0
Illness		113	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	119
Drowning		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	111
Unspecified and miscellaneous		2	2	1	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67

Statistical Summary of Personnel Injuries on Board Commercial Vessels Not Involving a Vessel Casualty

1 October 1977 to 30 September 1978 Fiscal Year 1978		Natural cause	Homicide	Suicide	Disappearance	Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, banded into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching or crushing	Heavy weather	Overexertion, strains and sprains	Cuts, lacerations, lacerations, and punctures	Altercations and misconduct	Unknown or insufficient information	Total
Number of injuries		2	0	2	0	128	17	217	107	7	13	313	4	130	36	67	10	41	57	6	173	65	38	29	1440
Number of uninspected vessels involved		1	0	1	.....	9	1	25	15	6	4	67	1	13	7	3	2	19	8	0	16	9	2	5	216
Number of inspected vessels involved		1	0	1	.....	119	16	192	92	1	9	246	3	117	27	62	8	22	49	6	157	56	36	24	1224
CAUSE OF INJURY																									
Intoxication		.....	.....	.....	.....	6	2	2	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16
Physical deficiency or handicap		2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	33
Unsafe movement or posture		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	179
Psychological—immaturity, insanity		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
Unsafe practice		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	161
Violation of law or regulation		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
Human errors		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	725
Decks slippery or cluttered		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72
Weather conditions		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75
Poor maintenance or housekeeping		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11
Inadequate lighting		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
Inadequate rails or guards		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
Failure of equipment		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
Inadequate supervision		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
Inadequate life preservers		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
Inadequate tools or equipment		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
Inadequate protective equipment		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
Improper use of tools or equipment		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26
Miscellaneous causes		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4

Statistical Summary of Personnel Injuries on Board Commercial Vessels Not Involving a Vessel Casualty - Continued

1 October 1977 to 30 September 1978 Fiscal Year 1979																										
		Natural cause	Homicide	Suicide	Disappearance	Slips and falls—holdings	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—open vessel	Falls into holds or tanks	Struck by objects falling, dropped or moving	Equipment and superstructure	Struck against, crushed, trapped into objects	Operating machinery and tools	Boys and girls under their electrical	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching or crushing	Heavy machine	Overexertion, sprains and strains	Cuts, lacerations, bruises, and punctures	Altercations and misconduct	Unknown or insufficient information	Total	
TYPES OF VESSELS INVOLVED																										
Inspected vessels:																										
Passenger and ferry—large						4	.....	9	2	1	.....	6	.....	10	1	.....	.....	.....	.....	.....	5	6	1	.....	4	
Passenger and ferry—small						2	.....	.....	1	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	1	2	2	.....	2	
Freight																									0	
Cargo barge						88	15	126	71	.....	8	163	2	86	21	29	8	13	36	3	111	36	25	13	839	
Tugboat																									0	
Tank barge						24	1	42	8	.....	.....	89	1	16	1	12	.....	5	3	1	30	10	6	7	219	
Public						1	.....	5	1	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	8	6	1	.....	27	
Miscellaneous								3	9	.....	1	17	.....	6	3	1	.....	3	1	.....	2	3	.....	1	48	
Uninspected vessels:																										
Fishing						3	.....	8	3	1	1	27	.....	4	3	.....	.....	11	3	.....	6	1	.....	3	78	
Tugs						1	.....	12	8	.....	.....	26	.....	7	.....	.....	.....	.....	.....	.....	10	4	2	1	99	
Foreign						2	.....	1	1	2	6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	
Miscellaneous								5	3	3	.....	8	.....	2	.....	2	1	1	1	.....	.....	2	.....	1	30	
TIME OF DAY																										
Daytime						73	7	139	73	4	10	264	3	95	28	33	8	34	39	6	140	49	14	12	1015	
Nighttime						45	10	65	27	2	3	32	1	29	6	6	2	7	10	.....	23	13	22	5	528	
Twilight						10	.....	13	7	1	.....	17	.....	6	.....	8	.....	.....	8	.....	10	3	2	12	97	
PARTICULARS OF PERSON INJURED																										
Papers of person injured:																										
Licensed by Coast Guard						19	1	31	20	.....	2	43	1	20	6	15	3	4	5	.....	25	8	7	3	213	
Documented by Coast Guard						96	16	157	69	1	7	208	1	93	22	26	3	19	45	6	134	68	30	18	1004	
No license or document						11	.....	29	18	5	2	64	2	17	.....	6	.....	2	17	7	14	9	1	8	218	
Other—unknown—foreign											1	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	5	
Status or capacity on vessel:																										
Passenger						1	.....	14	4	1	.....	5	.....	5	.....	.....	.....	.....	.....	.....	5	5	.....	2	39	
Longshoreman—harbor worker						1	.....	1	3	.....	.....	12	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	
Crewmember						125	17	199	93	6	12	290	3	123	33	44	9	40	55	6	169	99	36	27	1350	
Other						1	.....	3	7	.....	1	6	1	.....	1	3	1	1	1	.....	1	2	.....	.....	31	
Activity engaged in:																										
Off duty						20	16	12	10	1	.....	9	.....	12	.....	1	.....	.....	.....	.....	7	6	21	1	121	
Deck department duties						47	1	102	30	4	10	182	2	49	15	12	1	30	23	3	88	18	6	7	631	
Engine department duties						23	.....	55	24	.....	1	64	1	36	17	25	8	1	12	1	64	22	2	5	357	
Steward department duties						14	.....	29	5	.....	.....	17	.....	19	.....	.....	.....	.....	.....	.....	16	9	4	6	134	
Handling cargo								3	1	.....	.....	5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	
Fishing						2	.....	2	3	.....	1	21	.....	3	1	.....	.....	8	1	.....	5	3	.....	.....	57	
Drills						1	.....	2	1	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	
Passenger						1	.....	14	3	.....	.....	6	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	
Other and unknown						17		18	10	1	1	9	1	3		5	1			5	1	6	4	5	8	95
Location:																										
Great Lakes						3	.....	5	2	1	2	7	.....	1	.....	3	1	4	6	.....	4	.....	.....	.....	45	
Western Rivers								6	4	2	2	14	.....	8	1	1	1	2	2	.....	.....	.....	.....	.....	35	
Inland						33	4	44	39	2	6	113	3	30	10	14	4	23	15	1	49	19	12	4	453	
Ocean						33	.....	64	27	1	2	84	1	30	10	12	1	1	16	5	55	26	3	8	380	
Foreign and unspecified						52	11	74	35	1	1	113	.....	41	13	17	3	11	18	.....	65	20	23	10	909	
PART OF BODY INVOLVED																										
Head						25	3	39	25	2	3	83	.....	26	1	18	4	2	3	1	9	6	21	4	273	
Back						26	.....	54	10	1	1	7	.....	16	1	.....	.....	.....	.....	.....	71	1	2	2	196	
Chest						20	2	29	14	2	3	19	.....	20	2	3	.....	1	2	.....	35	1	4	1	160	
Extremities						54	10	92	36	1	6	199	1	67	30	23	3	37	31	3	57	36	10	16	776	
Illness												1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	
Drowning																									0	
Unspecified and miscellaneous						5	.....	5	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29	

Statistics of Casualties

1977

Annually the U.S. Coast Guard presents a statistical summary of commercial vessel casualties that were investigated by Coast Guard marine inspectors during the previous fiscal year. The public, industry, and the Coast Guard have used the findings of these investigations to establish standards and determine the need for legislation to improve the protection of safety of life and property at sea.

The master of a vessel is required by law to report a marine casualty as soon as possible after its occurrence to the Coast Guard Officer in Charge, Marine Inspection. Casualties involving commercial vessels are required to be reported to the Coast Guard whenever the casualty results in any of the following:

- (a) actual physical damage to property in excess of \$1,500;
- (b) material damage affecting the seaworthiness or efficiency of a vessel;
- (c) stranding or grounding (with or without damage);
- (d) loss of life;
- (e) injury causing any person to remain incapacitated for a period in excess of 72 hours, except injury to harbor workers not resulting in death and not resulting from vessel casualty or

vessel equipment casualty.

The statistical summary on the following pages represents casualties to commercial vessels which meet the above criteria. It is important to note that the summary represents casualties reported to Coast Guard Headquarters in fiscal year 1977, which ended September 30, 1977. Statistics concerning noncommercial recreational boating accidents can be found in CG-357, Boating Statistics, published by the Office of Boating Safety.

This summary also includes those casualties serious enough by reason of dollar damage or number of deaths and/or injuries to warrant the convening of a Marine Board of Investigation. Included in this year's statistics are the following Marine Boards of Investigation: the collision of the MV Frosta and the ferry George Prince with the subsequent capsizing of the latter vessel at Mile 126 of the Lower Mississippi River; the explosion and sinking of the tankship Sansinena at Long Beach, California; and the structural failure and swamping of the tankship Chester A. Poling near Gloucester, Massachusetts. These major marine casualties resulted in 87 deaths, 33 injuries, and property damage

amounting to \$2,890,000.

Every event involving a vessel or her personnel which meets any of the conditions of a reportable casualty is of great concern to the Coast Guard. A number of reportable casualties are not investigated by the Coast Guard each year simply because they are not reported. Thus it is of primary importance that the masters of all vessels ensure that all casualties are reported and investigated. Through the cooperation of the masters, owners, and agents of commercial vessels many of the unreported casualties can be investigated.

This statistical tabulation is intended to summarize the casualty experience for the entire commercial fleet. Because this summary is so all-encompassing, the use of the statistics may lead to erroneous conclusions unless the limitations of the data are well understood.

The Information and Analysis Staff of the Office of Merchant Marine Safety will gladly assist in quantifying those limitations for each specific need. Comments and recommendations for changes or improvements to these statistics should be addressed to Commandant (G-MA/83), U.S. Coast Guard, Washington, D.C. 20590.

Statistical Summary of Casualties to Commercial Vessels

1 October 1976 to 30 September 1977

Fiscal Year 1977

	Collisions: crossing, meeting, and overtaking	Collisions while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire - cargo	Explosion and/or fire - vessel's fuel	Explosion and/or fire - boilers, pressure vessels	Explosion and/or fire - structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, capsizings, and floodings	Heavy weather damage	Cargo damage	Material failure - structure and equipment	Material failure - machinery and engineering equipment	Casualty not otherwise classified	Total
Number of casualties.....	269	218	3	493	280	16	8	9	181	417	650	414	23	24	213	286	70	3574
Number of vessels involved.....	830	568	9	958	485	20	10	9	193	766	1077	498	34	26	243	308	106	6140
Number of inspected vessels involved.....	213	159	1	295	161	7	1	6	55	210	324	45	13	21	135	170	36	1 52
Number of uninspected vessels involved.....	617	409	8	663	324	13	9	3	138	556	753	453	21	5	108	138	70	4288
PRIMARY CAUSE																		
Personnel fault:																		
Pilots-State.....	15	7		22	2					8	34	2					3	93
Pilots-Federal.....	2	4		15						7	14							37
Licensed officer-documentation man.....	144	107	1	274	89				3	117	207	30		1	10	2	10	1019
Unlicensed-undocumented persons.....	71	29	1	20	17		1	1	8	70	84	37			6	1	1	359
All others.....	12	20		33	8	8		1	9	9	37	8			6	3		164
Calculated risk.....				9	2					2	2	1						8
Restricted maneuvering.....				9	1					3	3							22
Storms-adverse weather.....	8	10		14	10				1	31	38	64	18	17	53		10	298
Unusual currents.....	1	2		4	1					7	3	3						30
Sheer, suction, bank cushion.....	11	1		6	1					6	6							31
Depth of water less than expected.....	1	2		1	0					64	155	3						146
Failure of equipment.....	14	21		54	15	5	1	4	67	35	46	63	1	1	70	256		659
Unseaworthy-lack of maintenance.....				2	1				1	1	2	63			14	5		69
Floating debris-submerged object.....				13	90					11	1	20			6			141
Inadequate tug assistance.....	1	1		6	1					4	4							13
Fault on part of other vessel or person.....	542	351	7	475	208	4	3		13	355	429	141	10	2	65	23	36	2664
Unknown-insufficient information.....	4	10		8	13	1	5	3	91	25	11	63			13	13	19	279
TYPE OF VESSEL																		
Inspected vessels:																		
Passenger and ferry-large.....	3	1		12	2				1		4			2	5			39
Passenger and ferry-small.....	10	7		7	8				14	20	14	21			6	20		131
Freight.....	26	47		79	34				26	21	68	8	5	19	6	82	18	487
Cargo barge.....	2			4	5					1	1							16
Tankships.....	9	15		25	19	1		2		16	42				31	32	11	216
Tank barge.....	154	70	1	167	87	5			8	147	191	7	3		20	14	1	889
Public.....	6	11		1	2				2	3	4	5			1	6		45
Miscellaneous.....	3	8		1	1	1				2					8	1		32
Uninspected vessels:																		
Fishing.....	98	60	2	22	36	1	4	1	61	93	125	203	4		33	85	17	864
Tugs.....	255	119	3	355	174	3	2		37	235	310	98	10	3	30	26	2	1766
Foreign.....	53	79	1	54	19	6		1	13	27	101	4	1		6	1	1	192
Miscellaneous.....	211	131	2	232	97	3	3	1	27	201	217	146	6	2	39	13	1	1468
GROSS TONNAGE																		
300 tons or less.....	437	287	4	374	232	6	9	2	132	326	402	405	16	6	90	141	56	1925
Over 300 to 1,000 tons.....	167	103	2	268	87	4	1		15	240	290	66	4		24	9	8	1270
Over 1,000 to 10,000 tons.....	174	102	3	234	121	7		3	22	159	222	15	8	6	61	52	23	1212
Over 10,000 tons.....	52	76		102	45	3			24	41	163	12	6	12	66	106	19	744
LENGTH																		
Less than 100 feet.....	374	235	4	305	178	3	9	1	118	274	323	356	10	3	69	145	47	2433
100 to less than 300 feet.....	380	221	3	503	221	11	1	1	36	423	535	128	13	3	78	47	24	2628
300 to less than 500 feet.....	26	21	2	26	38	2			2	13	20	45	3	4	6	17	10	252
500 feet and over.....	50	91		124	48	4		5	26	49	174	11	7	14	79	120	25	827
AGE																		
Less than 10 years.....	395	241	5	434	194	10	5	2	72	326	481	119	12	9	77	118	47	2547
10 to less than 20 years.....	194	130	3	233	123	5	1	3	49	210	278	111	11	6	57	62	24	1500
20 to less than 30 years.....	77	67	1	132	68	1	1	1	23	106	138	88	5	2	47	51	10	818
30 years and over.....	164	130		159	100	4	3	3	49	124	180	180	6	9	62	77	25	1275
LOCATION OF CASUALTY																		
Inland-Atlantic.....	36	39		90	65	4		2	34	84	210	85	2	1	40	64	18	772
Inland-Gulf.....	108	55	1	137	63	5	3	2	45	80	112	74	4	1	18	15	11	714
Inland-Pacific.....	22	28		46	33	2	1		29	64	79	67	2	2	23	10	5	433
Ocean-Atlantic.....	9	4		5	13	1		1	11	14	6	47	4	8	39	55	13	230
Ocean-Gulf.....	12	13		15	16	1			14	11	6	25	2	1	10	21	2	149
Ocean-Pacific.....	15	7		3	8		2	2	19	21	10	38	5	6	24	40	4	204

March 1978

THIS TABLE
FROM COPY

Statistical Summary of Casualties to Commercial Vessels - Con.

1 October 1976 to 30 September 1977 Fiscal Year 1977		Collisions; crossing, meeting, and overtaking	Collisions while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire - cargo	Explosion and/or fire - vessel's fuel	Explosion and/or fire - boilers, pressure vessels	Explosion and/or fire - structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, capsizings, and floodings	Heavy weather damage	Cargo damage	Material failure - structure and equipment	Material failure - machinery and engineering equipment	Casualty not otherwise classified	Total
LOCATION OF CASUALTY - Continued																			
Great Lakes.....	6	9	.....	50	26	.....	.....	1	7	22	42	9	1	.....	19	35	5	232	
Western rivers.....	53	36	2	116	47	3	2	.....	15	109	154	66	.....	1	17	7	7	635	
Ocean-outer.....	3	12	.....	13	5	.....	.....	1	5	5	14	2	2	3	15	10	2	92	
Foreign waters.....	5	15	.....	18	4	.....	.....	.....	2	7	17	1	1	1	8	9	3	91	
TIME OF DAY																			
Daylight.....	126	126	1	254	141	12	6	4	105	175	311	210	10	16	94	176	38	1805	
Nighttime.....	126	84	2	189	99	4	.....	3	65	186	297	160	9	10	63	84	22	1399	
Twilight.....	17	8	.....	50	40	.....	2	2	11	56	42	44	4	12	56	26	10	370	
ESTIMATED LOSSES (\$1000's)																			
Vessel.....	10459	5774	35	6804	10945	3842	677	492	26762	36335	0	21119	993	189	5440	7348	1927	139141	
Cargo.....	678	19	0	610	1211	18	2	1	1237	2552	0	3957	91	4612	475	1007	719	17189	
Property.....	2137	417	53	16577	640	3	5	0	6486	6754	737	683	0	26	58	84	227	34681	
VESSELS TOTALLY LOST																			
Inspected.....	.....	.....	.....	.....	2	3	.....	.....	3	2	.....	9	1	.....	2	.....	.....	22	
Uninspected.....	20	3	.....	8	18	3	3	2	39	35	.....	123	1	.....	14	1	2	272	

Statistical Summary of Deaths/Injuries Due to a Vessel Casualty

1 October 1976 to 30 September 1977																			
Fiscal Year 1977																			
	Collisions; crossing, meeting, and overtaking	Collisions while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire - cargo	Explosion and/or fire - vessel's fuel	Explosion and/or fire - boilers, pressure vessels	Explosion and/or fire - structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, capsizings, and floodings	Heavy weather damage	Cargo damage	Material failure - structure and equipment	Material failure - machinery and engineering equipment	Casualty not otherwise classified	Total	
Number of casualties.....	21	8	1	5	2	9	4	2	19	4	1	41	0	0	6	5	5	133	
Number of inspected vessels involved....	1	2	0	1	0	4	0	1	7	1	0	5	0	0	3	2	1	28	
Number of uninspected vessels involved..	20	6	1	4	2	5	4	1	12	3	1	36	0	0	3	3	4	105	
Number of persons deceased/injured.....	88/34	1/17	0/1	1/9	3/1	19/16	0/5	0/5	14/19	1/3	0/1	74/15	0/0	0/0	8/3	3/4	4/3	216/136	
PRIMARY CAUSE																			
Personnel fault:																			
Pilots-State.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	
Pilots-Federal.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	
Licensed officer-documented seaman....	3	1	.....	3	1	1	.....	1	1	1	.....	4	.....	.....	.....	1	.....	16	
Unlicensed-undocumented persons.....	8	1	.....	1	.....	.....	.....	5	2	.....	.....	4	.....	.....	.....	.....	.....	21	
All others.....	.....	.....	.....	.....	.....	3	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	6	
Error in judgement-calculated risk.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	

Statistical Summary of Deaths/Injuries Due to a Vessel Casualty - Continued

1 October 1976 to 30 September 1977 Fiscal Year 1977		Collisions: crossing, meeting, and overtaking	Collisions while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire - cargo	Explosion and/or fire - vessel's fuel	Explosion and/or fire - boilers, pressure vessels	Explosion and/or fire - structure, equipment, all others	Grounding with damage to vessel	Grounding without damage to vessel	Foundering, capsizing, and floodings	Heavy weather damage	Cargo damage	Material failure - structure and equipment	Material failure - machinery and engineering equipment	Casualty not otherwise classified	Total
PRIMARY CAUSE - Continued																			
Restricted maneuvering room.....										1		1	15					1	0
Storms-adverse weather.....													1						18
Unusual currents.....													1						1
Sheer, suction, bank cushion.....													1						0
Depth of water less than expected.....													1						1
Failure of equipment.....							2			3	1		4			4	5		19
Unseaworthy-lack of maintenance.....													1						1
Floating debris-submerged object.....						1							1						2
Inadequate tug assistance.....																			0
Fault of other vessel or person.....		10	6	1	1		2						4			1		1	26
Unknown-insufficient information.....							1	4	1	8			5			1		2	22
TYPE OF VESSEL INVOLVED																			
Inspected vessels:																			
Passenger and ferry-large.....					1/1					1/1							1/1		0/1
Passenger and ferry-small.....			1/1								1/1		15/						15/2
Freight.....		1/1								2/8			1/			1/			4/9
Cargo barge.....																			0/0
Tankships.....									2/				1/6			3/			4/8
Tank barges.....			1/1				4/5		1/1	1/							1/1		5/8
Public.....																			0/0
Miscellaneous.....							2/2											1/1	2/3
Uninspected vessels:																			
Fishing.....		3/11	2/			3/	1/	1/		3/2	1/1		37/5			3/		2/1	53/23
Tugs.....		1/1	3/		1/6	1/1		3/		2/1	1/	1/	7/2			3/			10/22
Foreign.....							9/9			2/							1/		10/11
Miscellaneous.....		85/21	1/10	1/	2/		3/	1/	2/	6/5			13/2			1/	2/	2/1	113/47
PARTICULARS OF PERSON DECEASED/INJURED																			
Papers of deceased/injured:																			
Licensed by Coast Guard.....		1/1	1/1		1/1					1/1								1/1	1/2
Documented by Coast Guard.....			1/1		1/1				2/	2/6	1/	1/	2/7			3/			7/20
No license or document.....		88/33	1/15	1/1	1/8	3/1	10/7	7/5	3/	11/9	1/2		72/8			4/3	2/4	4/2	197/101
Other-unknown-foreign.....			1/1				9/9			3/						1/	1/		11/13
Status or capacity on vessel:																			
Passenger.....		76/18	1/9	1/1	1/1					2/2	1/1		18/1				1/1	1/1	97/35
Longshoreman-harbor worker.....																	1/1		1/1
Crewmember.....		12/16	1/8		1/6	3/1	16/13	7/5	3/	10/10	1/2	1/	56/14			7/3	2/1	4/2	111/85
Other.....					1/2		3/3		2/	2/7						1/	1/		7/15
Activity engaged in:																			
Off duty.....		3/	1/1		2/			1/1		3/1			1/						4/8
Deck department duties.....		11/9	1/5		2/		12/7	2/	2/	1/5	1/1	1/1	16/3			3/3	1/1	4/1	48/42
Engine department duties.....		1/1	1/1		1/1		4/3	2/		1/1									5/9
Stewards department duties.....		1/1					3/						2/						2/4
Handling cargo.....										1/			1/			1/	1/1		2/3
Fishing.....		1/2	2/			3/				2/	1/1		36/4			3/		1/1	46/10
Drills.....																			0/0
Passenger.....		76/18	1/8	1/1	1/1					2/2	1/1		4/1				1/1	1/1	83/34
Other and unknown.....					1/3	1/1	3/3		3/	5/9			15/6			1/	1/1		26/26
Location of vessel:																			
At dock.....			4/				1/2	1/1		1/1						1/			3/8
At anchor.....		10/18	2/		1/2				1/1				3/			3/			14/26
Underway.....		78/16	1/11	1/1	1/7	3/1	18/14	7/4	4/	13/18	1/3	1/1	71/15			7/	3/4	4/3	199/102
Unknown.....																			0/0
PART OF BODY INVOLVED																			
Head and upper limbs.....		1/1	1/6		1/3	1/1	1/5	2/		2/	1/1						3/1		3/22
Back and lower limbs.....		1/1	1/7	1/1	1/3		1/1	1/1		2/			1/1				2/		0/19
Chest.....		1/1	1/1		1/1					1/1	1/1		1/1						0/6
Extremities.....		4/4	2/				1/5	1/1	1/5	1/4	1/1	1/1	4/			3/	2/		1/32
Illness.....						1/1							1/1					1/	2/2
Drowning.....		85/	1/		1/	2/	1/			2/			53/			4/		1/	150/0
Miscellaneous and unspecified.....		3/27	1/1		1/1	1/	18/5	1/1		11/10	1/		20/8			4/	1/1	2/1	60/55

Statistical Summary of Deaths on Board Commercial Vessels Not Involving a Vessel Casualty

1 October 1976 to 30 September 1977

Fiscal Year 1977

	Natural cause	Homicide	Suicide	Disappearance	Slips and falls - ladders	Slips and falls - gangways	Slips and falls - on deck	Slips and falls - other	Falls from vessel - into water	Falls into holds or tanks	Struck by objects; falling, dropped, or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains, and strains	Cuts, lacerations, bruises, and punctures	Altercations and misconduct	Unknown or insufficient information	Total
Number of deaths.....	114	0	10	11	2	1	1	8	77	5	14	11	4	0	2	4	1	4	0	0	0	0	1	272
Number of uninspected vessels involved.....	38	0	6	7	1	1	1	4	64	2	9	4	3	0	1	1	1	0	0	0	0	0	0	144
Number of inspected vessels involved.....	76	0	4	4	1	0	0	4	13	3	5	7	1	0	1	3	1	2	0	0	0	0	1	128
CAUSE OF DEATH																								
Intoxication.....									6				1											7
Physical deficiency or handicap.....	114																							115
Unsafe movement or posture.....									1	12	3		1					1						18
Psychological-immaturity, insanity.....			10																					10
Unsafe practice.....								1	2	13														16
Violation of law or regulation.....									1															2
Human errors.....								1	11	1	2	2	1		1		3							20
Decks-slippery or cluttered.....									2															2
Weather conditions.....				1					2															3
Poor maintenance or housekeeping.....																								0
Inadequate lighting.....																								0
Inadequate rails or guards.....								1																2
Failure of equipment.....								2	3		11	3	1			1		2						23
Inadequate supervision.....									1															4
Inadequate life preservers.....									3															3
Inadequate tools or equipment.....																								0
Inadequate protective equipment.....									2							1								3
Improper use of tools or equipment.....											1													1
Miscellaneous causes.....				12	2			1	21	1		4				2								43
TYPES OF VESSELS INVOLVED																								
Inspected vessels:																								
Passenger and ferry-large.....	16		1	1					2			2	1											26
Passenger and ferry-small.....	8																							8
Freight ships and barges.....	39			2					7	3	3							2						56
Tankships and barges.....	13		1	2				4	4			5			1	2	1							34
Public.....																								0
Miscellaneous.....				1							2					1								4
Uninspected vessels:																								
Fishing.....	12		2	4					13			3												34
Tugs.....	15		2	1					30		3					1		1						53
Foreign.....	4		1			1	1		3	2	2		1											16
Miscellaneous.....	7		1	2				4	18		4	1	2		1			1						41
TIME OF DAY																								
Daytime.....	79		4	3	1		1	6	40	1	11	7	3		2	3	1	3					1	166
Nighttime.....	28		5	9	1	1		2	33	3	1	1	1											85
Twilight.....	7		1	1					4	1	2	3				1		1						21
PARTICULARS OF DECEASED																								
Papers of deceased:																								
Licensed by Coast Guard.....	4								1			1												6
Documented by Coast Guard.....	54		1	4				4	10	3	3	2			1			2						85
No license or document.....	53		8	9	1	1		4	62	1	11	7	4		1	4	1	2						169
Other-unknown-foreign.....	1		1				1		4	1		1												12
Status or capacity on vessel:																								
Passenger.....	25		3	1	1				3			2	1											36
Longshoreman-harbor worker.....	1			1					2	2	1				1									10
Crewmember.....	85		7	11	1		1	6	70	3	8	6	2		1	3		4						209
Other.....	3						1	2	2		3	3	1			1	1							17
Activity engaged in:																								
Off duty.....	29		1	1					5														1	37
Deck department duties.....	22			2	1			1	4	5	2	7	2	1			1		4					92
Engine department duties.....	9							2	1	1					1	1								14
Stewards department duties.....	8																							10
Handling cargo.....	1								1	1	4		1											9
Fishing.....	19		1	3					5			2												30
Drill.....																								1
Passenger.....	15		1	1					2				1											24
Other and unknown.....	11		3	4			1	2	17	1	2	4	1		1	2	1							50

Statistical Summary of Deaths on Board Commercial Vessels Not Involving a Vessel Casualty - Continued

1 October 1976 to 30 September 1977 Fiscal Year 1977		Natural cause	Homicide	Suicide	Disappearance	Slips and falls - ladders	Slips and falls - gangways	Slips and falls - on deck	Slips and falls - other	Falls from vessel - into water	Falls into holds or tanks	Struck by objects; falling, dropped, or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains, and strains	Cuts, lacerations, bruises, and punctures	Altercations and misconduct	Unknown or insufficient information	Total
Location of vessel:																									
At dock.....		5	...	...	1	...	...	...	...	16	1	2	1	1	...	...	...	...	...	...	...	...	...	...	27
At anchor.....		8	...	1	1	1	...	...	...	6	1	2	1	3	...	...	...	...	...	...	...	...	...	...	22
Underway.....		111	...	9	11	1	1	1	7	55	3	10	10	...	...	2	4	1	3	...	...	...	1	...	223
PART OF BODY INVOLVED																									
Head.....		...	...	...	...	1	1	1	4	1	3	8	...	4	...	1	...	1	...	...	...	...	...	...	26
Back.....		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0
Chest.....		1	...	1	...	...	...	...	1	2	...	4	...	...	...	...	...	...	...	...	...	...	...	...	10
Extremities.....		...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Illness.....		113	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	113
Drowning.....		...	...	6	...	...	...	...	1	60	...	4	...	...	...	...	...	...	...	...	...	...	...	...	71
Unspecified and miscellaneous.....		...	...	3	13	1	...	...	2	14	2	1	7	...	...	1	4	...	2	...	...	...	...	1	51

Statistical Summary of Personnel Injuries on Board All Commercial Vessels Not Involving a Vessel Casualty

1 October 1976 to 30 September 1977																																									
Fiscal Year 1977																																									
		Slips and falls - ladders		Slips and falls - gangways		Slips and falls - on deck		Slips and falls - other		Falls from vessel - into water		Falls into holds or tanks		Struck by objects: falling, dropped or moving		Exposure and asphyxiation		Struck against, crushed, bumped into objects		Operating machinery and tools		Burns and scalds (other than electrical)		Electrical shock and burns		Caught in lines, chains, or wire ropes		Pinching and crushing		Heavy weather		Overexertion, sprains and strains		Cuts, lacerations, bruises, and punctures		Altercations and misconduct		Unknown or insufficient information		Total	
Number of injuries.....		165	21	249	69	9	15	216	4	147	14	51	4	79	88	1	172	65	38	10	1419																				
Number of uninspected vessels involved.....		8	0	22	11	2	4	50	0	16	2	8	0	37	13	0	10	12	3	3	201																				
Number of inspected vessels involved.....		157	21	227	58	7	11	166	4	131	12	43	4	42	75	1	162	53	35	7	1218																				
CAUSE OF INJURY																																									
Intoxication.....		7	1	5	2	...	...	1	...	4	...	...	...	...	1	...	1	...	4	...	27																				
Physical deficiency or handicap.....		5	...	6	4	...	...	...	...	2	...	...	...	...	...	...	18	...	1	...	39																				
Unsafe movement or posture.....		12	2	20	8	...	4	11	...	12	...	...	...	...	...	...	55	...	...	...	140																				
Psychological-immaturity, insanity.....		...	...	1	...	1	...	...	...	2	...	1	...	9	4	...	...	...	...	...	39																				
Unsafe practice.....		21	...	19	5	1	2	40	...	12	2	11	...	17	11	...	16	7	...	1	165																				
Violation of law or regulation.....		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3																				
Human errors.....		95	17	119	41	6	107	1	70	10	30	3	46	62	1	68	44	...	3	...	730																				
Decks-slippery or cluttered.....		9	1	59	...	...	2	1	...	5	...	30	3	46	62	1	68	44	1	3	85																				
Weather conditions.....		1	...	11	1	1	...	9	31	2	1	2	...	2	1	4	...	...	...	...	15																				
Poor maintenance or housekeeping.....		1	...	5	1	...	...	3	...	2	1	2	...	2	4	...	2	...	...	...	65																				
Inadequate lighting.....		...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1																				
Inadequate rails or guards.....		...	...	1	1	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	5																				
Failure of equipment.....		9	...	1	4	...	...	36	3	2	...	7	1	3	2	...	...	...	...	...	69																				
Inadequate supervision.....		...	...	...	...	...	2	...	1	...	...	...	...	...	2	...	...	...	...	...	5																				
Inadequate life preservers.....		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0																				

March 1978

THIS PAGE IS OF POOR QUALITY FRACILICABLE
IN COPY SENT TO BDC

Statistical Summary of Personnel Injuries on Board All Commercial Vessels Not Involving a Vessel Casualty - Continued

1 October 1976 to 30 September 1977 Fiscal Year 1977	Slips and falls - ladders	Slips and falls - gangways	Slips and falls - on deck	Slips and falls - other	Falls from vessel - into water	Falls into holds or tanks	Struck by objects, falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises, and punctures	Altercations and misconduct	Unknown or insufficient information	Total
CAUSE OF INJURY - Continued																				
Inadequate tools or equipment.....							1		1											2
Inadequate protective equipment.....							1		1	1										3
Improper use of tools or equipment.....	1												1				1	2		4
Miscellaneous causes.....	1		1			1			1		1			1			1		2	14
TYPES OF VESSELS INVOLVED																				
Inspected vessels:																				
Passenger and ferry-large.....	13		13	8			7	1	21	3	1		2	5		7	2	3		86
Passenger and ferry-small.....						2			2										1	10
Freight ships and barges.....	116	18	165	19		8	117	1	85	6	33		25	49		117	37	22	61	852
Tankships and barges.....	25	3	40	1		1	27	2	19	2	10		9	15	1	35	13	9	1	224
Public.....	1																			1
Miscellaneous.....	2		8	1	1		13		4	1	1		2	5		3	1			42
Uninspected vessels:																				
Fishing.....			7	1	1	1	14		4	1			15	7			7	1	3	69
Tugs.....			14	7	1	1	29		10	1	7		18	5		5	3			104
Foreign.....			1			2	2						1	1						7
Miscellaneous.....	2		3				1		2		1		3			2	2	2		21
TIME OF DAY																				
Daytime.....	15	4	140	4	3	1	180		109	9	42		60	47		121	53	15	4	675
Nighttime.....	61	14	76	19	5	4	46		31	3	0		18	15	1	36	6	15		361
Twilight.....	9	3	1	1	1	1	10		7	2	2		1	5		15	6	8	2	83
PARTICULARS OF PERSON INJURED																				
Papers of person injured:																				
Licensed by Coast Guard.....	3	1	4	3			5	1	1	2	1		2			5		1		19
Documented by Coast Guard.....	146	27	213	27	6	8	148	3	199	10	46		34	65	1	152	52	34	2	1,195
No license or document.....	16		42	19	3	5	61		37	2	6		42	22		15	13	3		289
Other-unknown-foreign.....						2	2						1							6
Status or capacity on vessel:																				
Passenger.....	4		11	6	1	2	3	1	17					3		1				47
Longshoreman-harbor worker.....	1		1				1									1				2
Crewmember.....	157	21	230	62	7	19	198	3	126	13	52		74	77	1	170	64	36	10	1,315
Other.....	3		7	1			3		4	1	1		5	6			1	2		48
Activity engaged in:																				
Off duty.....	18	8	16	9	1		7		8		2			3		1	5	9	2	89
Deck department duties.....	71	7	107	32	5	8	132		66	3	8		52	38	1	8	24	12	2	651
Engine department duties.....	5	3	63	13		1	42	2	35	8	29	4	9	15		49	12	3	2	341
Stewards department duties.....	11	1	32	5			8	1	15	1	11		1	12		28	18	4		148
Handling cargo.....	1						3									3				4
Fishing.....			5	2	1	1	7		11				12	4		3	3		3	52
Drills.....			1																	2
Passenger.....	4		8	4		2	1		7					3		1				30
Other and unknown.....	7	2	17	3	2	3	16	1	5	2	3		5	10		8	3	1		97
Location of vessel:																				
At dock.....	5		6	2	1		5		3		3		1	2		5				31
At anchor.....			12				2		2				10	2		7	2	1		33
Underway.....	15	21	232	66	8	13	254		102	14	46	4	69	84	1	160	61	37	6	1,332
PART OF BODY INVOLVED																				
Head.....	27	1	37	4	1	2	67		38	3	9	1	3	3		12		22	2	135
Back.....	4	4	62	14	1		8		16	1			2	2		9		3	1	156
Chest.....	13	1	29	10	2	2	11		16	1	1		3			20	2	1		112
Extremities.....	82	11	129	33	3	9	126		70	9	15	1	71	79	1	45	59	9	2	774
Limbs.....									1									1		3
Drowning.....																				0
Unspecified and miscellaneous.....	1	1	6		2	2	4		6		8					1	2	2	4	41

Statistics of Casualties

1976

Annually the U.S. Coast Guard presents a statistical summary of commercial vessel casualties that were investigated by Coast Guard marine inspectors during the previous fiscal year. The public, industry, and the Coast Guard have used the findings of these investigations to establish standards and determine the need for legislation to improve the protection of safety of life and property at sea.

The master of a vessel is required by law to report a marine casualty as soon as possible after its occurrence to the Officer in Charge, Marine Inspection, U.S. Coast Guard. Casualties involving commercial vessels are required to be reported to the Coast Guard whenever the casualty results in any of the following:

- (a) Actual physical damage to property in excess of \$1,500;
- (b) Material damage affecting the seaworthiness or efficiency of a vessel;
- (c) Stranding or grounding (with or without damage);
- (d) Loss of life;
- (e) Injury causing any person to remain incapacitated for a period in excess of 72 hours, except injury to harbor workers not resulting in death and not resulting from vessel casualty or vessel equipment casualty.

Every event involving a vessel or

her personnel which meets any of the conditions of a reportable casualty is of great concern to the Coast Guard. A number of reportable casualties are not investigated by the Coast Guard each year simply because they are not reported. Thus it is of primary importance that the masters of all vessels ensure that all casualties are reported and investigated. Through the cooperation of the masters, owners, and agents of commercial vessels many of the unreported casualties can be investigated.

The statistical summary represents casualties to commercial vessels which meet the above criteria. It is important to note that in contrast to previous years this summary represent casualties reported to Coast Guard Headquarters during an extended fiscal year of 15 months, which ended September 30, 1976. This factor should be taken into consideration in any comparison with statistics of previous fiscal years.

Statistics concerning noncommercial recreational boating accidents can be found in CG-357, Boating Statistics, published by the Office of Boating Safety.

This summary also includes those casualties serious enough by reason

of dollar damage or number of deaths and/or injuries to warrant the convening of a Marine Board of Investigation. Included in this year's statistics are the following Marine Boards of Investigation: the explosion of tank barge B924 at Greenville, Mississippi; the capsizing and sinking of the drilling rig *Ocean Express* in the Gulf of Mexico; and the sinking of the SS *Edmund Fitzgerald* in Lake Superior. These major marine casualties resulted in 46 deaths, 7 injuries, and property damage amounting to \$25,790,000.

This statistical tabulation is intended to summarize the casualty experience for the entire commercial fleet. Because this summary is so all-encompassing, the use of the statistics may lead to erroneous conclusions unless the limitations of the data are well understood.

The Information and Analysis Staff of the Office of Merchant Marine Safety will gladly assist in quantifying those limitations for each specific need. Comments and recommendations for changes or improvements to these statistics should be addressed to Commandant (G-MIS/83), U.S. Coast Guard, Washington, D.C. 20590.

Statistical Summary of Casualties to Commercial Vessels¹

	Nature of casualty														Total
	Collisions, crossing, meeting and overtaking	Collisions, while anchored, docking or unloading	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, cut off, and sinking	Heavy weather damage	Cargo damage	
1 July 1975 to 30 Sept. 1976															
Fiscal year 1976 ²															
Number of casualties.....	228	198	22	619	474	9	53	5	215	481	616	561	78	17	4211
Number of vessels involved.....	720	563	54	1204	844	12	57	5	219	623	1016	104	104	21	7160
Number of inspected vessels involved.....	177	136	15	368	297	7	10	1	61	202	300	96	63	12	2182
Number of uninspected vessels involved.....	543	427	39	836	547	5	47	4	158	621	716	665	41	9	8018
PRIMARY CAUSE															
Personnel fault:															
Pilots—State.....	8	8	0	43	6	0	0	0	0	7	31	0	0	0	113
Pilots—Federal.....	0	7	0	15	0	0	0	0	0	3	7	0	0	0	32
Licensed officer—documented seaman.....	131	75	14	353	170	1	2	0	5	174	165	31	2	0	1170
Unlicensed—undocumented persons.....	59	25	5	18	61	0	3	0	7	95	95	49	0	0	428
All others.....	16	13	1	46	21	1	4	0	13	16	27	12	0	6	218
Calculated risk.....	0	0	0	3	10	0	1	0	1	4	4	5	2	0	27
Restricted maneuvering room.....	12	21	4	44	27	0	0	0	6	25	35	10	1	2	210
Storms—adverse weather.....	2	22	3	31	49	0	1	0	0	52	53	66	8	19	405
Unusual currents.....	0	1	0	2	4	0	0	0	0	0	1	1	0	0	10
Sheer, suction, bank cushion.....	16	23	0	8	3	0	0	0	0	3	6	0	0	0	41
Depth of water less than expected.....	0	2	0	4	10	0	0	0	0	88	3	0	0	0	373
Failure of equipment.....	24	43	1	65	54	0	36	5	63	61	70	67	1	68	879
Unseaworthy—lack of maintenance.....	0	0	0	0	1	0	0	0	1	11	0	20	0	0	34
Floating debris—submerged object.....	1	1	0	16	4	0	0	0	0	3	3	0	0	0	168
Inadequate tug assistance.....	439	332	24	510	328	2	1	0	8	264	235	173	5	42	2483
Fault on part of other vessel or person.....	12	14	2	14	37	5	9	0	112	16	14	190	4	1	631
Unknown—insufficient information.....															
TYPE OF VESSEL															
Inspected vessels:															
Passenger and ferry—large.....	4	3	0	14	7	0	0	0	1	5	3	0	0	0	52
Passenger and ferry—small.....	17	7	3	8	32	0	1	0	15	22	31	28	2	17	223
Freight.....	17	34	3	95	60	0	5	1	21	31	73	4	32	12	552
Cargo barge.....	13	9	0	16	22	1	0	0	2	21	17	10	0	6	136
Tankships.....	12	21	2	32	32	0	1	0	9	13	37	5	9	0	257
Tank barge.....	107	51	6	214	116	5	2	0	6	99	134	12	4	0	796
Public.....	1	3	0	0	2	0	0	0	1	2	2	1	1	0	19
Miscellaneous.....	6	8	1	12	26	1	1	0	3	9	4	6	2	10	97
Uninspected vessels:															
Fishing.....	68	53	13	24	104	0	21	0	69	113	138	289	7	0	1012
Tugs.....	236	149	11	470	265	3	12	1	37	224	233	157	18	2	1895
Foreign.....	41	56	7	81	51	1	6	3	18	32	107	9	1	4	443
Miscellaneous.....	198	175	8	241	177	1	8	0	34	212	238	194	15	3	1668
GROSS TONNAGE															
300 tons or less.....	378	318	34	478	504	4	41	2	142	394	423	582	37	5	3647
Over 300 to 1,000 tons.....	177	102	9	203	150	2	2	0	14	245	211	85	10	3	1410
Over 1,000 to 10,000 tons.....	137	80	7	272	177	6	4	0	31	132	197	24	23	2	1215
Over 10,000 tons.....	40	66	4	169	83	0	7	3	32	52	185	11	34	11	878
LENGTH															
Less than 100 feet.....	318	258	32	373	415	4	35	1	124	334	318	501	28	3	3044
100 to less than 300 feet.....	338	269	13	616	338	7	13	2	43	405	446	106	30	6	2844
300 to less than 500 feet.....	19	28	4	42	51	1	2	0	10	26	40	5	4	1	286
500 feet and over.....	47	71	8	173	90	0	7	2	30	56	182	10	42	11	976
AGE															
Less than 10 years.....	381	220	27	577	393	9	27	3	83	344	489	182	61	10	3203
10 to less than 20 years.....	158	138	8	303	194	2	13	0	39	201	265	152	19	1	1674
20 to less than 30 years.....	70	59	5	139	104	1	6	1	34	95	103	123	11	1	823
30 years and over.....	111	149	14	182	206	0	11	1	63	138	156	221	13	9	1460

See footnotes at end of table.

Statistical Summary of Casualties to Commercial Vessels¹—Continued

1 July 1975 to 30 Sept. 1976 Fiscal year 1976 :	Nature of casualty															Total		
	Collisions; crossing, meeting and overtaking	Collisions while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment		Material failure—machinery and engineering equipment	Casualty not otherwise classified
	LOCATION OF CASUALTY																	
Inland—Atlantic.....	28	37	6	124	97	2	11	2	46	109	164	109	5	0	23	43	33	839
Inland—Gulf.....	100	66	7	180	102	3	16	2	48	72	176	92	4	3	8	13	44	936
Inland—Pacific.....	12	21	0	55	63	0	8	0	26	108	110	63	4	3	26	45	16	569
Ocean—Atlantic.....	9	6	6	1	23	0	4	0	17	13	16	54	20	2	20	58	12	261
Ocean—Gulf.....	15	9	0	4	61	0	8	0	12	23	9	65	6	5	13	30	7	242
Ocean—Pacific.....	12	2	0	0	40	0	5	0	23	28	11	80	30	8	30	52	6	327
Great Lakes.....	4	3	0	67	26	1	0	0	2	22	27	7	2	0	12	22	11	206
Western rivers.....	3	36	3	148	43	3	4	0	19	91	93	86	0	0	4	2	22	595
Ocean—other.....	0	2	0	3	3	0	0	0	6	5	3	3	3	0	4	6	4	41
Foreign waters.....	7	14	0	38	26	0	0	1	6	13	37	5	5	1	20	7	15	195
TIME OF DAY																		
Daylight.....	111	113	15	330	281	5	32	3	124	213	308	267	37	7	96	170	86	2168
Nighttime.....	103	64	7	288	176	3	17	0	81	235	287	225	23	9	39	78	56	1661
Twilight.....	14	19	0	31	47	1	7	2	10	36	51	72	18	1	25	20	28	382
ESTIMATED LOSSES (in thousands)																		
Vessel.....	9876	5092	582	8505	19092	1135	6129	300	22151	25660	557	34015	10793	78	11012	7410	7425	169812
Cargo.....	1214	116	10	6274	9100	212	33	0	2081	7027	5	3743	1956	379	689	7	232	33138
Property.....	65	1259	0	17958	6009	717	30	0	4491	1381	131	1686	749	23	1136	4	1202	37741
VESSELS TOTALLY LOST																		
Inspected.....	3	0	0	4	2	2	1	0	7	2	0	11	1	0	3	1	1	38
Uninspected.....	18	3	4	8	20	0	18	0	52	42	0	23	3	0	2	1	11	408

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-357.

² Includes FY 76 Transition Quarter.

Statistical Summary of Deaths/Injuries Due to a Vessel Casualty¹

1 July 1975 to 30 Sept. 1976 Fiscal year 1976 *	Nature of casualty														Total		
	Collision, crossing, meet- ing, and overtaking	Collision, while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fires— Cargo	Explosion and/or fires— Vessel's fuel	Explosion and/or fire— Boilers, pressure vessel	Explosion and/or fire— Structure, equipment, all others	Grounding with damage	Grounding without dam- age	Foundering, capsizings and floodings	Heavy weather damage	Cargo damage		Material failure—Struc- ture and equipment	Material failure—Machin- ery and engineering equipment	Casualty not otherwise classified
Number of casualties.....	15	6	3	6	7	4	8	4	24	2	7	72	1	1	9	4	13
Number of inspected vessels involved.....	1	2	0	2	10	3	3	0	4	1	1	1	0	1	4	2	7
Number of uninspected vessels involved.....	15	4	3	4	7	1	5	4	20	1	6	72	1	0	5	2	9
Number of persons deceased/injured.....	13/13	6/13	2/3	1/11	13/5	7/8	2/8	5/2	15/26	1/5	3/5	137/26	1/1	1/1	3/3	27/15	269/163
PRIMARY CAUSE																	
Personnel fault:																	0
Pilots—State.....																	0
Pilots—Federal.....																	12
Licensed officer—documented seaman.....	1			2	1	1	2		1	1		3				1	27
Unlicensed—undocumented persons.....	4	3	2		1	1			3		2	12					7
All others.....			1		1	1	1		3								7

See footnotes at end of table.

Statistical Summary of Deaths/Injuries Due to a Vessel Casualty¹—Continued

	Nature of casualty																	Total
	Collision, crossing, meet- ing, and overtaking	Collision, while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire— Cargo	Explosion and/or fire— Vessel's fuel	Explosion and/or fire— Boilers, pressure vessel	Explosion and/or fire— Structure, equipment, all others	Grounding with damage	Grounding without dam- age	Foundering, capsizings and floodings	Heavy weather damage	Cargo damage	Material failure—Struc- ture and equipment	Material failure—Machin- ery and engineering equipment	Casualty not otherwise classified	Total
1 July 1975 to 30 Sept. 1976																		
Fiscal year 1976 *																		
PRIMARY CAUSE—Continued																		
Error in judgement—calculated risk												3					1	0
Restricted maneuvering room	2				1							12			1		1	7
Storms—adverse weather				2			1				1	1						19
Unusual currents												1						1
Shear, suction, bank cushion											2							0
Depth of water less than expected							3	4	6	1		5			5	4	2	32
Failure of equipment	2											1						1
Unseaworthy—lack of maintenance												1						1
Floating debris—submerged object												1						0
Inadequate tug assistance												2			2		4	24
Fault on part of other vessel or person	7	3		1	3	1			1			23		1	2		6	59
Unknown—insufficient information				1	1	2	1		10		2				2			
TYPE OF VESSEL INVOLVED																		
Inspected vessels:																		
Passenger and ferry—large				4													4	0/10
Passenger and ferry—small	1	9								4	2				29	4	1	0/17
Freight							2		4			1					2	38/10
Cargo barge																		0/0
Tankships																	1	0/1
Tank barges		1				4	7	1	2								1	5/12
Public																		0/0
Miscellaneous				1	2		3					5			1	1	3	10/7
Uninspected vessels:																		
Fishing	1		1		4	3	2		7	1	3	66	1		1	2	1	86/31
Tugs	3		5		3	2	1		1		13	13					1	20/24
Foreign		2		2	7		4		1		2	1					17	34/6
Miscellaneous	11	5	2	2	2	1			1			51			2	3	3	76/35
PARTICULARS OF PERSON DECEASED/INJURED																		
Papers of deceased/injured:																		
Licensed by Coast Guard	1			2		1	3		2		1	6			8		1	15/15
Documented by Coast Guard	1			2			1		1			3			21		1	25/9
No license or document	12	10	3	1	13	7	4	3	13	1	3	126	1	1	4	2	9	201/125
Other—unknown—foreign		1	2			2	2		2			2			1		17	28/4
Status or capacity on vessel:																		
Passenger	3	1	9	1	2				1	1	3	31					2	40/28
Longshoreman—harbor worker									3					1	4		2	4/6
Crewmember	8	9	6	2	11	1	6	8	5	10	1	84	1		32	2	25	190/103
Other	2	3				6	2		1		2	22			2		1	35/16
Activity engaged in:																		
Off duty	3	4		1	7				1			5			22			39/17
Deck department duties	2	3	1	2	3	1	1		3	3	2	15	1		6		7	38/45
Engine department duties		1				3	3		5			1			4	3	1	12/24
Stewards department duties									2	1	1	1					3	3/4
Handling cargo														1	1		2	2/7
Fishing	3	3			1		3		1	1	3	44				2	1	66/13
Drills			9	1													1	10
Passenger	3				2				1		2	19					1	26/16
Other and unknown	2	2	5	1		6	2		6			52			1		17	93/17
Location of vessel:																		
At dock	6	3	1	1	3	5	2		2			1			29		2	7/6
At anchor		1				1	1		1			9						48/24
Underway	7	10	5	2	13	2	7	5	15	1	3	126	1	1	5	2	214	123
Unknown																		0/0
PART OF BODY INVOLVED																		
Head and upper limbs	3		2	4		1		1	4	1		7			2	1	2	6/29
Back and lower limbs					1			1	5	1		3					2	13
Chest	1	1		1			1		1			5	1				1	1/11
Extremities	2	2		1	2	1	3		1	2	5	4			2	1	4	4/5
Illness			1									1						3/1
Drowning	11	8	6		3				1	2	75	1			1	1	3	103/1
Miscellaneous and unspecified	2	7	10	1	10	4	2	4	14	1	1	61		1	31	1	22	156/53

¹Statistics concerning recreation and pleasure boating accidents are published in CG-357.

²Includes FY76 Transition Quarter.

Statistical Summary of Deaths on Board Commercial Vessels¹ (Not Involving a Vessel Casualty)

	Nature of death																								Total
	Natural cause	Homicide	Suicide	Disappearance	Slips and falls—Ladders	Slips and falls—Gangways	Slips and falls—On deck	Slips and Falls—Other	Falls from vessel— Into water	Falls into holds or tanks	Struck by objects; falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Altercations and misconduct	Unknown or insufficient information	Total	
1 July 1975 to 30 Sept. 1976																									
Fiscal year 1976 *																									
Number of deaths.....	172	7	18	16	10	1	0	13	97	5	25	13	4	0	1	3	10	3	0	0	1	2	4	405	
Number of inspected vessel deaths.....	127	1	13	2	8	1	0	8	19	5	9	4	1	0	1	0	3	3	0	0	1	1	2	209	
Number of uninspected vessel deaths.....	45	6	5	14	2	0	0	5	78	0	16	9	3	0	0	3	7	0	0	0	0	1	2	196	
CAUSE OF DEATH																									
Intoxication.....	0	1	1	1	2	0	0	1	13	0	0	0	0	0	0	0	1	0	0	0	0	0	0	20	
Physical deficiency or handicap.....	72	1	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	180	
Unsafe movement or posture.....	0	0	0	0	0	0	0	1	21	1	0	0	0	0	0	0	0	0	0	0	0	0	0	28	
Psychological—immaturity, insanity.....	0	0	5	16	1	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	2	0	36	
Unsafe practice.....	0	0	0	0	0	3	1	0	7	11	2	3	5	0	0	1	1	1	0	0	0	0	0	38	
Violation of law or regulation.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Human errors.....	0	0	0	0	1	1	0	1	13	1	1	1	0	0	0	0	3	0	0	0	1	0	0	22	
Decks—slippery or cluttered.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Weather conditions.....	0	0	0	0	2	0	0	0	3	0	1	0	1	0	0	0	0	0	0	0	0	0	0	7	
Poor maintenance or housekeeping.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Inadequate lighting.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Inadequate rails or guards.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Failure of equipment.....	0	0	0	0	0	0	0	0	3	0	18	0	3	0	0	0	2	2	0	0	0	0	1	29	
Inadequate supervision.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Inadequate life preservers.....	0	0	0	0	1	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
Inadequate tools or equipment.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Inadequate protective equipment.....	0	0	0	0	1	0	0	1	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	7	
Improper use of tools or equipment.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	
Miscellaneous causes.....	0	0	0	10	1	0	0	2	19	0	1	2	0	0	0	2	1	0	0	0	0	0	1	32	
TYPES OF VESSELS INVOLVED																									
Inspected vessels:																									
Passenger and ferry—large.....	18	0	4	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	
Passenger and ferry—small.....	33	0	4	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	42	
Freight ships and barges.....	44	0	5	2	6	1	0	3	6	3	4	2	0	0	1	0	2	2	0	0	1	0	1	53	
Tankships and barges.....	22	1	0	0	1	0	0	5	5	2	1	1	0	0	0	0	1	1	0	0	0	0	0	40	
Public.....	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Miscellaneous.....	9	0	0	0	1	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	1	1	1	16	
Uninspected vessels:																									
Fishing.....	13	5	1	7	0	0	0	0	29	0	4	5	1	0	0	1	2	0	0	0	0	0	1	69	
Tugs.....	15	0	1	3	0	0	0	2	21	0	4	0	0	0	0	2	12	0	0	0	0	0	0	50	
Foreign.....	9	1	3	0	1	0	0	1	4	0	2	2	0	0	0	0	1	1	0	0	0	1	1	26	
Miscellaneous.....	8	0	0	4	1	0	0	2	24	0	6	2	2	0	0	0	2	0	0	0	0	0	0	51	
TIME OF DAY																									
Daytime.....	119	2	9	8	4	1	0	7	49	3	19	6	4	0	1	3	9	2	0	0	1	0	2	249	
Nighttime.....	40	5	6	7	6	0	0	6	41	2	6	4	0	0	0	0	1	1	0	0	0	0	0	128	
Twilight.....	13	0	3	1	0	0	0	1	7	0	0	3	0	0	0	0	0	0	0	0	0	0	0	28	
PARTICULARS OF DECEASED																									
Papers of deceased:																									
Licensed by Coast Guard.....	19	0	1	1	1	0	0	1	5	0	2	1	0	0	0	0	0	0	0	0	0	0	0	31	
Documented by Coast Guard.....	64	1	4	3	6	1	0	8	14	5	3	2	0	0	1	0	2	2	0	0	1	1	0	119	
No license or document.....	83	5	9	12	2	0	0	3	75	0	18	10	4	0	0	3	7	1	0	0	0	1	1	234	
Other—unknown—foreign.....	6	1	4	0	1	0	0	1	3	0	2	0	0	0	0	0	1	0	0	0	0	0	0	21	
Status or capacity on vessel:																									
Passenger.....	55	0	8	2	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	76	
Longshoreman—harbor worker.....	2	0	1	0	2	0	0	2	2	1	2	0	0	0	0	0	2	1	0	0	0	0	0	15	
Crewmember.....	103	7	8	13	6	1	0	11	78	2	22	11	4	0	1	3	21	2	0	0	1	1	3	283	
Other.....	12	0	1	1	2	0	0	0	8	2	1	2	0	0	0	0	2	0	0	0	0	0	1	32	
Activity engaged in:																									
Off duty.....	50	4	4	1	2	0	0	1	8	1	1	0	0	0	0	0	0	0	0	0	1	2	73		
Deck department duties.....	24	1	4	7	3	1	0	4	37	1	16	3	3	0	0	2	3	3	0	0	0	0	0	112	
Engine department duties.....	8	0	0	1	0	0	0	4	2	1	2	1	0	0	1	0	0	0	0	0	0	0	0	21	
Stewards department duties.....	6	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	9		
Handling cargo.....	1	0	0	1	0	0	0	1	1	1	2	0	0	0	0	0	2	0	0	0	0	0	0	9	
Fishing.....	34	2	1	4	0	0	0	0	26	0	2	1	1	0	0	1	2	0	0	0	0	0	0	73	
Drills.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Passenger.....	29	0	7	1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	
Other and unknown.....	20	0	1	2	3	0	0	3	20	1	2	8	0	0	0	0	3	0	0	0	0	1	2	66	

See footnotes at end of table.

Statistical Summary of Deaths on Board Commercial Vessels¹ (Not Involving a Vessel Casualty)—Continued

1 July 1975 to 30 Sept. 1976 Fiscal year 1976 ²		Nature of death																							
		Natural cause	Homicide	Suicide	Disappearance	Slips and falls—Ladders	Slips and falls—Gangways	Slips and falls—On deck	Slips and falls—Other	Falls from vessel— Into water	Falls into holds or tanks	Struck by objects: falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Alterations and misconduct	Unknown or insufficient information	Total
PARTICULARS OF DECEASED—Continued																									
Location of vessel:																									
At dock.....		8	0	0	1	2	0	0	1	16	1	2	0	0	0	0	0	1	1	0	0	0	0	0	0
At anchor.....		8	0	0	0	0	0	0	0	13	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Underway.....		166	7	16	12	8	1	0	11	68	4	22	13	4	0	1	3	0	2	0	0	0	2	4	0
Unknown.....		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PART OF BODY INVOLVED																									
Head.....		0	1	2	0	6	0	0	7	3	2	18	0	8	0	1	1	1	1	0	0	0	1	1	47
Back.....		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Chest.....		0	0	0	1	2	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
Extremities.....		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Illness.....		139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	139
Drowning.....		0	0	11	2	1	0	0	0	70	0	0	0	0	1	0	0	8	0	0	0	0	1	1	91
Unspecified and miscellaneous.....		32	6	5	13	1	0	0	6	24	3	6	10	1	0	0	2	4	1	0	0	0	2	2	116

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-367.
² Includes FY76 Transition Quarter.

Statistical Summary of Personnel Injuries on Board All Commercial Vessels¹ (Not Involving a Vessel Casualty)

1 July 1975 to 30 Sept. 1976 Fiscal year 1976 ²		Nature of injury																			
		Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects; falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Alterations and misconduct	Unknown or insufficient information	Total
Number of injuries.....		132	29	195	115	8	21	205	10	97	4	54	8	67	68	3	111	53	37	17	1224
Number of inspected vessel injuries.....		123	24	169	95	7	16	155	7	86	3	42	7	52	59	3	100	45	25	14	1018
Number of uninspected vessel injuries.....		9	5	26	20	1	5	50	3	11	1	12	1	15	9	0	11	8	12	3	211
CAUSE OF INJURY																					
Intoxication.....		6	2	4	1	0	0	0	0	3	0	1	1	0	0	0	0	1	2	2	23
Physical deficiency or handicap.....		2	0	3	2	0	0	0	0	3	0	0	0	0	0	0	15	2	4	4	26
Unsafe movement or posture.....		9	2	20	10	0	3	11	1	11	1	5	0	4	4	0	45	3	0	0	129
Psychological—immaturity, insanity.....		2	0	0	1	0	0	1	1	1	0	0	0	0	0	0	1	2	2	2	27
Unsafe practice.....		17	4	25	18	3	3	46	0	8	0	6	1	18	7	0	17	10	1	1	184
Violation of law or regulation.....		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	6
Human errors.....		78	16	110	58	4	14	101	1	55	3	28	4	38	3	1	28	24	2	4	606
Decks—slippery or cluttered.....		6	2	23	3	0	0	0	0	2	0	0	0	0	0	0	2	2	0	0	34
Weather conditions.....		2	0	7	6	0	0	0	0	7	0	1	0	1	1	1	2	2	0	0	8
Poor maintenance or housekeeping.....		1	0	0	2	0	0	2	0	0	0	1	0	0	0	0	0	0	0	1	4
Inadequate lighting.....		1	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Inadequate rails or guards.....		0	0	1	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	4

See footnotes at end of table.

Statistical Summary of Personnel Injuries on Board All Commercial Vessels¹ (Not Involving a Vessel Casualty—Continued)

CAUSE OF INJURY—Continued	Nature of injury																			Total
	Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects, falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Alterations and maladjustment	Unknown or insufficient information	
Failure of equipment.....	5	3	1	8	0	0	27	3	3	5	2	3	2	0	1	4	0	0	0	67
Inadequate supervision.....	0	0	0	1	0	1	5	0	1	0	1	0	2	0	1	1	0	0	0	13
Inadequate life preservers.....	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Inadequate tools or equipment.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Inadequate protective equipment.....	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	0	8
Improper use of tools or equipment.....	3	0	0	2	1	0	2	3	3	0	0	0	0	0	0	0	1	0	3	17
Miscellaneous causes.....	0	0	0	1	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	5
TYPES OF VESSELS INVOLVED																				
Inspected vessels:																				
Passenger and ferry—large.....	2	1	4	5	1	0	1	2	0	0	1	0	0	0	0	2	0	0	0	19
Passenger and ferry—small.....	2	0	6	10	0	2	2	0	1	0	0	0	2	1	0	0	1	0	0	27
Freight ships and barges.....	90	19	125	49	0	11	116	32	73	2	26	6	33	37	0	79	35	23	8	734
Tankships and barges.....	21	4	32	20	0	2	21	3	10	1	12	1	5	6	0	14	4	11	4	171
Public.....	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	5
Miscellaneous.....	7	0	2	11	0	1	14	0	1	0	3	0	2	5	0	4	5	0	2	57
Uninspected vessels:																				
Fishing.....	1	0	6	3	4	3	26	0	4	0	6	0	16	4	2	3	7	2	3	90
Tugs.....	7	1	13	11	3	2	21	0	4	0	5	0	7	4	1	6	1	0	0	86
Foreign.....	1	4	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	8
Miscellaneous.....	0	0	6	5	0	0	3	3	3	1	0	0	1	2	1	2	0	0	0	27
TIME OF DAY																				
Daytime.....	101	14	127	76	6	15	153	9	64	2	43	7	56	45	3	95	42	13	9	870
Nighttime.....	24	11	56	30	2	5	45	1	27	1	11	0	5	8	0	19	8	22	7	282
Twilight.....	7	4	12	9	0	1	7	0	6	1	0	1	6	5	0	7	3	2	1	72
PARTICULARS OF PERSON INJURED																				
Papers of person injured:																				
Licensed by Coast Guard.....	8	1	4	9	0	2	18	0	5	0	4	1	4	5	0	14	2	1	2	80
Documented by Coast Guard.....	107	23	153	61	1	12	124	6	80	3	37	6	36	36	0	83	39	34	11	851
No license or document.....	16	2	37	44	6	7	63	4	12	1	12	1	27	17	3	14	13	2	4	285
Other—unknown—foreign.....	1	3	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	8
Status or capacity on vessel:																				
Passenger.....	2	2	9	15	1	2	2	0	1	0	2	0	2	2	0	0	1	0	0	41
Longshoreman—harbor worker.....	2	0	0	1	0	2	2	3	0	1	1	0	0	0	0	0	0	0	0	13
Crewmember.....	121	23	178	87	5	17	196	5	92	2	49	7	65	54	3	107	47	57	16	1,106
Other.....	7	4	8	12	2	0	5	2	4	1	2	1	1	2	0	4	5	2	1	63
Activity engaged in:																				
Off duty.....	10	8	12	10	0	0	1	1	10	0	2	0	0	2	0	6	4	11	1	78
Deck department duties.....	52	4	102	40	3	13	133	1	46	1	21	1	45	28	1	57	14	4	9	575
Engine department duties.....	47	2	31	19	0	2	39	3	27	1	17	0	8	15	0	31	14	4	4	270
Stewards department duties.....	5	6	24	8	0	1	5	0	4	1	9	0	0	0	0	10	12	5	1	100
Handling cargo.....	1	0	1	1	0	2	1	0	0	1	0	0	0	0	0	2	0	0	0	9
Fishing.....	1	0	8	6	2	1	14	0	2	0	3	0	12	2	2	1	6	0	1	61
Drills.....	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
Passenger.....	1	2	5	12	0	2	2	0	1	0	0	0	1	1	0	0	0	0	0	27
Other and unknown.....	11	7	12	18	3	0	10	5	7	0	2	1	1	4	0	4	3	13	1	102
Location of vessel:																				
At dock.....	5	0	4	11	0	0	9	1	3	0	1	0	5	1	0	4	0	0	0	44
At anchor.....	3	0	7	4	1	2	4	0	1	0	3	1	1	1	0	3	0	0	2	33
Underway.....	124	29	184	100	7	19	182	9	93	4	50	7	61	56	3	104	53	37	15	1,147
Unknown.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARTS OF BODY INVOLVED																				
Eye.....	0	0	1	0	0	0	22	2	2	0	4	1	1	0	0	0	4	6	1	44
Head.....	15	3	16	11	0	1	28	0	17	0	2	0	1	1	0	0	3	12	3	113
Back.....	21	4	34	18	1	0	3	0	8	0	1	0	2	0	0	61	0	1	1	155
Neck and shoulder.....	6	1	18	6	0	0	5	1	4	0	2	0	1	0	0	4	1	1	0	50
Chest.....	10	0	10	5	0	2	5	1	9	0	1	0	1	0	1	2	0	1	1	49
Abdomen and hip.....	9	0	7	8	0	3	4	0	8	0	7	0	1	1	1	19	0	4	4	76
Extremities.....	63	21	100	57	7	13	129	1	46	2	26	6	60	56	1	24	43	10	5	670
Unspecified and miscellaneous.....	8	0	9	10	0	2	9	5	3	2	11	1	0	0	0	1	2	2	2	67

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-357.

² Includes FY 76 Transition Quarter.

Annual Statistics of Casualties

Annually the U.S. Coast Guard presents a statistical summary of commercial vessel casualties that were investigated by Coast Guard marine inspectors during the previous fiscal year. The public, industry, and the Coast Guard have used the findings of these investigations to establish standards and determine the need for legislation to improve the protection of safety of life and property at sea.

The master of a vessel is required by law to report a marine casualty as soon as possible after its occurrence to the Officer in Charge, Marine Inspection, U.S. Coast Guard. Casualties involving commercial vessels are required to be reported to the Coast Guard whenever the casualty results in any of the following:

- (a) Actual physical damage to property in excess of \$1,500;
- (b) Material damage affecting the seaworthiness or efficiency of a vessel;
- (c) Stranding or grounding (with or without damage);
- (d) Loss of life;
- (e) Injury causing any person to remain incapacitated for a period in excess of 72 hours, except injury to harbor workers not resulting in death and not resulting from vessel casualty or vessel equipment casualty.

Every event involving a vessel or her personnel which meets any of the conditions of a reportable casualty is of great concern to the Coast Guard. A number of reportable casualties are not investigated by the Coast Guard each year simply because they are not reported. Thus it is of primary importance that the masters of all vessels ensure that all casualties are reported and investigated. Through the cooperation of the masters, owners, and agents of commercial vessels many of the unreported casualties can be investigated.

The statistical summary represents casualties to commercial vessels which meet the above criteria. It is important to note that the summary represents casualties reported to Coast Guard Headquarters in fiscal year 1975, which ended June 30, 1975. Statistics concerning noncommercial recreational boating accidents can be found in CG-357, Boating Statistics, published by the Office of Boating Safety.

This summary also includes those casualties serious enough by reason of dollar damage or number of deaths and/or injuries to warrant the convening of a Marine Board of Investigation. Included in this year's

statistics are the following Marine Boards of Investigation: the collision in the Mississippi River of the Norwegian vessel *Baune* and the U.S. tanker *Keytrader*; the explosion of the Greek tanker *Elias* in Philadelphia; the stranding of the U.S. tanker *Transhuron* off the west coast of India; and the collision of the U.S. tanker *Edgar M. Queeny* with the moored Liberian tanker *Corinthos* at Marcus Hook, Pennsylvania. As a result of these casualties there were 55 deaths and 13 injuries. Dollar damage amounted to \$49,820,000 for vessels, cargoes, and property.

This statistical tabulation is intended to summarize the casualty experience for the entire commercial fleet. Because this summary is so all-encompassing the use of the statistics may lead to erroneous conclusions unless the limitations of the data are well understood.

The Information and Analysis Staff of the Office of Merchant Marine Safety will gladly assist in quantifying those limitations for each specific need. Comments and recommendations for changes or improvements to these statistics should be addressed to Commandant (G-MIS/83), U.S. Coast Guard, Washington, D.C. 20590.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS

	Nature of casualty																		Total
	Collision, crossing, meeting, and overtaking	Collision, while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—Cargo	Explosion and/or fire—Vessel's fuel	Explosion and/or fire—Boilers, pressure vessel	Explosion and/or fire—Structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizing, and flooding	Heavy weather damage	Cargo damage	Material failure—Structure and equipment	Material failure—Machinery and engineering equipment	Casualty not otherwise classified	Total	
1 July 1974 to 30 June 1975																			
Fiscal year 1975																			
Number of casualties.....	223	280	14	569	269	16	49	12	129	396	390	438	58	18	170	231	63	3306	
Number of vessels involved.....	684	721	44	1161	488	20	51	12	182	615	504	641	71	22	185	237	113	3551	
Number of inspected vessels involved.....	182	186	12	348	199	13	11	8	23	173	182	47	62	17	115	126	30	1704	
Number of uninspected vessels involved.....	502	535	32	812	269	7	40	4	110	442	322	404	19	5	70	101	83	3847	
PRIMARY CAUSE																			
Personnel fault.....																			
Pilots—State.....	8	9		21	6					6	22							72	
Pilots—Federal.....	2	1		7	1					2	4	1						18	
Licensed Officer—Documented seaman.....	128	111	11	373	93	2		1	2	150	120	26	3	1	3	2	11	1040	
Unlicensed—Undocumented persons.....	70	33	8	14	22	2		1	1	73	48	31			1		7	314	
All others.....	24	27		40	15	2	1		8	13	31	20		1	9	2	8	201	
Error in judgement—calculated risk.....	2	1		4	4													7	
Restricted maneuvering room.....	5	8		3	6				1								2	26	
Storms—Adverse weather.....	3	45		21	23					40	18	50	61	12	17	2	1	263	
Unusual currents.....	3	1		8	1							1						12	
Sheer, suction, bank cushion.....	3	3		3	1					3	9							32	
Depth of water less than expected.....	2			2	8					23	63	2						100	
Failure of equipment.....	16	47		58	28	5	34	8	65	56	61	55	2	2	96	221	32	788	
Unseaworthy—Lack of maintenance.....												35			4		1	40	
Floating debris—Submerged object.....				2	44					12	1	39			10		2	110	
Inadequate tug assistance.....	1	2		17	2					1	2	1						26	
Fault on part of other vessel or person.....	417	399	35	576	168	4	4	1	6	218	113	186	5	6	28	7	23	2186	
Unknown—Insufficient information.....	3	31		15	18	5	8	1	61	18	8	94			15	3	26	296	
TYPE OF VESSEL INVOLVED																			
Inspected vessels:																			
Passenger and ferry—large.....	2	2		7	1			1	2	2	5	1	1		2	8	1	35	
Passenger and ferry—small.....	14	10		9	18		4		6	11	11	19	2		11	22	3	140	
Freight.....	25	48	2	75	30	6	2	3	8	24	53	3	26	13	55	63	11	447	
Cargo Barge.....	11	11		15	20		1		18	17	10	3	3	3			2	111	
Tankships.....	7	25	2	28	17		2	4	5	13	38	1	11		27	30	1	211	
Tank barges.....	120	75	7	208	67	7	1			93	51	6	5		13	5	7	665	
Public.....	1	1		1	1				1									7	
Miscellaneous.....	2	14	1	5	15		1		1	12	7	7	4	1	4	6	5	85	
Uninspected vessels:																			
Fishing.....	87	89	9	14	46		22	2	54	130	89	184	5		39	70	30	850	
Tugs.....	215	175	11	454	180	2	7		24	172	110	141	9	4	18	13	6	1486	
Foreign.....	49	110	2	57	28	4	8	1	7	35	81	3	1		4	2	7	394	
Miscellaneous.....	151	181	10	287	65	1	8	1	25	105	42	166	4	1	14	16	40	1117	
GROSS TONNAGE																			
300 tons or Less.....	356	327	31	467	240	1	41	2	108	289	230	428	20	5	72	115	46	2788	
Over 300 to 1,000 tons.....	151	139	10	332	62	3	5		7	169	46	82	2		13	7	27	1065	
Over 1,000 to 10,000 tons.....	126	140	8	253	96	8	2	3	7	106	88	26	20	7	84	43	24	908	
Over 10,000 tons.....	49	115	5	88	40	8	3	7	11	51	140	5	29	10	66	72	16	715	
LENGTH																			
Less than 100 feet.....	281	266	16	359	174	1	41	2	97	250	192	372	13	2	64	108	39	2277	
100 to less than 300 feet.....	329	281	23	611	181	9	6	1	18	235	121	156	15	5	81	24	42	2148	
300 to less than 500 feet.....	23	44	1	65	33	1		2	6	15	42	5	6	4	12	21	14	297	
500 feet and over.....	51	126	4	125	50	9	4	7	13	55	149	8	37	11	78	84	18	829	
AGE																			
Less than 10 years.....	327	293	17	504	187	9	24	7	43	231	167	137	32	6	72	107	65	2228	
10 to less than 20 years.....	174	179	13	282	102	6	10		28	158	130	120	12	5	38	39	24	1320	
20 to less than 30 years.....	79	85	8	176	57	3	6	1	24	96	90	121	13	4	30	36	7	838	
30 years and over.....	104	164	6	196	92	2	11	4	38	128	117	163	14	7	45	55	17	1165	
LOCATION OF CASUALTY																			
Inland—Atlantic.....	32	69	2	116	52	6	10	1	28	89	113	72	2		29	26	7	654	
Inland—Gulf.....	79	63	4	149	63	2	8	2	24	75	100	75		1	16	5	9	673	
Inland—Pacific.....	25	26	2	46	56	1	15		39	90	84	87	6	6	34	49	5	570	
Ocean—Atlantic.....	6	6		2	12	3	2	2	5	7	6	19	26	6	21	19	7	149	
Ocean—Gulf.....	13	4	2	3	30		4		8	9	3	43	6		13	23	11	172	
Ocean—Pacific.....	8	2		7	7		5	3	7	15	2	40	16	5	26	67	8	206	
Great Lakes.....	8	13	1	67	17		2	2	2	21	24	7			15	28	6	211	
Western rivers.....	49	65	3	167	24	3	4	1	11	83	41	89	1		2	3	11	557	
Ocean—Other.....				2	1		1		1	3	3	5			2			18	
Foreign waters.....	8	12		17	7	1		1	4	4	14	1	1	1	12	11	4	98	
TIME OF DAY																			
Daylight.....	111	146	10	283	132	8	32	8	73	175	204	223	28	8	116	154	36	1747	
Nighttime.....	100	101	4	253	112	5	14	4	46	191	157	186	27	7	42	57	30	1326	
Twilight.....	12	13		33	25	3	3		10	30	29	29	3	3	12	20	7	282	

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS—Continued

1 July 1974 to 30 June 1975 Fiscal year 1975	Nature of casualty													Total
	Collision, crossing, meeting, and overtaking	Collision, while anchored, docking, or undocking	Collision, fog	Collision with piers and bridges	Collisions, all others	Explosion and/or fire—Cargo	Explosion and/or fire—Vessel's fuel	Explosion and/or fire—Boilers, pressure vessel	Explosion and/or fire—Structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	
ESTIMATED LOSSES (X1,000)														
Vessel.....	15343	18922	690	7770	7888	11085	3483	603	9808	30008	123	23586	1490	146888
Cargo.....	1589	4511	28	1832	330	414	7	.....	382	2280	22	4811	755	71888
Property.....	1105	12067	5	10152	823	9096	21	.....	644	527	55	1182	606	40500
VESSELS TOTALLY LOST														
Inspected.....	1	1	.....	1	.....	1	1	.....	1	6	.....	9	.....	24
Uninspected.....	11	6	.....	7	11	1	11	1	50	44	1	148	.....	301

STATISTICAL SUMMARY OF DEATHS/INJURIES DUE TO A VESSEL CASUALTY

1 July 1974 to 30 June 1975 Fiscal year 1975	Nature of Casualty													Total
	Collision, crossing, meeting, and overtaking	Collision, while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—Cargo	Explosion and/or fire—Vessel's fuel	Explosion and/or fire—Boilers, pressure vessel	Explosion and/or fire—Structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	
Number of casualties.....	18	10	1	6	3	5	3	1	13	2	2	46	1	121
Number of inspected vessels involved.....	9	2	.....	2	.....	2	2	.....	2	1	1	4	.....	19
Number of uninspected vessels involved.....	17	8	1	4	3	3	1	.....	11	1	1	42	1	115
Number of persons deceased/injured.....	29/17	31/13	1/1	5/5	5/3	14/3	2/2	1/1	4/15	4/1	1/1	79/3	1/1	190/74
PRIMARY CAUSE														
Personnel fault:														
Pilots—State.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pilots—Federal.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Licensed Officer—Documented seaman.....	4/4	2/5	1/1	3/1	3/1	.....	.....	.....	1/1	.....	.....	4/4	.....	14/11
Unlicensed—Undocumented persons.....	4/3	2/2	.....	1/2	3/2	.....	2/2	.....	.....	3/1	.....	4/4	.....	18/7
All others.....	1/1	.....	.....	.....	.....	12/1	.....	.....	1/1	.....	.....	5/5	.....	22/5
Error in judgement—Calculated risk.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Restricted maneuvering room.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Storms—Adverse weather.....	.....	.....	.....	1/1	.....	.....	2/2	.....	.....	.....	.....	20/1	1/1	21/4
Unusual currents.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shear, suction, bank cushion.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Depth of water less than expected.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Failure of equipment.....	1/1	.....	.....	.....	.....	.....	2/1	.....	3/11	.....	1/1	5/1	.....	15/16
Unseaworthy—Lack of maintenance.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Floating debris—Submerged object.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2/2	.....	2/2
Inadequate tug assistance.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fault on part of other vessel or person.....	21/3	27/3	.....	3/3	2/2	1/1	1/4	1/1	1/1	1/1	.....	2/1	.....	52/22
Unknown—Insufficient information.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44/3
TYPE OF VESSEL INVOLVED														
Inspected vessels:														
Passenger and ferry—large.....	3/3	1/1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/1
Passenger and ferry—small.....	1/1	.....	.....	1/1	.....	1/1	2/2	.....	1/3	.....	.....	1/1	.....	1/3
Freight.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2/2
Cargo barge.....	.....	1/4	.....	.....	.....	.....	.....	.....	.....	1/1	.....	.....	.....	1/1
Tankships.....	2/2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3/4
Tank barge.....	.....	.....	.....	2/2	.....	1/1	2/2	.....	.....	.....	.....	.....	.....	2/2
Public.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous.....	.....	.....	.....	.....	.....	.....	2/2	.....	.....	.....	.....	.....	.....	1/4
Uninspected vessels:														
Fishing.....	6/6	1/1	.....	1/1	2/2	.....	2/1	.....	2/7	2/2	.....	44/1	.....	70/17
Tugs.....	1/7	1/3	.....	2/1	.....	.....	2/2	.....	1/1	1/1	.....	8/8	1/1	14/13
Foreign.....	14/4	24/5	.....	.....	.....	18/1	.....	.....	.....	.....	.....	.....	.....	53/13
Miscellaneous.....	6/3	4/4	1/1	1/1	2/1	.....	.....	.....	.....	.....	.....	.....	.....	43/9

STATISTICAL SUMMARY OF DEATHS/INJURIES DUE TO A VESSEL CASUALTY—Continued

Nature of Casualty																		
	Collision; crossing meet- ing and overtaking	Collision, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fires— Cargo	Explosion and/or fires— Vessel's fuel	Explosion and/or fire— Boilers, pressure vessel	Explosion and/or fires— Structure, equipment, all others	Grounding with damage	Grounding without dam- age	Foundering, capsizings and floodings	Heavy weather damage	Cargo damage	Material failure—Struc- ture and equipment	Material failure—Machin- ery and engineering equipment	Casualty not otherwise classified	Total
PARTICULARS OF PERSON DECEASED/INJURED																		
Papers of deceased/injured:																		
Licensed by Coast Guard	4/5	2/4	/1	/3		1/1	/2		1/2	/1	3/				6/3	1/	7/1	4/7
Documented by Coast Guard	10/8	5/3		2/2	5/3	/1	2/5		3/11	3/	1/	76/3						8/15
No license or document	15/4	24/5		3/		13/		1/	/2				/1					121/40
Other—Unknown—Foreign																		57/12
Status or capacity on vessel:																		
Passenger	4/1	4/							/1			2/			/1			10/3
Longshoreman—Harbor worker								1/	3/12	4/	1/1	5/			2/		1/	9/
Crewmember	24/12	25/13	/1	1/4	5/3	9/	2/6		3/12			63/3	/1		3/2		4/1	145/50
Other	1/4	2/		4/1	5/2	/3			/2			9/			2/	1/	2/	26/12
Activity engaged in:																		
Off duty	/1	2/4	/1		1/		1/		2/2			3/			/1			9/9
Deck department duties	11/6	7/2		1/3	4/3	1/	1/7		/6	2/	/1	58/2	/1		1/1		3/	88/32
Engine department duties	3/	3/1						1/	1/4	1/		/1				/1		9/7
Stewards department duties	/1	/1																/2
Handling cargo												6/			2/1		1/	10/1
Fishing	1/											2/						2/
Drills									/1									8/2
Passenger	4/1	4/		4/2		13/2	/2		1/2	1/	1/	10/		4/		1/	2/	62/21
Other and unknown	10/8	15/5																
Location of vessel:																		
At anchor/at dock		24/8		/1	5/3	14/2	2/7	1/	2/5			6/		2/1		1/	3/1	55/25
Underway	29/18	7/5	/1	5/4			/2		2/10	4/	/1	73/3	/1	4/2			4/	138/48
Unknown	/1													1/				2/1
PART OF BODY INVOLVED																		
Head and upper limbs	/3			/2		/3	1/	1/	/1		/1				3/	1/	2/1	7/11
Back and lower limbs	/4	1/4		1/1	/1	/1			/1			/1			3/2			2/15
Chest	1/1	/1																1/2
Extremities	/4		/1	/1		/1	/2		2/10			/2	/1		/1			2/23
Illness																		/1
Drowning	12/	3/		4/	4/1	1/	1/			2/	1/	67/		2/			3/	99/1
Unspecified and miscellaneous	16/5	27/8			1/1	13/1	1/3		2/3	2/		12/		2/			3/	79/21

STATISTICAL SUMMARY OF DEATHS ON BOARD COMMERCIAL VESSELS (Not Involving a Vessel Casualty)

1 July 1974 to 30 June 1975 Fiscal year 1975		Nature of death																								Total
		Natural cause	Homicide	Suicide	Disappearance	Slips and falls—Ladders	Slips and falls—Gangways	Slips and falls—On deck	Slips and falls—Other	Falls from vessel— Into water	Falls into holds or tanks	Struck by objects: falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Altercations and misconduct	Unknown or insufficient information		
Number of deaths.....	144	2	12	.....	5	2	1	9	113	4	15	11	1	.....	2	4	4	8	.....	.....	.....	3	8	348		
Number of inspected vessels deaths.....	110	1	5	.....	3	1	1	6	22	2	5	5	1	.....	1	1	4	4	.....	.....	.....	2	8	177		
Number of uninspected vessels deaths.....	34	1	7	.....	2	1	.....	3	91	2	10	6	.....	.....	1	3	.....	4	.....	.....	.....	1	5	171		
CAUSE OF DEATH																										
Intoxication.....	.....	1	.....	.....	2	.....	1	1	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	11		
Physical deficiency or handicap.....	143	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	144		
Unsafe movement or posture.....	.....	.....	.....	.....	1	1	.....	3	53	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	68		
Psychological—immaturity, insanity.....	.....	.....	12	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	15		
Unsafe practice.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10		
Violation of law or regulation.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2		
Human errors.....	.....	.....	.....	.....	1	.....	.....	1	17	1	1	.....	1	.....	2	1	1	2	.....	.....	.....	.....	.....	30		
Decks—slippery or cluttered.....	.....	.....	.....	.....	.....	1	.....	.....	6	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	9		
Weather conditions.....	.....	.....	.....	.....	1	.....	.....	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		

STATISTICAL SUMMARY OF DEATHS ON BOARD COMMERCIAL VESSELS—Continued (Not Involving a Vessel Casualty)

		Nature of death																									Total
1 July 1974 to 30 June 1975 Fiscal year 1975		Natural causes	Homicide	Suicide	Disappearance	Slips and falls—Ladders	Slips and falls—Gangways	Slips and falls—On deck	Slips and falls—Other	Falls from vessel— Into water	Falls into holds or tanks	Struck by ob'cts: falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into ob'cts	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Flushing and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Alterations and misconduct	Unknown or insufficient information			
Poor maintenance or housekeeping.....																											
Inadequate lighting.....																											
Inadequate rails or guards.....																											
Failure of equipment.....																											
Inadequate supervision.....																											
Inadequate life preservers.....																											
Inadequate tools or equipment.....																											
Inadequate protective equipment.....																											
Improper use of tools or equipment.....																											
Miscellaneous causes.....																											
TYPES OF VESSELS INVOLVED																											
Inspected vessels:																											
Passenger and ferry—large.....		13			1				1	2															17		
Passenger and ferry—small.....		22							6	6		1												2	32		
Freight ships and barges.....		59	1	1		2		1	2	9	2	1			1								1	1	81		
Tankships and barges.....		16		2		1			1	2			5				1	1		1			1		31		
Public.....							1																		8		
Miscellaneous.....				1					2			3							3						9		
Uninspected vessels:																											
Fishing.....		8	1	2					2	30		1	4				1	3	1				1	2	56		
Tugs.....		11							25	25							2	1	1						41		
Foreign.....		5		2		1	1			9	2	2	1					1	1				1	1	25		
Miscellaneous.....		10		2		1			1	27		7	1				1		1				2		53		
TIME OF DAY																											
Daytime.....		89	2	7		2	1	1	8	61	3	9	11	1		1	2	3	6				1	5	213		
Nighttime.....		45		4		3			1	40	1	5	1				2	1	1				1	2	106		
Twilight.....		10		1						12		1					1		1				1	1	39		
PARTICULARS OF DECEASED																											
Papers of deceased:																											
Licensed by Coast Guard.....		29		1		1			1	7		2		1	1		1	1						2	46		
Documented by Coast Guard.....		59	1	4		2	1	1	3	21	2	2					1						1	1	103		
No license or document.....		56	1	7		2			5	85	2	13	7				1	3	4	5			2	5	197		
Other—Unknown—Foreign.....							1																		2		
Status or capacity on vessel:																											
Passenger.....		36		1						9		1		1									1	1	48		
Longshoreman—Harbor worker.....		2		1						3	1	1						1	3						13		
Crewmember.....		104	1	10		4	2	1	7	92	3	9	7	1			1	4	2	4			2	7	261		
Other.....		2	1			1			2	9		5	3				1	1	1						26		
Activity engaged in:																											
Off duty.....		44		3						14	1												1	1	64		
Deck department duties.....		32	1	1		2				5	32	1	7	4				3		4				4	116		
Engine department duties.....		11		2		1				6	1	2	3	1			1								28		
Stewards department duties.....		5		1		1	1	1																	9		
Handling cargo.....												2													3		
Fishing.....		18		1						12			1					2	1				1		36		
Drills.....																											
Passenger.....		16		1					7		1	4	3				1	1	2	2				1	25		
Other and unknown.....		18	1	3		1	1		4	22	1	4	3				1	1					1	2	67		
Location of vessel:																											
At dock anchor.....		44	1			4	2	1	4	41	4	4	3				1	3	1	3					115		
Underway.....		100	1	12		1			5	72		11	5	1			1	1	3	5			3	6	230		
Unknown.....																											
PART OF BODY INVOLVED																											
Head.....		2				1		1	4	2	3	9						1	2				1		26		
Back.....																											
Chest.....		1	1									2													6		
Extremities.....		1					1		1		1														6		
Illness.....		123							1	1							1								130		
Drowning.....		2																							3		
Unspecified and miscellaneous.....		10	1	7		1	1		3	104	6		3	10	1		2	3	1	2			2	3	57		

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD ALL COMMERCIAL VESSELS (Not Involving a Vessel Casualty)

	Nature of injury															Total
	Slips and falls—Ladders	Slips and falls—Gangways	Slips and falls—On deck	Slips and falls—Other	Falls from vessel—Into water	Falls into holds or tanks	Struck by objects: falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	
1 July 1974 to 30 June 1975																
Fiscal year 1975																
Number of injuries.....	120	19	129	209	5	17	223	11	50	1	52	7	52	108	1	1216
Number of inspected vessels injuries.....	107	19	116	178	3	10	189	5	44	1	45	7	30	87	1	1009
Number of uninspected vessels injuries.....	13		13	31	2	7	34	6	6		7		22	21		207
CAUSE OF INJURY																
Intoxication.....	6	4	4	6										2		30
Physical deficiency or handicap.....	1		4	5				1	1		2			1		42
Unsafe movement or posture.....	2	1	3	7		2	3							13	3	30
Psychological immaturity, insanity.....			1	1			1		1					11	1	30
Unsafe practice.....	3						5		2				2	3		42
Violation of law or regulation.....																17
Human errors.....	84	12	63	125	2	11	113	1	37	1	25	4	33	75		677
Decks—Slippery or cluttered.....	8	35	18			1										62
Weather conditions.....	3	1	14	27			7		5		1		1	14	1	76
Poor maintenance or housekeeping.....	1	1	1	2			3							1		9
Inadequate lighting.....				1		2										3
Inadequate rails or guards.....				1					1							76
Failure of equipment.....	2	3	2			1	48		1		12	2	4	1		32
Inadequate supervision.....	1		1	1	2		6	4			5				5	
Inadequate life preservers.....																6
Inadequate tools or equipment.....				1			2		1				1	2		28
Inadequate protective equipment.....				3			10	4	1		3		3	1		49
Improper use of tools or equipment.....	7			5			8	1	1		3	1	4	3		20
Miscellaneous causes.....	2			4	1		9		1		1				2	
TYPE OF VESSELS INVOLVED																
Inspected vessels:																
Passenger and ferry—large.....	6	4	6	8		1	5		1		3		1	2		37
Passenger and ferry—small.....	2												1			20
Freight ships and barges.....	7	14	88	137		2	7	136	5	40	1	31	7	21	65	750
Tankships and barges.....	14	1	15	20		2	20		1		8		3	11	10	122
Public.....	3															5
Miscellaneous.....	5		3	7			8		1		3		4	8	4	45
Uninspected vessels:																
Fishing.....			2	3		1	17		3		3		13	10	2	65
Tugs.....	6	6	22	2		5	25	1	3		4		5	5	3	90
Foreign.....	2						1	4								10
Miscellaneous.....	5	5	5		1	11	1						4	6	2	42
TIME OF DAY																
Daytime.....	74	8	82	139	1	10	156	10	30	1	36	5	40	83	1	815
Nighttime.....	39	8	36	57	2	6	54		18		15		8	24	1	329
Twilight.....	7	3	11	13	2	1	13	1	2		1	2	4	1		72
PARTICULARS OF PERSONS INJURED																
Papers of person injured:																
Licensed by Coast Guard.....	23	3	20	32		2	26	1	13	1	18	3	4	10	9	182
Documented by Coast Guard.....	79	14	92	136		3	146	5	32		24	2	27	67	1	792
No license or document.....	18	2	17	41	2	6	51	5	5		10	2	21	31	9	242
Other—Unknown—Foreign.....																
Status or capacity on vessel:																
Passenger.....	2	2	6	15		1	1				4	1	1	2		31
Longshoreman—Harbor worker.....	3		3	1		2	1									19
Crewmember.....	110		118	186	3	15	209	10	50	1	46	6	48	99	1	1108
Other.....	5	17	2	7			12	1			2		3	7		80
Activity engaged in:																
On duty.....	4	5	3	3			1				2			1	3	31
Deck department duties.....	34	4	65	102	2	7	141	6	21		9	1	35	42	43	540
Engine department duties.....	43	2	30	42	2	8	45	2	15	1	28	6	7	26	25	315
Stewards department duties.....	21	1	17	25			8	2	9		9		1	22	10	150
Handling cargo.....			1				3								1	5
Fishing.....	2		1	3		1	8		1		2		6	4	1	34
Drills.....	2	1	1	3			2						1	1		7
Passenger.....	2	1	7	12	1	1	1						2	2		29
Other and unknown.....	14	6	4	19			14	1	4		2		3	10	1	105
Location of vessel:																
At dock/anchor.....	45	16	50	84	2	10	164	6	26		27	4	22	38	39	548
Underway.....	75	3	79	125	3	7	119	5	24	1	25	3	30	70	1	608
Unknown.....																
Part of body injured:																
Eye.....	2		2	7			14	2	2		4	1			1	43
Head.....	10	2	10	12			20		6						1	69
Back.....	25	1	19	31		1	6	1	1		1			1	47	141
Neck and shoulder.....	2	1	6	10	1	1	6		4				1	1	2	39
Chest.....	1		1	1	1	1	2		2		1					17
Abdomen and hip.....	4	1	13	18		2	4		2		2		2	7	1	51
Extremities.....	68	15	76	124	2	12	165	3	33	1	38	6	50	104	1	797
Unspecified miscellaneous.....	8	1	2	11	1		6	5			6		1		5	59

ANNUAL STATISTICS OF CASUALTIES

Annually the U.S. Coast Guard presents a statistical summary of commercial vessel casualties that were investigated by Coast Guard marine inspectors during the previous fiscal year. The public, industry and the Coast Guard have utilized the findings of these investigations to establish standards and determine the need for legislation to improve the protection of safety of life and property at sea.

The master of a vessel is required by law to report a marine casualty as soon as possible after its occurrence to the Officer-in-Charge, Marine Inspection, U.S. Coast Guard. Casualties involving commercial vessels are required to be reported to the Coast Guard whenever the casualty results in any of the following:

(a) Actual physical damage to property in excess of \$1,500.

(b) Material damage affecting the seaworthiness or efficiency of a vessel.

(c) Stranding or grounding. (With or without damage).

(d) Loss of life.

(e) Injury causing any persons to remain incapacitated for a period in excess of 72 hours; except injury to harbor workers not resulting in death and not resulting from vessel casualty or vessel equipment casualty.

Every event involving a vessel or her personnel which meets any of the conditions of a reportable casualty is of great concern to the Coast Guard. A number of reportable casualties are not investigated by the Coast Guard each year simply because they are not reported. Thus it is of primary importance that the masters of all vessels ensure that all casualties are reported and investigated. Through the cooperation of the masters, owners, and agents of commercial vessels many of the unreported casualties can be investigated.

The statistical summary represents casualties to commercial vessels which meet the above criteria. It is important to note that the summary represents casualties reported to Coast Guard Headquarters in fiscal year 1974, which ended June 30, 1974.

This statistical tabulation is intended to summarize the casualty experience for the entire commercial fleet. Because this summary is so all-encompassing, the use of the statistics may lead to erroneous conclusions unless the limitations of the data are well understood. The below listed office will gladly assist in quantifying those limitations for each specific need. Comments and recommendations for changes or improvements to these data are solicited. Remarks should be addressed to Commandant (G-MIS), U.S. Coast Guard, Washington, D.C. 20590.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS

1 July 1973 to 30 June 1974 Fiscal year 1974	Nature of casualty														Totals
	Collisions: crossing, meeting and overtaking	Collisions, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—Cargo	Explosion and/or fire—Vessel's fuel	Explosion and/or fire—Hull, pressure vessel	Explosion and/or fire—Structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	Cargo damage	
Number of casualties.....	217	229	19	478	270	13	54	7	100	393	404	241	86	11	3388
Number of vessels involved.....	653	676	44	985	400	14	56	7	121	580	525	306	105	11	5413
Number of inspected vessels involved.....	185	170	16	319	168	5	7	3	26	185	190	40	74	10	1763
Number of uninspected vessels involved.....	468	506	28	616	232	9	49	4	95	208	214	206	31	1	3650
PRIMARY CAUSE															
Personnel fault:															
Pilots—State.....	5	18		15	2					5	22				69
Pilots—Federal.....	1	5	1	12	1					5	14				39
Licensed officer—Documented seaman.....	112	76	14	245	60	2	1		1	123	92	26	3	1	773
Unlicensed—Undocumented persons.....	98	82	5	48	30	1	1		5	111	62	28	1	3	43
All others.....	18	15	2	28	3	2	4	2	7	18	27	12	1	3	191
															158

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS—Continued

Nature of casualty																		
PRIMARY CAUSE	Collision, capsizing, sinking, and overloading	Collision, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—Cargo	Explosion and/or fire—Vessel's fuel	Explosion and/or fire—Boilers, pressure vessels	Explosion and/or fire—Structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	Cargo damage	Material failure—Structure and equipment	Material failure—Machinery and engineering equipment	Casualty not otherwise classified	Totals
1 July 1973 to 30 June 1974 Fiscal year 1974																		
TYPE OF VESSEL																		
Inspected vessels:																		
Passenger and ferry—large	2	1	1	5	2				2	4	7				3	2		29
Passenger and ferry—small	12	10	3	1	18					15	7	14	1		15	50	1	159
Freight	11	25	5	87	61	1		2	7	24	52	5	42	10	62	86	488	
Cargo barge	15	23	1	16	16	1				20	19	4	6		4	2	125	
Tankships	7	15	2	28	13	1		1	3	17	50	1	12		30	28	210	
Tank barge	120	88	4	145	49	2	5		8	88	89	12	7		7	12	599	
Public	1			4	1					2	2				4	3	16	
Miscellaneous	17	8		33	8		2		2	17	14	4	6		11	16	143	
Uninspected vessels:																		
Fishing	71	55	3	15	48	2	26	2	32	123	87	89	10		92	175	882	
Tugs	286	181	11	336	123		13		23	166	105	91	12		48	39	1,395	
Foreign	32	61	5	28	11	5	3	1	4	27	84	3	1		3	13	288	
Cargo	74	147	4	193	31		8		5	55	38	43	5	1	45	11	717	
Miscellaneous	51	82	5	24	16	2	6	1	31	24	21	40	3		14	42	368	
GROSS TONNAGE																		
300 tons or less	346	201	17	361	116	3	41	4	84	322	235	242	31		186	320	2,764	
Over 300 to 1,000 tons	132	165	4	276	69	1	7		16	105	88	44	5		44	21	987	
Over 1,000 to 10,000 tons	142	130	17	208	78	6	5	1	12	106	102	14	25	1	44	50	951	
Over 10,000 tons	33	84	6	90	57	4	3	2	9	47	150	6	44	10	67	88	711	
LENGTH																		
Less than 100 feet	303	255	12	283	159	2	34	3	72	279	197	211	22		166	305	2,364	
100 to less than 300 feet	289	290	18	486	142	2	18	1	32	222	133	84	23		81	49	1,943	
300 to less than 500 feet	26	39	6	40	24	4			3	25	36	4	11	2	11	22	258	
500 feet and over	35	92	8	126	75	6	4	3	14	54	165	7	49	9	53	106	846	
AGE																		
Less than 10 years	354	319	11	392	150	4	23		40	206	188	85	49	6	105	197	2,210	
10 to less than 20 years	130	180	16	216	92	4	12	1	24	137	135	66	20	2	53	80	1,209	
20 to less than 30 years	88	95	8	149	77	5	7	2	26	106	100	63	19	1	73	83	915	
30 years and over	81	112	9	178	81	1	14	4	31	131	102	92	17	2	80	119	1,079	
LOCATION OF CASUALTY																		
Inland—Atlantic	24	30	3	72	51	2	8	4	28	99	134	41	4	2	41	46	608	
Inland—Gulf	82	52	6	106	59	3	9		17	82	110	33	6	1	48	37	659	
Inland—Pacific	16	27	2	31	46	4	18	1	14	66	34	35	6	2	53	104	476	
Ocean—Atlantic	2		2	3	5		2		9	15	10	16	82		17	86	168	
Ocean—Gulf	10	12	3	13	1	3			7	5	3	20	3		17	28	136	
Ocean—Pacific	15	3	2	5	21		7	1	10	33	7	37	27	2	52	135	371	
Great Lakes	6	12	3	71	27		1	1	1	22	25	9			20	26	232	
Western Rivers	55	80	1	168	39	2	5		19	68	69	47			36	21	622	
Ocean—Other	1			3					1	2	1	1			7	5	23	
Foreign Waters	6	13		14	9		1		3	6	11	2	8	2	16	7	96	
TIME OF DAY																		
Daylight	112	121	12	261	136	10	32	6	55	162	227	140	45	5	215	331	1,945	
Nighttime	96	90	6	206	95	2	15	1	45	199	142	89	85	6	84	95	1,287	
Twilight	9	18	1	21	17	1			9	32	35	12	6		10	21	206	
ESTIMATED LOSSES (X1000)																		
Vessel	9484	5615	2871	4578	5607	3337	4345	174	8380	17987	15	20133	2744	1	9410	5380	101090	
Cargo	114	195	8	1581	251	26	18		1554	742	33	2014	3374	139	612	174	12287	
Property	6457	9227	281	13336	680		34		877	706	17	5996	256	153	337	409	41272	

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS —Continued

1 July 1973 to 30 June 1974 Fiscal year 1974	Nature of casualty													Totals
	Collisions, crossing, meeting and overtaking	Collisions, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fires—Cargo	Explosion and/or fires—Vessel's fuel	Explosion and/or fire—Boilers, pressure vessel	Explosion and/or fire—Structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	
VESSELS TOTALLY LOST														
Inspected.....	3	1	1	2	1		4		5	9		14	4	54
Uninspected.....	8	9	1	5	21		17		33	49	1	91	4	298

1 Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF DEATHS/INJURIES DUE TO A VESSEL CASUALTY 1

1 July 1973 to 30 June 1974 Fiscal year 1974	Nature of Casualty													Totals
	Collision; crossing, meeting and overtaking	Collision, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fires—Cargo	Explosion and/or fires—Vessel's fuel	Explosion and/or fire—Boilers, pressure vessel	Explosion and/or fire—Structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	
Number of casualties.....	11	11	2	5	5	2	10	3	11	8	4	51		144
Number of inspected vessels involved.....	2	2	1	2	2	1	2	0	3	1	1	2		28
Number of uninspected vessels involved.....	9	9	1	3	3	1	8	3	8	7	3	49		120
Number of persons deceased/injured.....	6/36	20/7	/1	4/4	4	4/2	6/14	3/1	10/9	6/7	2/1	112/5		199/104
PRIMARY CAUSE														
Personnel Fault:														
Pilots—State.....											1			1
Pilots—Federal.....														
Licensed Officer—Documented Seamen.....	3	1	1	3						1	1	6		16
Unlicensed—Undocumented Persons.....	2	2	1		2		1	1	2	3	1	5		18
All Others.....	2						2					1		9
Error in judgement—calculated risk.....	1													1
Restricted maneuvering room.....														
Storms—Adverse weather.....				1	1					2		16		22
Unusual currents.....														
Sheer, suction, bank cushion.....														
Depth of water less than expected.....												1		1
Failure of equipment.....		1					3	2	4			2		21
Unseaworthy—Lack of maintenance.....									2			8		10
Floating Debris—Submerged object.....					1							1		2
Inadequate tug assistance.....														
Fault on part of other vessel or person.....	3	6		1						1		2		18
Unknown—Insufficient information.....		1			1	2	4		3	1	1	9		24
TYPE OF VESSEL INVOLVED														
Inspected vessels:														
Passenger and ferry—large.....	1/26													1/26
Passenger and ferry—small.....	/4								1			1/		1/6
Freight.....	/2	3/1	/1	/1								7		16/9
Cargo barge.....													6/3	/2
Tankships.....						3/2								/1
Tank barges.....						1/			1/1					2/1
Public.....	1/				1/									2/1
Miscellaneous.....	2/	3/1					1/1		2/1	1/2		18/		31/5
Uninspected vessels:														
Fishing.....	2/1	/5		/1			1/6	/1	1/2	2/3	1/	58/1		74/27
Tugs.....	/2	1/		4/2	1/		4/3		1/	1/1	11/4			24/15
Foreign.....	/1	13			2/		/4							17/6
Miscellaneous.....							3/	6/3	2/2			17/		28/5

STATISTICAL SUMMARY OF DEATHS/INJURIE DUES TO A VESSEL CASUALTY¹—Con.

July 1973 to 30 June 1974 Fiscal year 1974	Nature of Casualty													Totals
	Collision; crossing meeting and overtaking	Collision, while anchored, docking or undocking	Collision, fog	Collision with piers and bridges	Collisions, all others	Explosion and/or fires—Cargo	Explosion and/or fires—Vessel's fuel	Explosion and/or fire—Boilers, pressure vessel	Explosion and/or fire—Structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsize and floodings	Heavy weather damage	
Papers of deceased/injured:														
Licensed by Coast Guard.....	1/2	2/1	/1	1		1/	2/1		3/1			6/		15 7
Documented by Coast Guard.....	1/4	1		1		3/2	2/2					2/1		11/17
No license or document.....	4 30	2 6		3/3	4/		2/10	3/1	6/8	6/7	2/1	92/4		144/77
Other—Unknown—Foreign.....		15/					/1		1/			12/		29/3

SEE ATTACHED PAGE FOR THESE STATISTICS
Chart No. 1

Location of vessel:															
At dock/anchor.....	3/28	2/		1/2	1/		6/14	3/1	10/9	2/		4/		14 31	
Underway.....	3/8	18/7	/1	3/2	3/	4/2				4/7	2/1	108/5		/15	
Unknown.....														11/1	
PART OF BODY INVOLVED															
Head and upper limbs.....	/4			/1			1/3		/2	/3		1/		4/	7/16
Back and lower limbs.....	8			/1			/1					1/3			6/3
Chest.....	1			/1			/7	2/	2/5	/4	2/1	1/1		/1	28/51
Extremities.....	/23	16/	/1	/1		4/2		/1	/1			/3	1/2		1/1
Illness.....															122/
Drowning.....	1/	3/		2/	4/		3/	1/	6/	6/		85/		7/	35 18
Unspecified and miscellaneous.....	2/	1/7		2/			2/2	/1	2/1			24/4			

¹Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF DEATHS ON BOARD COMMERCIAL VESSELS¹ (Not Involving a Vessel Casualty)

1 July 1973 to 30 June 1974 Fiscal year 1974	Nature of death																
	Natural cause	Homicide	Suicide	Disappearance	Slips and falls—Ladders	Slips and falls—Gangways	Slips and falls—On deck	Slips and falls—Other	Falls from vessel—Into water	Falls into holds or tanks	Struck by objects; falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes
CAUSE OF DEATH																	
Total.....	2																
9 Intoxication.....	105			1					5								
108 Physical deficiency or handicap.....					2		12	3	70	2	1		1				
88 Unsafe movement or posture.....	1		6						1								
11 Psychological immaturity, insanity.....			2					1	1		2	14					
27 Unsafe practice.....																	
2 Violation of law or regulation.....																	

STATISTICAL SUMMARY OF DEATHS ON BOARD COMMERCIAL VESSELS —Continued (Not Involving a Vessel Casualty)

		Nature of death																							
		Natural cause	Homicide	Suicide	Disappearance	Slips and falls—Ladders	Slips and falls—Gangways	Slips and falls—On deck	Slips and falls—Other	Falls from vessel— Into water	Falls into holds or tanks	Struck by objects: falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Altercations and misconduct	Unknown or insufficient information	
1 July 1973 to 30 June 1974 Fiscal year 1974																									
CAUSE OF DEATH																									
28	Human errors.....				3	2			2	9		1						2	2			1	1		
2	Decks—slippery or cluttered.....									2															
6	Weather conditions.....							1		3		2													
	Poor maintenance or housekeeping.....																								
	Inadequate lighting.....																								
	Inadequate rails or guards.....																								
15	Failure of equipment.....									1		10				2	1	1							
1	Inadequate supervision.....					1																			
	Inadequate life preservers.....																								
	Inadequate tools or equipment.....											1													
2	Inadequate protective equipment.....					1																			
2	Improper use of tools or equipment.....								1										1						
	Miscellaneous causes.....																								
TYPES OF VESSELS INVOLVED																									
Inspected vessels:																									
26	Passenger and ferry—large.....	14		1	1					8		1											1		
1	Passenger and ferry—small.....									1															
75	Freight ships and barges.....	38	2							14		4	1									1	1	4	
85	Tankships and barges.....	22		1	1	2				7									2					1	
	Public.....																								
21	Miscellaneous.....	4			1	1				7	1		2			2	1	1	1						
Uninspected vessels:																									
41	Fishing.....	11	2		2	1				18		1	2					3	1						
43	Tugs.....	11			4					22		5							1						
1	Foreign.....									1															
51	Miscellaneous.....	8		2					1	20	2	6	8	1				1	1			1			
TIME OF DAY																									
178	Daytime.....	70		3	4	5			7	48	1	7	12	1		2	1	3	5			2		1	
97	Nighttime.....	22	2	3	5			3		46	2	7	1					2						3	
21	Twilight.....	10								4		2	1						1				2	1	
PARTICULARS OF DECEASED																									
Papers of deceased:																									
45	Licensed by Coast Guard.....	29		2			1	3		9		4	1							1					
113	Documented by Coast Guard.....	46	1	3	1	3			2	34	2	7	3					1	2			1	2	3	
134	No license or document.....	32	1	1	8	1			1	4	55	1	6	10	1		2	1	4	3		1			
1	Other—Unknown—Foreign.....	1																							

SEE ATTACHED PAGE FOR THESE STATISTICS
Chart No. 2

PART OF BODY INVOLVED		Head	Back	Chest	Extremities	Illness	Drowning	Unspecified and miscellaneous
21	Head.....	1						
4	Back.....		1					
7	Chest.....			1				
6	Extremities.....				1			
101	Illness.....	90						
108	Drowning.....						87	
54	Unspecified and miscellaneous.....	1	3	8	2		1	3

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-357.

Chart No. 1

T O T A L S

NON-VESSEL CASUALTY DEATHS Chart No. 2

	Natural cause	Homicide	Suicide	Disappearance	Slips and falls - Ladders	Slips and falls - Gangways	Slips and falls - On deck	Slips and falls - Other	Falls from vessel - Into water	Falls into holds or tanks	Struck by objects: falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Altercations and misconduct	Unknown or insufficient information
32 Passenger	19	--	--	--	--	--	--	13	1	--	--	--	--	--	--	1	--	1	--	--	--	--	3
17 Longshoreman-Harbor worker	1	--	1	--	--	--	--	1	7	1	--	--	--	--	--	--	--	1	--	--	1	--	7
234 Crewmember	86	2	6	3	4	--	2	5	8	2	14	6	1	--	2	--	2	--	--	--	--	3	1
13 Other	2	--	--	--	--	--	--	--	3	--	1	2	1	--	--	--	1	2	--	--	--	--	1
7 Off duty	2	--	2	--	--	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
153 Deck department duties	52	2	3	1	3	--	1	5	60	2	9	4	--	--	--	--	2	1	--	--	--	1	6
40 Engine department duties	23	--	1	--	1	--	1	--	6	--	3	--	1	--	2	--	--	1	--	--	--	1	1
21 Stewards department duties	7	--	--	1	--	--	--	--	9	--	1	--	--	--	--	1	--	1	--	--	--	2	--
17 Handling cargo	1	--	1	--	--	--	--	1	7	1	--	--	--	--	--	--	--	1	--	--	--	--	3
20 Fishing	8	--	--	--	--	--	--	--	9	--	1	1	--	--	--	--	--	1	--	--	--	--	--
1 Drills	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24 Passenger	14	--	--	--	--	--	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13 Other and unknown	1	--	--	--	--	--	--	--	3	--	1	3	1	--	--	--	1	2	--	--	--	--	1

Status or capacity on vessel:

Activity engaged in:

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD ALL COMMERCIAL VESSELS¹

(Not Involving a Vessel Casualty)

		Nature of Injury																		
		Slips and falls— Ladders	Slips and falls— Gangways	Slips and falls—On deck	Slips and falls—Other	Falls from vessel— into water	Falls into holds or tanks	Struck by objects, falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Altercations and miscon- duct	Unknown or insufficient information
Totals		CAUSE OF INJURY																		
35	Intoxication.....	5		3	8			4		1		1						3	7	3
67	Physical deficiency or handicap.....	3	1	6	15						1						25		1	11
49	Unsafe movement or posture.....	3		3	6												8	1	19	2
24	Psychological immaturity, insanity.....			1	1	2	2	2	1				1	1	2	1				
26	Unsafe practice.....	3	1	1	1															
6	Violation of law or regulation.....																			
707	Human errors.....	107	17	70	139	1	17	113	1	20		35	6	45	72		19	28	13	1
68	Decks—Slippery or cluttered.....	6		46	11	1		1						2	2					
68	Weather conditions.....	7		7	25			9		3		1		5	9	1		1		
9	Poor maintenance or housekeeping.....	1			3							3						2		
4	Inadequate lighting.....	2			1									1						
7	Inadequate rails or guards.....				1		1													
106	Failure of equipment.....	3	1	3	11		1	90	1	1		18		4	3	1	1	1		
31	Inadequate supervision.....	2		1	1			13	1	1				8			1			
	Inadequate life preservers.....																			
19	Inadequate tools or equipment.....	2			1			7				1	1	3	1		1	2		
18	Inadequate protective equipment.....				1			2	1			8			2			3		
21	Improper use of tools or equipment.....	3		1	1			8						1	2			4		
	Miscellaneous causes.....																			
TYPES OF VESSELS INVOLVED																				
Inspected Vessels:																				
58	Passenger and Ferry—large.....	6	1	7	20	1		8	1			1		2	4		4	2		1
2	Passenger and Ferry—small.....			1	1															
825	Freight ships and barges.....	107	17	97	148	3	13	138	4	20	1	48	8	34	61	2	41	35	34	14
185	Tankships and barges.....	22	2	24	31	2	6	28	1	6	16	16	8	16	19	4	19	4	9	3
5	Public.....	1		1	1			1						2			1			
57	Miscellaneous.....	4	5	9	1	1	14	1				2		5	12	1	1	2		
Uninspected Vessels:																				
38	Fishing.....	1		2	4	6	4					1		14	4			1		1
67	Tugs.....	0		5	12	4	1	20		1		1		6	5		2	1		3
	Foreign.....																			
28	Miscellaneous.....	4	1	2	5		8							3	2		1		1	1
TIME OF DAY																				
816	Daytime.....	94	8	90	147	12	14	171	4	20		41	6	56	63	2	55	23	25	14
341	Nighttime.....	51	10	49	61	8	5	41	1	6	1	13	2	19	28	1	11	11	16	7
78	Twilight.....	5	2	3	20	2	2	9		1		15		2			3	4	3	2
PARTICULARS OF PERSON INJURED																				
Papers of person injured:																				
219	Licensed by Coast Guard.....	28	1	17	35	2	10	86	2	6		23	2	9	14	1	12	5	8	4
911	Documented by Coast Guard.....	113	18	112	159	11	9	168	2	21	1	41	5	39	67	1	55	26	40	14
144	No license or document.....	9	1	13	24	9	2	17	1			5	1	23	15	2	2	4	1	5
	Other—Unknown—Foreign.....																			
Status or Capacity on Vessel:																				
2	Passenger.....			1	1															
123	Longshoreman—Harbor worker.....	5	1	11	32	9	2	15	1			5	1	17	12	2	2	3	1	4
1139	Crewmember.....	145	19	130	195	18	10	206	4	27	1	64	7	53	84	1	67	42	43	19
1	Other.....													1						
Activity engaged in:																				
2	Off duty.....																			
611	Deck department duties.....	67	11	73	110	10	10	129	1	14		19	4	43	30		37	15	22	7
262	Engine department duties.....	59	6	27	53	2	9	65	3	11	1	38	3	8	31	1	20	11	8	6
162	Stewards department duties.....	19	2	29	32	1		12		2		7		2	12		10	16	13	5
	Handling cargo.....																			
3	Fishing.....				1									1						1
	Drills.....																			
124	Passenger.....	5	1	18	31	9	2	15	1			5	1	17	12	1	2	3	1	4
1	Other and unknown.....																			
Location of vessel:																				
483	At deck/anchor.....	54	15	54	79	8	11	87	1	9	1	22	7	26	34		24	17	25	9
782	Underway.....	96	5	88	149	14	10	184	4	18		47	1	45	62	3	45	28	19	14
	Unknown.....																			

(Not Involving a Vessel Casualty)

¹ Statistics concerning recreation and pleasure boating accidents are published in CU-357.

ANNUAL STATISTICS OF CASUALTIES

Annually the U.S. Coast Guard releases to the public a statistical summary of casualties involving commercial vessels. This year the following brief explanation of the statistics is given in an attempt to make them more meaningful.

Casualties involving commercial vessels are required to be reported to the Coast Guard whenever the casualty results in the following:

- (a) Actual physical damage to property in excess of \$1,500.
- (b) Material damage affecting the seaworthiness or efficiency of a vessel.
- (c) Stranding or grounding.
- (d) Loss of life.
- (e) Injury causing any persons to remain incapacitated for a period in excess of 72 hours; except injury to harbor workers not resulting in death and not resulting from vessel casualty or vessel equipment casualty.

The statistical summary represents casualties to commercial vessels which meet the above criteria. It is important to note that the summary represents casualties reported to Coast Guard Headquarters in fiscal year 1973.

This statistical tabulation is intended to summarize the casualty experience for the entire commercial fleet. Because this summary is so all-encompassing, the use of the statistics may lead to erroneous conclusions unless the limitations of the data are well understood.

Since the limitations are dependent upon the parameters of a problem, the below listed office will gladly assist in quantifying those limitations for each specific need.

Comments and recommendations for changes or improvements to these data are solicited. Remarks should be addressed to Commandant (G-MIS), U.S. Coast Guard, Washington, D.C. 20590.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS¹

	Nature of casualty																	
	Collisions, crossing, meeting and overtaking	Collisions, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total
1 July 1972 to 30 June 1973 Fiscal year 1973																		
Number of casualties	207	203	24	536	214	18	27	5	57	312	338	140	61	16	227	128	74	1,104
Number of vessels involved	631	628	80	1,027	439	24	26	6	103	464	455	180	72	18	264	484	120	1,977
Number of inspected vessels involved	191	171	24	316	189	13	6	5	21	141	174	28	48	15	130	183	81	1,064
Number of uninspected vessels involved	440	357	36	711	270	11	22	1	82	323	261	152	24	3	238	271	80	913
PRIMARY CAUSE																		
Personnel fault:																		
Pilots—State	10	26	1	21	9	0	0	0	0	0	22	0	0	0	0	0	2	40
Pilots—Federal	9	6	1	24	4	0	0	0	0	5	21	0	0	0	0	0	0	70
Licensed officer—documented seaman	33	33	13	65	36	2	0	0	2	54	44	7	2	2	4	12	3	312
Unlicensed—undocumented persons	149	64	13	252	66	0	2	0	5	127	79	37	1	0	10	6	26	807
All others	14	19	8	24	11	6	1	0	7	9	18	3	1	3	13	4	10	154
Error in judgement—calculated risk	0	1	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	5
Restricted maneuvering room	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Storms—adverse weather	6	26	3	29	30	0	0	0	0	36	25	19	51	8	20	0	4	289
Unusual currents	1	7	0	44	3	0	0	0	0	1	5	1	1	0	0	0	0	63
Sheer, suction, bank cushion	11	1	0	6	2	0	0	0	0	4	14	1	1	0	0	0	0	40
Depth of water less than expected	0	1	0	4	0	0	0	0	0	16	62	0	1	0	0	0	1	87
Failure of equipment	7	16	0	26	2	2	14	3	29	13	17	11	0	0	120	267	3	680
Unseaworthy—lack of maintenance																		
Floating debris—submerged object	0	1	0	6	112	0	0	0	0	7	3	1	0	0	18	4	0	134
Inadequate tug assistance	3	2	0	10	3	0	0	0	0	1	2	0	0	0	2	0	0	21
Fault on part of other vessel or person	285	307	21	492	143	6	1	0	6	149	124	51	11	3	152	27	30	1,004
Unknown—insufficient information	4	26	0	52	18	8	10	2	51	22	16	36	2	2	26	14	36	226

¹ See footnote at end of table.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS ¹

1 July 1972 to 30 June 1973
Fiscal year 1973

TYPE OF VESSEL	Nature of casualty														Totals
	Collisions: crossing, meeting and overtaking	Collisions: while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	Unlabeled damage	
Inspected vessels:															
Passenger and ferry—large	3	5		4	3			2	1	2	5	1	2	1	29
Passenger and ferry—small	9	6	3	6	13		1	1	3	17	8	7	2	15	145
Freight	22	47	8	78	43	4	1	2	4	21	57	4	30	12	503
Cargo barge	16	20		35	22				2	15	13	9	4	2	149
Tankships	10	20	2	31	29	5	1	1	4	19	62	2	7	21	247
Tank barge	120	63	7	118	45	2	2		5	68	47	4	3	11	536
Public			1	2	1										5
Miscellaneous	11	10	3	12	13		1		2	1	2	1		1	50
Uninspected vessels:															
Fishing	52	29	5	18	36		18		40	103	63	54	9	99	728
Tugs	222	120	11	395	130	1	6		14	130	191	56	6	51	1,299
Foreign	26	86	10	30	14	2	1		2	15	51	12	4	4	289
Cargo	84	82	6	239	27	3			3	30	38	24	1	51	670
Miscellaneous	46	40	4	20	43	5	3		23	13	10	18	8	23	314
GROSS TONNAGE															
300 tons or less	316	292	31	407	224	6	24		77	250	185	141	28	214	2,461
Over 300 to 1000 tons	139	100	8	301	74	5	1		7	74	51	23	3	43	890
Over 1000 to 10,000 tons	141	133	9	227	89	9	2	4	15	104	101	12	16	56	1,016
Over 10,000 tons	35	93	12	92	52	4	1	2	4	36	118	4	25	53	630
LENGTH															
Less than 100 feet	292	180	21	329	186	7	22		70	209	162	127	21	177	2,067
100 to less than 300 feet	304	192	17	557	178	9	4	2	24	185	113	43	10	99	1,867
300 to less than 500 feet	27	52	3	17	33	4	1		3	27	50	8	10	4	334
500 feet and over	38	104	16	114	62	4	1	4	6	43	130	2	28	11	749
AGE															
Less than 10 years	309	234	26	550	155	13	10		29	196	171	51	27	94	1,967
10 to less than 20 years	142	136	14	364	99	3	2	2	29	86	104	52	12	74	1,125
20 to less than 30 years	91	71	6	168	99	7	10	1	20	89	82	26	18	94	918
30 years and over	80	87	13	145	36	1	6	3	25	94	98	49	15	106	967
LOCATION OF CASUALTY															
Inland—Atlantic	41	39	2	104	69	5	2	1	16	80	124	32	6	53	651
Inland—Gulf	90	44	8	105	81	3	6		28	81	111	36	1	47	746
Inland—Pacific	7	19	1	31	50	1	12		25	61	35	23	8	67	478
Ocean—Atlantic	4	10	2	1	4	1	2		3	9	7	13	17	4	155
Ocean—Gulf	1	5	1	3	12		2		7	3	2	5	5	1	74
Ocean—Pacific	7	4	4	2	22	1	2	1	7	23	4	12	21	5	294
Great Lakes	5	12	1	53	18		2		5	15	23	1	1	13	169
Western Rivers	41	58	5	155	28	5	1	1	5	32	16	17	1	30	410
Ocean—other	2	1		2	5		1		2	2	1	1		4	27
Foreign waters	3	11		22	16	2			1	6	13		1	11	106
TIME OF DAY															
Daylight	163	120	14	271	166	15	19	2	48	149	173	83	32	8	1,734
Nighttime	105	80	8	248	120	3	8	3	43	147	143	48	28	7	1,212
Twilight	9	3	2	19	8				6	16	22	9	4	1	162
ESTIMATED LOSSES															
Vessel	9,053	15,012	3,675	4,912	3,376	2,312	776	108	11,358	12,984	280	4,697	890	20	81,894
Cargo	388	126	5	1,240	3,086	423	1		796	4,064	18	433	1,076	180	1,282
Property	330	1,581	7	25,926	659	1,022	6		121	2,418	48	197	125	45	34,436
VESSELS TOTALLY LOST															
Inspected	3	1		1	1	1			4			7	1	1	19
Uninspected	15	6	3	15	13	2	8		42	42		36	12	81	302

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-367.

STATISTICAL SUMMARY OF DEATHS/INJURIES DUE TO A VESSEL CASUALTY ¹

	Nature of casualty														Total
	Collision; coming meeting and overtaking	Collision, while anchored, docking or undocking	Collision, fog	Collision with pier and bridge	Collision, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizing and flooding	Heavy weather damage	Cargo damage	
1 July 1972 to 30 June 1973 Fiscal year 1973															
Number of casualties.....	9	4	3	9	6	4	6	0	6	3	0	21	4	0	108
Number of inspected vessels involved.....	0	2	2	5	0	4	1	0	2	0	0	0	0	7	26
Number of uninspected vessels involved.....	9	1	1	4	6	0	5	0	4	3	0	21	4	19	84
Number of persons deceased/injured.....	6/6	1/6	/6	19/10	17/2	2/3	1/13	0	2/8	2/1	0	34/1	18/1	0	131/74
PRIMARY CAUSE															
Personnel fault:															
Pilots—state.....															6
Pilots—Federal.....															26
Licensed officer—documented seaman.....															84
Unlicensed—undocumented persons.....	7	1	1	2	2	1	2			3		12		4	1
All others.....						1									
Error in judgment—calculated risk.....															
Restricted maneuvering room.....															
Storms—adverse weather.....				1	1							3	4	3	12
Unusual currents.....				1								1			
Shear, suction, back cushion.....															
Depth of water less than expected.....															
Failure of equipment.....							4							12	22
Unseaworthy—lack of maintenance.....												2		4	6
Floating debris—submerged object.....															
Inadequate tug assistance.....															
Fault on part of other vessel or person.....	2	2	1	2	3				2					2	13
Unknown—insufficient information.....						2			4			3			13
TYPE OF VESSEL INVOLVED															
Inspected vessels:															
Passenger and ferry—large.....		/1	/2	/1					/1					/2	5/7
Passenger and ferry—small.....				11/8										/3	11/13
Freight.....															
Cargo barge.....						/1	/2		1/					/1	1/3
Tankships.....			/3			2/2									2/5
Tank barges.....															
Public.....															
Miscellaneous.....		/3													/3
Uninspected vessels:															
Fishing.....	0/2			8/1	7/2	/4			1/1	1/1	19/	6/		18/	63/9
Tugs.....		/1				/1			/1	/1	7/1			2/2	11/8
Foreign.....	1/4	1/							/5						2/9
Miscellaneous.....	5/0		/2	10/		/3					8/	9/1		4/4	36/17
PARTICULARS OF PERSON DECEASED/INJURED															
Papers of deceased/injured:															
Licensed by Coast Guard.....		/1	/1	/1	1/	/1	/2		1/1	1/1	1/1			/1	5/6
Documented by Coast Guard.....														1/1	2/7
No license or document.....	6/6	1/4	/3	8/3	16/2	2/2	10/		1/3	1/	33/	18/1		23/10	106/56
Other—unknown—foreign.....				11/					/4					5/	18/4
Status or capacity on vessel:															
Passenger.....	1/	/2			3/				1/	0/1	4/	5/1		1/2	19/6
Longshoreman—harbor worker.....						/1								2/2	2/3
Crewmember.....	2/6	1/3	/6	9/2	14/3	2/2	/7		1/7	2/	29/	10/		21/7	96/47
Other.....	3/			10/8		/6			/1		1/1			/1	14/17
Activity engaged in:															
Off duty.....			/2	3/	6/	/1			/4			3/			12/7
Deck Department duties.....	1/2	1/2	/3	4/2	5/1	2/2	/5		/2	1/	16/	5/		8/6	46/27
Engine Department duties.....	1/4	/1		1/			/2		1/1		3/			/1	6/12
Stewards Department duties.....			/1												1/1
Handling Cargo.....														14/2	1/4
Fishing.....					3/					1/	7/	7/1			34/3
Drills.....															
Passenger.....	1/	/2			3/		/5		1/		1/			4/	10/7
Other and unknown.....	3/			10/8	/1					0/1	4/1	3/		1/1	21/12
Location of Vessel:															
At Anchor/Dock.....		1/1		/2	7/1	2/3	/4		/1		5/	3/		4/4	22/19
Underway.....	6/6	/5	/6	9/	10/	/9			2/7	2/1	20/1	12/1		20/8	96/46
Other.....				10/8											10/8
PART OF BODY INVOLVED															
Head and upper limbs.....	/1	/1		/1										2/3	2/6
Back and lower limbs.....	/1		/1											/2	7/
Chest.....	/4			1/	3/	/1								/1	4/7
Extremities.....		1/2		1/			/4		1/2	/1		/1		/4	4/21
Illness.....				/1											/1
Drowning.....	6/				14/					1/	28/	9/		13/	76/
Unspecified and miscellaneous.....		/2	/5	17/8	/1	2/3	/9		1/6	1/	6/1	6/		9/2	45/81

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-557.

STATISTICAL SUMMARY OF DEATHS ON BOARD COMMERCIAL VESSELS¹ (Not Involving a Vessel Casualty)

		Nature of death																							
		Natural cause	Homicide	Suicide	Disappearance	Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects, falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Alterations and misconduct	Unknown or insufficient information	
1 July 1972 to 30 June 1973 Fiscal year 1973																									
CAUSE OF DEATH																									
Total: 333																									
20 Intoxication		123	2	1						16															
128 Physical Deficiency or Handicap						1	1			2		1													
15 Unsafe Movement or Posture			4	12						6															
24 Psychological—Immaturity, insanity						1				19		3	1	2											
33 Unsafe Practices			1						1																
1 Violation of Law or Regulation			1																1	1					
70 Human Errors			1			5	2		1	40		2	9	3					1	6					
4 Decks—Slippery or Cluttered										3															
8 Weather Conditions						1				7															
Poor Maintenance or Housekeeping																									
Inadequate Lighting																									
Inadequate Rails or Guards																									
22 Failure of Equipment										2		1	16	2					1						
4 Inadequate Supervision										2															
Inadequate Life Preservers																									
Inadequate Tools or Equipment														1											
2 Inadequate Protective Equipment										1															
Improper use of Tools or Equipment																									
2 Miscellaneous Causes										1															
TYPES OF VESSELS INVOLVED																									
Inspected Vessels:																									
23 Passenger and Ferry—large		14		2						7															
23 Passenger and Ferry—small		15							1	5									1						
91 Freight Ships and Barges		49	4	4		2	1		2	10		4	7	3	4										
31 Tankships and Barges		15	1			2	1			3															
3 Public		1		1																					
11 Miscellaneous		2							1	2		1	3												
Uninspected Vessels:																									
52 Fishing		0	4	2						36									1						
44 Tugs		7		3						26		7													
19 Foreign		5				3	1		1	4		2													
36 Miscellaneous		6								18		6	1				2		1	2					
TIME OF DAY																									
164 Daytime		82	2	4		2	1		3	49		5	15	8					2	6					
129 Nighttime		36	6	8		6	2		1	54		2	8	2						1					
20 Twilight		5		1					1	8			3	1					1						
PARTICULARS OF DECEASED																									
Papers of Deceased:																									
47 Licensed by Coast Guard		27		3		1				7		1	4	4											
106 Documented by Coast Guard		50	3	6		3	2		1	27		2	5	4					1	1					
153 No License or Document		41	3	4					3	73		2	13	2					2	4					
27 Other—Unknown—Foreign		5	2			4	1		1	4		2	4	1											
Status or Capacity on Vessel:																									
35 Passenger		27		1		1				7															
39 Longshoreman—harbor worker		6	2						3	14		3	4				2		1	3					
236 Crewmember		86	6	12		6	3		1	83		4	18	10			2	2	2	4					
24 Other		8				1			1	7			7	1											
Activity engaged in:																									
37 Off duty		24	2	4						5				1											
145 Deck department duties		34	3	6		5	1		2	64		4	11	8			2		2	3					
28 Engine department duties		15		1		1	1			8				4	1										
16 Stewards department duties		12	1	1			1			1															
15 Handling cargo		1							3	1		2	3				1			3					
16 Fishing		7								9															
Drills																									
49 Passenger		26	2	1					1	18		1	1						1	1					
27 Other and unknown		4				1				11			7	1			1								
Location of vessel:																									
98 At Dock/Anchor		34	3	2		5	2		2	20		4	10	7			3			4					
218 Underway		81	5	11		3	1		3	84		3	14	2			1		2	3					
20 Other		8								7			2	2				1							
PART OF BODY INVOLVED																									
22 Head		1	1			2			3			2	12							2					
5 Back						1							2												
8 Chest			1									1	5				1		1						
4 Extremities													2												
122 Illness		119				1	1							1						2					
119 Drowning		1		10		3	2			99		1	2	1											
52 Unspecified & miscellaneous		3	6	3		1			2	12		3	3	10			3		1	3					

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD ALL COMMERCIAL VESSELS¹

(Not Involving a Vessel Casualty)

CAUSE OF INJURY	Nature of injury															
	Slips and falls - ladders	Slips and falls - gangways	Slips and falls - on deck	Slips and falls - other	Falls from vessel into water	Falls into holds or tanks	Struck by objects; falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, jammed into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains, and strains
Totals: 1,168																
28 Intoxication	3	1	6	5	2						1					1
22 Physical deficiency or handicap	7		3	3												19
39 Unsafe movement or posture	8		3	11	1		1		1							1
36 Psychological—immaturity, insanity					1											32
117 Unsafe practice	11	2	7	11	2		26	4	3	8	8	3	3	5		21
3 Violation of law or regulation																1
67 Human errors	109	16	85	81	4	7	91		29	27	39	1	37	66	3	35
55 Decks—slippery or cluttered	4	2	28	7			1		1				1	1		2
63 Weather conditions	2		14	9			11		1				1	9	12	2
10 Poor maintenance or housekeeping	2		3	2			1									
1 Inadequate lighting		1														
5 Inadequate rails or guards				2												
70 Failure of equipment	3			13			47		1	1	4		2	1		2
14 Inadequate supervision	1			1			7		1				2	1		1
Inadequate life preservers																
3 Inadequate tools or equipment							3		2							
9 Inadequate protective equipment							1		1							
6 Improper use of tools or equipment							1		3							
4 Miscellaneous causes				1			1		1							
TYPES OF VESSELS INVOLVED																
Inspected vessels:																
49 Passenger and ferry—large	4	3	13	3			5		2	1	2		1	2	2	4
30 Passenger and ferry—small			9	5	1		3		1	1	2		1	4	1	2
773 Freight ships and barges	109	16	106	98	3	2	127		27	23	37	3	21	88	8	63
126 Tankships and barges	21	1	15	23	1		16		5	4	9	2	4	6	2	23
18 Public	6	1	1	2					2		1					4
36 Miscellaneous	1	1	5	2	1	1	4	1		2	3		1	6		8
Uninspected vessels:																
38 Fishing			1	4		1	9		4				9	6	1	2
70 Tugs	3		7	7	3	1	24		2	2	1		8	7	1	2
4 Foreign			1	1		1	1		1				1			
21 Miscellaneous	1		2	3	1	1	6		1	3				2		1
TIME OF DAY																
797 Daytime	105	3	108	92	5	4	142	5	30	28	43	3	31	62	10	62
322 Nighttime	39	19	43	48	4	3	43	1	5	10	10	2	16	24	4	20
49 Twilight	2		8	8	1		9		2	2	2		1	5	1	3
PARTICULARS OF PERSON INJURED																
Papers of person injured:																
155 Licensed by Coast Guard	17	2	16	22		2	29	2	7	6	14	2	3	13	4	9
874 Documented by Coast Guard	124	20	126	112	7	1	133	2	29	26	37	3	32	62	9	71
123 No license or document	4		15	9	3	4	31	1	1	8	4		13	15	1	6
16 Other—unknown—foreign	1		3	5			1		1				1	1		1
Status or capacity on vessel:																
21 Passenger			7	4	1		1				1			2	1	1
13 Longshoreman—harbor worker	3			5	1	1	1									2
113 Crewmember	142	22	140	139	8	6	188	6	37	38	52	5	48	85	14	68
21 Other	1		3				4		2	2				4		2
Activity engaged in:																
87 Off duty	12	8	15	19	1		1		1							3
533 Deck department duties	61	5	73	66	4	3	120	3	18	11	7		49	36	11	45
322 Engine department duties	48	4	31	40		2	42	3	14	25	35	5	2	35	1	25
142 Stewards department duties	21	6	29	11	2		15		4	1	9		2	10	1	10
11 Handling cargo	2			4	1	1	1									7
21 Fishing	1		1	1		1	5			2			5	3		2
11 Drills			1	4			5									
20 Passenger			6	3			1						2	1		2
21 Other and unknown	1		3	1			4			1	2		1	4		2
Location of vessel:																
801 At dock anchor	64	17	57	68	7	4	90	2	15	9	25	8	18	28		39
630 Underway	81	6	97	75	3	3	97	4	21	29	29	2	26	30	15	42
37 Other	1		5				7		1	2	1		2	3		4

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-357.

July 1972 to 30 June 1973 Fiscal year 1973		Nature of injuries																		
Part of body injured:		Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into boats or tanks	Struck by objects: falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, jammed into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, lacerations and punctures	Altercations and miscellaneous	Unknown or insufficient information
21	Eye.....	1		2							1	2								
22	Head.....	12		15	11	1	1	36	1	6	2	2	1	1						
155	Back.....	31	1	27	3	1	2	11		3	1	2	1	1	1					
28	Neck and shoulder...	6		7	3			4			1	1								
30	Chest.....	4		5	1			8			2	4		1						
63	Abdomen and hip.....	16		11	12	1	1	3			2	1		1						
73	Extremities.....	16		11	12	1	1	3			2	4		1						
49	Unspecified and miscellaneous.....	72	19	13	85	1	2	121	1	25	34	41	2	46	67	9				
		4	2	3	2	6		4	4	1	3	3	2		1	1				

¹ Statistics concerning recreation and pleasure boating accidents are published in C-G-257.

ANNUAL STATISTICS OF CASUALTIES

Annually the U.S. Coast Guard releases to the public a statistical summary of casualties involving commercial vessels. This year the following brief explanation of the statistics is given in an attempt to make them more meaningful.

Casualties involving commercial vessels are required to be reported to the Coast Guard whenever the casualty results in the following:

- (a) Actual physical damage to property in excess of \$1,500.
- (b) Material damage affecting the seaworthiness or efficiency of a vessel.
- (c) Stranding or grounding.
- (d) Loss of Life.
- (e) Injury causing any persons to remain incapacitated for a period in excess of 72 hours; except injury to harbor workers not resulting in death and not resulting from vessel casualty or vessel equipment casualty.

The statistical summary represents casualties to commercial vessels which meet the above criteria. It is important to note that the summary represents casualties reported to Coast Guard Headquarters in fiscal year 1972.

This statistical tabulation is intended to summarize the casualty experience for the entire commercial fleet. Because this summary is so all-encompassing, the use of the statistics may lead to erroneous conclusions unless the limitations of the data are well understood.

Since the limitations are dependent upon the parameters of a problem, the below listed office will gladly assist in quantifying those limitations for each specific need.

To better serve the public's pursuit of safety, the Coast Guard would like to change the presentation of data to serve the widest possible spectrum of maritime interests. Persons who have used these data in safety programs, educational pursuits, business management, and those who could use this information if presented in a different form are requested to forward their recommendations for changes to U.S. Coast Guard (GMIS/83), 400 Seventh Street SW., Washington, DC 20590.

The suggestions solicited last year in a similar request have been partially incorporated in the data base but are yet not reflected in the following tables.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS¹

1 July 1971 to 30 June 1972 Fiscal year 1972	Nature of casualty																	Totals
	Collisions, crossing, meeting and overtaking	Collisions, while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—boilers, Pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, Capsizeings and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	
Number of casualties.....	198	159	58	426	254	12	25	2	131	304	236	85	3	31	341	145	24	2,424
Number of vessels involved.....	618	459	168	787	385	12	27	2	136	442	304	128	4	42	409	168	41	4,117
Number of inspected vessels involved.....	164	131	80	285	159	10	3	2	39	155	162	13	1	28	181	103	11	1,587
Number of uninspected vessels involved.....	454	328	108	502	236	2	24	1	97	287	142	110	2	14	228	45	30	2,610
PRIMARY CAUSE																		
Personnel fault:																		
Pilots—State.....	5	7	12	12	1					5	19				2		1	62
Pilots—Federal.....	25	27	9	73	18					28	40	1					1	224
Licensed officer—documented seaman.....	37	20	17	78	15	3			7	48	37	5		5	11		1	284
Unlicensed—undocumented persons.....	145	39	32	141	40	1	3		9	106	36	24		3	14		4	597
All others.....	36	44	11	32	19	4			18	14	14	4		2	10		6	136
Error in judgement calculated risk.....										1	3							4
Restricted maneuvering room.....																		3
Storms—adverse weather.....	1	13	5	35	36	1				33	19	11	4	19	74	2		256
Unusual currents.....	1	1		11	1					2	2							14
Shear, striction, bank cushion.....	2			1						13	37							7
Depth of water less than expected.....					2													53
Failure of equipment.....	10	21	3	31	20	2	15	2	55	33	19	10		2	118	140	3	483
Unseaworthy—lack of maintenance.....	1			1					1	5		14			36			56
Floating debris—submerged object.....		1		4	110					5					2		1	128
Inadequate tug assistance.....	1	1		1														8
Fault on part of other vessel or person.....	350	285	79	359	125		2		5	143	74	36		11	134	6	10	1,619
Unknown—insufficient information.....	3			7	4	1	7		41	3	4	18			7	14		109

See footnote at end of table.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS¹—Continued

1 July 1971 to 30 June 1972 Fiscal year 1972	Nature of casualty															Totals	
	Collisions; crossing, meeting and overtaking	Collisions, while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire— cargo	Explosion and/or fire— vessel's fuel	Explosion and/or fire— boiler, pressure vessel	Explosion and/or fire— structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, Capsizings and floodings	Heavy weather damage	Cargo damage	Material failure— structure and equipment		Material failure— machinery and engineering equipment	Casualty not otherwise classified
TYPE OF VESSEL																	
Inspected vessels:																	
Passenger and ferry—large	4	3		6	3		1		1	5	2	2			5	3	34
Passenger and ferry—small	3	8		4	12				8	17	7				13	5	81
Freight	19	30	11	101	49	4	2		13	27	65	1		10	103	55	507
Cargo barge	7	15	10	24	12		1		1	14	4	3			14		114
Tank ships	11	23	6	13	32	2			6	13	50		1		18	30	206
Tank barge	112	46	25	128	45	4	1		8	71	32	6			16	2	497
Public	2	2	1		2					2		1			6	3	19
Miscellaneous	6	4	4	9	4				2	6	2			1	6	5	49
Uninspected vessels:																	
Fishing	68	40	9	12	43		15		45	101	22	32			70	27	499
Tugs	208	91	42	280	117		5		27	119	65	42	1	9	63	5	1,080
Foreign	35	71	24	29	18	2			6	15	29	2			5		249
Cargo	103	83	18	160	32				4	37	11	24			50	14	539
Miscellaneous	40	43	15	21	26		4		15	15	4	10	2	1	31	12	243
GROSS TONNAGE																	
300 tons or less	283	171	67	280	197		23		87	232	98	83	1	12	188	44	1,762
Over 300 to 1,000 tons	163	126	44	255	87	2	3		12	88	27	29		2	63	8	895
Over 1,000 to 10,000 tons	140	79	37	214	95	6	1	1	27	97	37	8	2	17	77	44	937
Over 10,000 tons	32	83	20	58	46	4	1		10	25	92	3	1	11	81	52	523
LENGTH																	
Less than 100 feet	252	140	50	207	164		24		80	206	84	70	1	6	156	41	1,497
100 to less than 300 feet	303	193	81	424	139	5	3		31	179	66	48	1	14	118	17	1,638
300 to less than 500 feet	25	32	16	62	27	2	1		14	21	40	2	1	8	36	26	318
500 feet and over	38	94	21	94	65	2	1		11	36	114	3	1	14	99	64	664
AGE																	
Less than 10 years	312	182	92	322	146	7	9	1	38	157	105	41	2	14	136	53	1,632
10 to less than 20 years	176	152	49	223	98	2	5		41	120	80	43		10	101	21	1,130
20 to less than 30 years	73	80	17	141	77	2	7	1	35	94	66	23	2	15	103	53	800
30 years and over	57	45	10	101	74	1	6		22	71	53	16		3	69	21	555
LOCATION OF CASUALTY																	
Inland—Atlantic	21	36	8	69	42	2	5		16	70	87	18		2	36	18	436
Inland—Gulf	83	51	25	137	54	4	3	1	31	66	63	22	1	1	28	7	590
Inland—Pacific	11	26	5	28	47	3	7	1	24	64	22	14	1	3	49	22	324
Ocean—Atlantic	6	2	6	1	7		1		11	8	4	5	1	6	45	21	125
Ocean—Gulf	14	3	1	7	24	1	1		8	14	10	4			35	7	131
Ocean—Pacific	9	3	2	9	1	4			22	16	1	12		17	72	44	215
Great Lakes	9	4	1	71	29				4	17	25	1		1	24	11	196
Western Rivers	28	17	6	93	23		3		11	31	6	8			21	3	251
Ocean—other	3			1	2		1		1	9	2	1			8	1	29
Foreign waters	7	14	4	22	17	1			3	9	16			1	19	7	125
TIME OF DAY																	
Daylight	77	93	32	207	151	10	14	1	88	132	107	54	2	17	238	94	1,330
Nighttime	104	56	24	192	87	1	11	1	38	148	113	29	1	12	86	40	956
Twilight	7	10	2	27	16	1			5	24	16	2		2	14	11	138
ESTIMATED LOSSES																	
Vessel	5,280	3,363	1,744	4,086	3,757	460	3,854	47	21,316	19,567	76	5,330	123	71	8,327	3,109	82,475
Cargo	4,282	28	26	323	270	481	3		792	3,096	557	1,065		8,327	1,806	10,107	12,866
Property	18	1,368		8,202	625	50	7		84	157	2	170	178	2	54	8	11,105
VESSELS TOTALLY LOST																	
Inspected	1		1	2		3	1		2	9		1			2		22
Uninspected	19	8	4	10	31		14		46	56		24	1		64	5	287

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-367.

STATISTICAL SUMMARY OF DEATH/INJURIES DUE TO A VESSEL CASUALTY

	Nature of casualty														Total
	Collision; crossing meeting and overtaking	Collision, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fires—cargo	Explosion and/or fires—vessel's fuel	Explosion and/or fire—boiler, pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsize and floodings	Heavy weather damage	Other damage	
1 July 1971 to 30 June 1972 Fiscal year 1972															
Number of casualties.....	13	4	4	6	4	4	6		21	8		16		1	75
Number of inspected vessels involved.....	1			3		51			28					29	68
Number of uninspected vessels involved.....	27	6	4	7	13	4	4		36	11		25		51	191
Number of persons deceased/injured.....	15/13	1/5	3/1	3/7	10/3	44/7	4		23/41	11/2		21		43/14	177/110
PRIMARY CAUSE															
Personnel fault:															
Pilots—State.....															
Pilots—Federal.....															
Licensed officer—documented seaman.....	1														6
Unlicensed—undocumented persons.....	9	2		3	2	1								3	45
All others.....	1		1											2	10
Error in judgment—calculated risk.....															
Restricted maneuvering room.....															
Storms—adverse weather.....														2	5
Unusual currents.....				1											
Sheer, suction, bank cushion.....															
Depth of water less than expected.....															
Failure of equipment.....	1					1			4	1				11	26
Unseaworthy—lack of maintenance.....				1										6	10
Floating debris—submerged object.....					2										2
Inadequate tug assistance.....															
Fault on part of other vessel or person.....	1	2	2	1										4	11
Unknown—insufficient information.....							3		5	1				1	19
TYPE OF VESSEL INVOLVED															
Inspected vessels:															
Passenger and ferry—large.....															
Passenger and ferry—small.....	1/1			1/1										3	3
Freight.....									4	1				1	1/12
Cargo barge.....															
Tankships.....						41/6			4						4/12
Tank barges.....				2		3/1			1						6
Public.....															
Miscellaneous.....									8/7						8/7
Uninspected vessels:															
Fishing.....	2/3	1/1			8/2		3/3		2/2	11/1		19/1		21/2	64/14
Tugs.....		4			1/1				1/2			1/1		10/2	15/11
Foreign.....	2/	2/							2					4/2	8/8
Miscellaneous.....	11/9		1/1	4	1/1		1/1		11/16			1/2		5/2	32/40
PARTICULARS OF PERSON DECEASED/INJURED															
Papers of deceased/injured:															
Licensed by Coast Guard.....				1/		13/2			2/2	1/				1/3	17/7
Documented by Coast Guard.....						23/4			8					1/3	26/17
No license or document.....	13/13	1/5	1/1	2/7	10/3	8/1	4		21/29	11/1		20/4		40/8	128/53
Other—unknown—foreign.....	2/		2/						2					1/1	4/4
Status or capacity on vessel:															
Passenger.....	9/7			2	1/1					1/1		1/2		2/	12/13
Longshoreman—harbor worker.....						3/1			5/4					4/2	12/9
Crewmember.....	6/6	1/5	3/1	3/6	10/2	35/6	4		5/14	11/1		19/2	1/	35/10	131/63
Other.....						6/			13/23			1/		2/2	22/28
Activity engaged in:															
Off duty.....		3				1/			3/2	3/		2/		2/	9/8
Deck department duties.....	5/5		3/1	3/4	5/2	15/4	1/1		4	6/		4/2		11/5	54/23
Engine department duties.....				1/	1/	13/			1/4	1/				1/	15/13
Stewards department duties.....		1/				7/1			7/1			2/			9/4
Handling cargo.....						3/1			3/					4/2	11/3
Fishing.....	2/1	1/1				1/	3			2/		9/		10/	26/7
Drills.....						1/								1/2	3
Passenger.....	8/7			2		5/			16/30	1/		1/2		1/	10/13
Other and unknown.....		1/		1/		5/				3/				17/2	43/23
Location of vessel:															
At dock.....				1/1		2/5			3/1					1/1	6/8
At anchor.....	10/4	3		3/1	2/							4/			19/8
Underway.....	5/9	1/2	3/1	5	8/3	42/2	4		20/40	11/2		17/4	1/	43/13	133/94
Part of body:															
Head.....	1/1			1/1	1/	2/6								6/3	9/13
Back.....	3	3		1/1					13			2		5	27
Chest.....	5				1/1				1/1						7
Extremities.....	2	1/1		1/1			3		9/11	1/1				1/3	10/22
Illness.....															2
Drowning.....	15/		3/1	3/	9/				5/	1/		21/	1/	34/	102/
Unspecified and miscellaneous.....	2	1/1	1/1	4	2	42/1	1/1		9/16	10/1		2/2		3/3	53/41

STATISTICAL SUMMARY OF DEATHS ON BOARD COMMERCIAL VESSELS¹ **(Not Involving a Vessel Casualty)**

1 July 1972 to 30 June 1973 Fiscal year 1972		Nature of death																							
CAUSE OF DEATH		Natural cause	Homicide	Suicide	Disappearance	Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects falling, dropped, or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises, and punctures	Alterations and misconduct	Unknown or insufficient information	
Total: 348		147	7	19		8	2		9	100	5	21	8	3			1	2	7	1				8	
19 Intoxication		1				1				14														2	
149 Physical deficiency or handicap		145								3								1							
2 Unsafe movement or posture										2															
30 Psychological—immaturity, insanity		1	2	18						6														3	
42 Unsafe practice						2			7	17	2	5	5	1					3						
6 Violation of law or regulation			5	1																					
61 Human errors						3	1			42	2	5	1	2				1	1	2				1	
4 Decks—slippery or cluttered										4															
7 Weather conditions						1				5															
Poor maintenance or housekeeping																				1					
2 Inadequate lighting										2		1													
2 Inadequate rails or guards										1															
11 Failure of equipment									1	2		8							1						
6 Inadequate supervision						1	1			2			1						1						
1 Inadequate life preservers										1															
Inadequate tools or equipment																									
Inadequate protective equipment																									
2 Improper use of tools or equipment																									
4 Miscellaneous causes										1		1													
TYPES OF VESSELS INVOLVED		22																							
Inspected vessels:																									
16 Passenger and ferry—large		9	1	4						2															
22 Passenger and ferry—small		20		1						1															
96 Freight ships and barges		47	2	6		5			6	12	3	6	2	1					2					4	
40 Tankships and barges		22		2			1			7	1	1	3						1					1	
6 Public		3								1															
1 Miscellaneous		1																							
Uninspected vessels:																									
64 Fishing		17	3	3		1				32		1	2	1				2						2	
40 Tugs		18		1						17		4													
29 Foreign		4	1	2		2	1		2	1		4	1				1		2						
34 Miscellaneous		6								20		5		1					2						
TIME OF DAY																									
205 Daytime		96	1	4		5			8	55	2	17	4	2				1	6	1				5	
128 Nighttime		46	6	13		3	2			41	3	4	4	1			1	1	1						
15 Twilight		5		2					1	4															
PARTICULARS OF DECEASED																									
Papers of deceased:																									
42 Licensed by Coast Guard		32		4		1	1		1	2	1														
100 Documented by Coast Guard		55	2	5		4			5	18		4	1												
186 No license or document		57	4	8		3	1		1	74	3	14	7	3			1	2	5	1				7	
20 Other—unknown—foreign		3	1	2					2	6	1	3							2						
Status or capacity on vessel:																									
42 Passenger		28	1	3						9				1											
27 Longshoreman—harbor worker		1				1	1		1	3	3	8	3	1			1		3						
258 Crewmember		115	4	15		6	1		8	81	1	11	4	1				2	2	1				6	
21 Other		3	2			1				7	1	2	1						2					2	
Activity engaged in:																									
107 Off duty		65	3	13		2			3	16														5	
84 Deck department duties		20		1		2			5	37	1	18	1					1	1	1				1	
17 Engine department duties		13				1				2			1												
7 Stewards department duties		7																							
16 Handling cargo																									
46 Fishing		20	1			1				20			2	1				1							
28 Drills																									
Passenger		16	1	3						7				1											
43 Other and unknown		6	2	2		2	2		1	17	1	2	2				1		3					2	
Location of vessel:																									
18 At dock		3	1			1			1	10		2													
16 At anchor		9								6															
314 Underway		135	6	19		7	2		8	84	5	18	8	3			1	2	7	1				8	
Part of body:																									
81 Head			3	1		2	1		5	2	3	11							2					1	
12 Back				3		3					1	3													
14 Chest			3	1					1	2		1		2					4						
Extremities																									
141 Limbs		130		1					1																
115 Drowning		1	1	11		2	1		1	93		4												1	
31 Unspecified and miscellaneous		6		2		1			1	2	1	1	8	1			1		1					6	

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD COMMERCIAL VESSELS¹ (Not Involving a Vessel Casualty)

1 July 1971 to 30 June 1972 Fiscal year 1972		Nature of Injury																			
		Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects, falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns caught in lines, chains, or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains, and strains	Cuts, lacerations, bruises, and punctures	Alterations and misconduct	Unknown or insufficient information		
CAUSE OF INJURY																					
Totals: 1,243		145	23	180	128	12	12	224	4	71	41	56	41	65	11	109	38	45	36		
48	Intoxication	15	4	8	7					1						11	1	5	3		
26	Physical deficiency or handicap	5		5	4																
36	Unsafe movement or posture	1		5	6	1				3						17	1	1	2		
41	Psychological—immaturity, insanity			1	1			1								2	1				
200	Unsafe practice	25	3	7	19	3	3	48	2	8	13	20	6	12	1	22	4		4		
	Violation of law or regulation							1													
648	Human errors	86	11	110	66	6	6	100	2	43	20	24	1	34	45	3	51	19	19		
41	Decks—slippery or cluttered	4	1	25	6			1								1	2	1			
69	Weather conditions	3	2	14	9	1		12		10	1	2		4	7	2	1				
9	Poor maintenance or housekeeping	1		2			1	3								1	1				
3	Inadequate lighting						1														
4	Inadequate rails or guards		1	1	1		1														
57	Failure of equipment	2		1	3			40		3		6	1			1					
12	Inadequate supervision	2						7		1		2									
	Inadequate life preservers																				
4	Inadequate tools or equipment			1				1			1	1					2				
11	Inadequate protective equipment				2			2									4				
18	Improper use of tools or equipment	1			1	1		6		3	3			1			1		1		
11	Miscellaneous causes		1		1			2		1		1				1	1		4		
TYPES OF VESSELS INVOLVED																					
Inspected vessels:																					
55	Passenger and ferry—large	8	1	11	9			6		3	1	1		2	3		2	4	4		
23	Passenger and ferry—small	3		4	5		1	2							1						
824	Freight ships and barges	109	19	123	75	5	5	139	3	43	21	37	2	14	49	9	90	28	22		
144	Tankships and barges	16	2	23	17	1	2	26	1	13	6	10		1	4		8	3	9		
4	Public	1		1	1																
39	Miscellaneous	4	1	2	4		1	7		5	4			1	1		6		1		
Uninspected vessels:																					
62	Fishing			4	7	1	1	20		3	3	2		14	3			1	2		
69	Tugs	3		10	9	4	1	16		2	5	2		7	2	1	4	2	1		
5	Foreign				1	1		1		1		1									
18	Miscellaneous	1		2	1			7		1	1	2		1	2		1				
TIME OF DAY																					
859	Daytime	95	9	109	92	6	8	171	4	52	31	41	2	30	39	9	86	31	25		
324	Nighttime	44	14	61	28	5	3	44		16	8	13		10	20	2	20	7	9		
60	Twilight	6		10	8	1	1	9		3	2	2		1	6		3	6	2		
PARTICULARS OF PERSON INJURED																					
Papers of person injured:																					
121	Licensed by Coast Guard	20	5	13	16	2	2	17		2	11	13		6	1	15	3	3	2		
931	Documented by Coast Guard	115	19	146	89	6	4	168	1	55	20	37	2	21	51	9	89	30	28		
175	No license or document	7		21	22	4	6	38	3	13	9	5		20	8	1	8	5	6		
6	Other—unknown—foreign				1			1		1	1	1						1			
Status or capacity on vessel:																					
24	Passenger	2		7	5		1	1		3				1	1			1	2		
9	Longshoreman—harbor worker			1			1	3	2			1									
1,167	crewmember	135	23	169	120	11	9	212	2	65	36	52	2	38	63	11	105	36	33		
43	other	8		3	1	1		8		3	3			2	1		1	2			
Activity engaged in:																					
194	Off duty	35	20	40	28	4	1	3		8		1							6		
545	Deck department duties	49	1	81	50	4	7	164	2	34	11	8		29	26	7	42	16	8		
258	Engine department duties	39	2	23	29	1		28		17	24	36	2	1	20	1	47	6	4		
112	Stewards department duties	16		23	10			7		4		7		2	8	1	11	7	13		
	Handling cargo						1	2		2											
34	Fishing			2	4	1	1	12		2	1			8	1				2		
14	Drills			2	5	2		1		2				1	1						
21	Passenger	2		7	4		1			3				1	1			1	1		
35	Other and unknown	4		2	3		1	7		3	4	3		1	1		1	2	2		
Location of vessel:																					
28	At dock	3	2		3		1	6		2	2	1		3			2		1		
24	At anchor	3		4	2	2		8		1		1					1				
1,191	Underway	130	21	176	123	10	11	210	4	66	39	54	2	38	62	11	106	37	35		
	Unknown																				

See footnote at end of table.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD COMMERCIAL VESSELS¹— Continued (Not Involving a Vessel Casualty)

1 July 1971 to 30 June 1972 Fiscal year 1972		Nature of injury												
		Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects; falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, lumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes
Totals														
Part of body injured:														
121 Head	22	2	9	15	20	10	3	6	1	1	2	1	1	1
41 Eye	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28 Neck and shoulder	5	1	6	3	2	2	2	2	2	2	2	2	2	2
704 Extremities	59	14	92	61	6	8	155	45	35	28	2	39	62	4
61 Chest	10	4	8	17	2	1	9	5	2	4	1	2	1	1
70 Abdomen and hip	9	16	3	1	6	1	6	5	4	1	1	1	1	1
101 Back	37	2	44	25	2	2	11	6	1	1	1	1	1	1
24 Unspecified and miscellaneous	2	4	4	4	1	3	3	3	3	3	3	3	3	3

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-357.

lessons from casualties

Death Dealing Drinks

This true story of five thirsty crew members of a Gulf Coast fishing boat provides tragic proof of the adage, "Alcohol and salt water don't mix!":

After spending a night anchored in the vicinity of the Mobile Ship Channel—a lonely Saturday night eased by the fellowship of good shipmates and liberal amounts of wine and whiskey brought on board—the vessel and its crew were supposed to proceed to the snapper fishing grounds in the Gulf of Mexico. During the "morning after," however, the captain found a red and white can which was labeled "lacquer thinner." Highballs of orange juice mixed with the contents of the can were poured for all hands and the can was thrown overboard. One crewmember didn't drink any of the brew because it didn't taste right to him, but the other four emptied their glasses.

The four that drank the concoction became ill and began vomiting. When their condition hadn't improved on Wednesday morning, the crewman who had not drunk any of the mixture decided to bring the men in for medical attention. The captain died within three days of their return to port; another crewmember died within a month. The two other crewmembers who drank the highballs lived, but were hospitalized for three months.

Autopsies of the bodies revealed that the cause of the death was the ingestion of carbon-tetrachloride. The chemical was used by personnel of the company that owned the fishing vessel to clean and maintain the fleet's electronic equipment. Though the chemical is normally kept locked in a store room ashore, the can found by the captain that Sunday morning was probably inadvertently left onboard the vessel by a repairman. The lesson should be obvious.

Where's the Fire?

In the spring of 1972 the crew of a vessel proceeding through the ice packed waters of Lake Superior found their vessel's engine space suddenly filled with CO₂ from the fixed fire fighting system. No evidence of fire was found, and none of the men aboard had activated the system.

Subsequent investigation indicated that the ship's vibrations while grinding through the ice caused some of the system's CO₂ cylinders to rotate in their brackets. Those that rotated were the "pilot" cylinders; their motion activated the rest of the system.

A confined space suddenly filled with deadly carbon dioxide can be fatal to those trapped within. In this case no one was hurt; however, the lesson to be learned is that special attention should be paid to the tightening of the cylinder rack bolts to prevent similar unwanted and possibly dangerous discharges.

ANNUAL STATISTICS OF CASUALTIES

Annually the U.S. Coast Guard releases to the public a statistical summary of casualties involving commercial vessels. This year the following brief explanation of the statistics is given in an attempt to make them more meaningful.

Casualties involving commercial vessels are required to be reported to the Coast Guard whenever the casualty results in the following:

- (a) Actual physical damage to property in excess of \$1,500.
- (b) Material damage affecting the seaworthiness or efficiency of a vessel.
- (c) Stranding or grounding.
- (d) Loss of life.
- (e) Injury causing any persons to remain incapacitated for a period in excess of 72 hours; except injury to harbor workers not resulting in death and not resulting from vessel casualty or vessel equipment casualty.

The statistical summary represents casualties to commercial vessels which meet the above criteria. It is impor-

tant to note that the summary represents casualties reported to Coast Guard Headquarters in fiscal year 1971.

This statistical tabulation is intended to summarize the casualty experience for the entire commercial fleet. Because this summary is so all-encompassing, the use of the statistics may lead to erroneous conclusions unless the limitations of the data are well understood.

Since the limitations are dependent upon the parameters of a problem, the below listed office will gladly assist in quantifying those limitations for each specific need.

To better serve the public's pursuit of safety, the Coast Guard would like to change the presentation of data to serve the widest possible spectrum of maritime interests. Persons who have used this data in safety programs, educational pursuits, business management, and those who could use this information if presented in a different form are requested to forward their recommendations for changes to: U.S. Coast Guard (MIS/83), 400 Seventh Street SW., Washington, D.C. 20590.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS¹

1 July 1970 to 30 June 1971 Fiscal year 1971	Nature of casualty																		Total
	Collisions, crossing, meeting and overtaking	Collisions, while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fires—cargo	Explosion and/or fires—vessel's fuel	Explosion and/or fires—boilers, pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, cap-sizes, and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified		
Number of casualties.....	190	175	41	433	280	16	23	9	128	372	232	92	35	27	347	144	33	2,577	
Number of vessels involved.....	616	475	106	733	419	16	23	9	141	488	319	128	36	32	411	146	82	4,182	
Number of inspected vessels involved.....	187	151	32	269	171	12	1	7	32	143	146	16	4	28	173	116	13	1,498	
Number of uninspected vessels involved.....	429	324	74	464	248	4	22	2	109	345	173	112	32	7	238	32	69	2,684	

PRIMARY CAUSE	Number of vessels																		Total
	Collisions, crossing, meeting and overtaking	Collisions, while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fires—cargo	Explosion and/or fires—vessel's fuel	Explosion and/or fires—boilers, pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, cap-sizes, and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified		
Personnel fault:																			
Pilots—State.....	7	8	12	9	9					3	23	1			2		1	76	
Pilots—Federal.....	31	24	9	66	13				1	28	21	2		1			1	197	
Licensed officer—documented seaman.....	47	18	21	72	21	2	1	1	7	54	23	4		2	7		3	283	
Unlicensed—undocumented persons.....	140	49	20	123	49	1	5		11	22	43	22	1	1	9	2	6	604	
All others.....	30	33	6	17	17	3	2		9	9	18	6	1	2	13		4	166	
Calculated risk.....				4	2					4	6				1			10	
Restricted maneuvering room.....	1			6	4												1	22	
Storms—adverse weather.....	1	20	1	59	18	1				84	26	21	32	20	82	8	3	370	
Unusual currents.....				16	1					2		1						19	
Sheer, suction, bank cushion.....	1			3	1					1	36							4	
Depth of water less than expected.....				1						10								80	
Failure of equipment.....	12	32		33	15	1	8		31	41	25	15		1	162	130	1	824	
Unseaworthy—lack of maintenance.....		1			2	1			4	2		10	1		59		1	81	
Floating debris—submerged object.....				8	132				1	3		1			5			181	
Inadequate tug assistance.....	2	2		6							4							14	
Fault on part of other vessel or person.....	343	288	36	307	129				11	118	94	30	1	5	55	4	14	1,436	
Unknown—insufficient information.....	1		1	4	6	7	7		66	4	2	16			16		17	147	

See footnotes at end of table

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS—Continued¹

1 July 1970 to 30 June 1971 Fiscal year 1971	Nature of casualty																	Total
	Collisions; crossing, meeting and overtaking	Collisions while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fires—cargo	Explosion and/or fires—vessel's fuel	Explosion and/or fires—boilers, pressure vessel	Explosion and/or fires—structure, equip- ment, all others	Grounding with damage	Grounding without damage	Foundering, cap- sizing, and floodings	Heavy weather damage	Cargo damage	Material failure— structure and equipment	Material failure— machinery and engi- neering equipment	Casualty not otherwise classified	
TYPE OF VESSEL																		
Inspected vessels:																		
Passenger and ferry—large	2	4		10	3		1		1	3	2				3	5		34
Passenger and ferry—small	4	11	5	7	10		1		1	16	5	5				4	6	54
Freight	20	59	6	88	59	11		3	13	25	46	1	2	22	86	78	2	521
Cargo barge	8	8	3	16	9				1	15	5	3			9			78
Tankships	10	17	3	27	25			1	2	21	34	1	2	1	28	21		193
Tank barge	134	36	15	110	52	1			11	56	44	6		1	24	3	4	497
Public	2	10		2	3			1		2	4				5	4	1	34
Miscellaneous	7	6		9	10			1	3	5	6				9	1		57
Uninspected vessels:																		
Fishing	51	42	10	28	72		13		54	186	33	32	26		94	21	5	649
Tugs	213	106	22	270	109		5	1	25	107	67	37	2	3	56	7	12	1,041
Foreign	37	51	21	35	21	3	1	1	5	13	40	1		2	8			240
Cargo barge	76	58	11	109	18				3	38	21	27	2	2	39	1	14	419
Miscellaneous	52	68	10	22	28	1	3		22		12	15	2		41	3	7	308
GROSS TONNAGE																		
300 tons or less	291	235	50	282	218		19	1	93	294	109	92	29	3	192	33	26	1,967
Over 300 to 1,000 tons	156	64	17	191	63	1	2	2	12	83	34	27	3	3	64	4	21	747
Over 1,000 to 10,000 tons	144	107	19	194	91	12		5	31	80	98	7	1	9	78	63	5	944
Over 10,000 tons	25	69	20	66	4	3	2	1	5	31	78	2	3	17	77	48		494
LENGTH																		
Less than 100 feet	256	212	35	240	184		17	1	86	265	93	80	28	2	199	31	25	1,734
100 to less than 300 feet	297	127	44	332	134	2	4	3	33	162	90	44	4	5	112	15	24	1,432
300 to less than 500 feet	32	57	7	57	31	8		4	14	22	50	1	1	7	38	26	3	386
500 feet and over	31	79	20	104	70	6	2	1	8	39	86	3	3	18	92	66		628
AGE																		
Less than 10 years	270	171	52	274	150	6	6	1	38	185	121	44	19	14	106	45	21	1,623
10 to less than 20 years	192	137	33	234	118	3	6	1	43	137	89	43	11	2	117	22	16	1,204
20 to less than 30 years	100	96	12	125	85	7	7	4	36	76	69	29	5	13	111	62	12	842
30 years and over	54	71	9	100	66		4	3	24	90	40	12	1	3	77	19	8	576
LOCATION OF CASUALTY																		
Number of casualties																		
Inland—Atlantic	27	35	7	80	58	1	6	3	30	85	94	9	1	2	42	15	6	501
Inland—Gulf	96	46	18	136	82	3	4	2	30	120	70	32	27	1	86	3	8	745
Inland—Pacific	9	26	3	40	34	3	6		16	57	20	15		1	85	14	5	294
Ocean—Atlantic	6		4	13	3	1			4	10	6	7	3	8	45	32	3	145
Ocean—Gulf	10	8	1	7	22		2		15	14	7	5	1		26	16	1	134
Ocean—Pacific	11	2		1	19	1	3		9	23	4	7		13	46	33		174
Great Lakes	4	12		67	25		2	1	1	16	9	3			20	17	1	178
Western rivers	22	15	7	87	11	1	1	1	13	31	11	13	2	1	30	3	8	286
Ocean—other		4		2	6	1			1	6		1		1	7	4		33
Foreign waters	5	27	1	13	10	3			9	10	11		1		17	8	1	116
TIME OF DAY																		
Daylight	90	97	12	272	153	6	17	6	66	185	114	63	31	18	222	84	19	1,455
Nighttime	94	98	26	142	114	9	5	3	55	163	109	25	4	7	108	51	13	996
Twilight	6	10	3	19	13	1	1		7	24	9	4		2	17	9	1	136
ESTIMATED LOSSES																		
Vessel	4,830	3,406	1,499	4,462	7,078	90	4,669	137	20,908	9,870	10	2,960	461	26	15,222	2,966	362	78,961
Cargo	154	3	79	727	169	891	1		683	777	1	693	16	344	2,087	18	16	8,629
Property	101	371	3	6,171	691	10	21		166	1,155		63	6	21	82	4	46	8,911
VESSELS TOTALLY LOST																		
Inspected			1	2						3		2			3	1		12
Uninspected	18	9	4	13	35		13		53	79		34	6		82	3	5	264

¹ Statistics concerning recreation and pleasure boating accidents are published in CO-367.

STATISTICAL SUMMARY OF DEATHS/INJURIES DUE TO A VESSEL CASUALTY

	Nature of casualty														Total
	Collision, crossing, meeting and overtaking	Collision, while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire - cargo	Explosion and/or fire - vessel's fuel	Explosion and/or fire - boilers, pressure vessel	Explosion and/or fire - structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsize, and floodings	Heavy weather damage	Cargo damage	
July 1970 to 30 June 1971															
Fiscal year 1971															
Number of casualties	17	3	6	9	9	1	11	3	29	9		24	1		159
Number of suspected vessels involved	7	1	1	1	1	1	1	1	1	1		1			7
Number of unsuspected vessels involved	15/12	2/1	1/6	4/7	8/3	1/	9/27	2/2	33/31	17/4		46/3	1/1		166/120
Number of persons deceased/injured	15/21	2/1	2/7	4/16	35/4	1/	9/28	2/4	43/47	17/4		47/3	1/1		243/163
PRIMARY CAUSE															
Personnel fault															
Pilots - State															2
Pilots - Federal															15
Licensed officer - documented seaman	5		3	1	1		1		1			1			32
Unlicensed - undocumented persons	4	1	1	2	3	1	4		2	3		8			17
All others	6	1	1						5	1					1
Calculated risk															
Restricted maneuvering room															
Storms - adverse weather															3
Currents															
Shoals, reefs, bank cushion															
Depth of water less than expected															
Failure of equipment	1	1		2	1		2	3	8			1			38
Unseaworthy - lack of maintenance												2	1		4
Floating debris - submerged object									1			1			
Inadequate tug assistance															
Fault on part of other vessel or person	1			2	1				5			1			11
Unknown - insufficient information				1			4		6	1		7			23
TYPE OF VESSEL INVOLVED															
Inspected vessels															
Passenger and ferry - large				1/1	27/1	1/	1/1								1
Passenger and ferry - small	2/7														32/12
Freight															2/13
Cargo barge												1/			1
Tankships															31/
Tank barges															2/1
Public															
Miscellaneous								1/	8/15						9/16
Uninspected vessels															
Fishing	1/1			1/	8/2		1/5	2/	5/2	16/2		27/2			74/21
Tugs	3/3	1/1	1/1	3/3			4/	4/4	4/4	1/1		6/			1/2
Foreign	1/1							2/	2/1	1/1		1/5			6/5
Miscellaneous	10/7	1/	6/	4/	1/		8/16		22/24	1/		13/1	1/1		67/71
PARTICULARS OF PERSON DECEASED/INJURED															
Papers of deceased/injured:															
Licensed by Coast Guard	1/	1/		2/2			1/	2/3	4/1			2/			16/4
Documented by Coast Guard	7/8						1/	1/3	2/3			2/			24/15
No license or document	13/12	2/	2/7	2/13	35/4	1/	9/27	2/	29/27	17/4		43/3			186/127
Other - unknown - foreign	1/1								8/16						12/17
Status or capacity on vessel:															
Passenger	6/5	1/	1/4	1/11		1/	5/12	1/	3/2	7/1		6/		2/5	34/41
Longshoreman - Harborworker							4/4	1/3	1/3			1/1		1/1	6/10
Crewmember	9/14	1/1	1/3	4/4	10/3		1/11	2/3	21/27	10/3		37/2	1/1	51/8	150/83
Other	2/2				25/1		1/		18/15			4/1		3/	53/29
Activity engaged in:															
Off duty	1/9		1/1	2/1	3/1		2/		7/12	3/		8/1		2/5	25/27
Deck department duties	3/5		1/2	1/3	1/		4/4	1/2	5/8	4/2		7/	1/1	26/4	48/31
Engine department duties		1/			1/		1/	1/2	4/7			1/		10/	15/13
Stewards department duties				1/				1/	1/2			1/		8/	9/2
Handling cargo														1/1	1/1
Fishing	1/	1/			7/			1/	3/			22/2		7/4	45/6
Drills															
Passenger	6/6		1/4	1/11		1/	5/12	1/	3/2	7/1		6/		2/5	31/41
Other and unknown	4/2	1/			24/2		4/9	1/	22/16	1/		3/		6/	69/42
Location of vessel:															
At dock			1/1				8/25	2/3	16/16			4/1		4/2	33/49
At anchor		1/			1/		1/3	1/	24/26	1/		4/8		5/9	36/44
Underway	15/21	1/1	1/6	4/15	35/3	1/			8/6	17/3		43/2	1/1	49/7	174/70
Unknown															
PART OF BODY INVOLVED															
Head and upper limbs	4/4		1/	4/	1/2		2/		1/6			1/	1/1	5/3	7/23
Back and lower limbs	4/4	1/		2/2	2/2		2/		1/4	2/		3/2		2/2	1/23
Multiple injuries (internal and external)	2/13		4/	4/9	2/2		4/24	4/	6/37	2/				4/9	2/
Death - heart															
Death - drowning	12/1	1/	1/	3/	34/	1/	1/	2/	3/	15/		41/		46/	164/
Death - disease, other	1/	1/	1/				4/		33/	2/		2/		2/	51/

Statistics concerning recreation and pleasure boating accidents are published in CG-387.

STATISTICAL SUMMARY OF DEATHS ON BOARD COMMERCIAL VESSELS¹ (Not Involving a Vessel Casualty)

		Nature of death																							
		Natural cause	Homicide	Suicide	Disappearance	Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects: falling, dropped, or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Fishing and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises, and punctures	Alterations and misconduct	Unknown or insufficient information	
1 July 1970 to 30 June 1971 Fiscal year 1971																									
CAUSE OF DEATH																									
Total		1		1		1	1						1												
12	Intoxication	153				1	1			7				1											
189	Physical deficiency or handicap					1				4															
15	Unsafe movement or posture					1				12	2														
33	Psychological immaturity, insanity		4	13						15															
45	Unsafe practice						1			14	3	9	8		1										
1	Violation of law or regulation		1															1	2					1	
33	Human errors					1			2	18	3	6			1	1		1							
7	Decks—slippery or cluttered								1	5	1														
9	Weather conditions									7		1			1										
	Poor maintenance or housekeeping																								
5	Inadequate lighting									2	3														
8	Inadequate rails or guards						1			6			2					1	1						
20	Failure of equipment					1				1	1	3													
6	Inadequate supervision									1														1	
1	Inadequate life preservers									1	1							1							
1	Inadequate tools or equipment								1	1															
2	Inadequate protective equipment											1													
1	Improper use of tools or equipment								1	24		1	2												
31	Miscellaneous causes			1																				3	
TYPES OF VESSELS INVOLVED																									
Inspected vessels:																									
28	Passenger and ferry—large	22		2						3									1					1	
24	Passenger and ferry—small	20				1			3	2														1	
109	Freight ships and barges	55	3	10		2				18	5	8	2	1										2	
44	Tankships and barges	20		1		2	1		1	10	1	2	5												
3	Public	1								1															
14	Miscellaneous	6								3		3						1						1	
Uninspected vessels:																									
58	Fishing	13		1						37			5					2							
36	Tugs	10	1	1						20	1	1	1		1										
21	Foreign	3	1				2		1	5	2	5				1			1						
52	Miscellaneous	4							5	25	3	10	1		1			1	2						
TIME OF DAY																									
242	Daytime	92	2	12		2	1		7	70	10	23	10	1	1	1		4	2					4	
132	Nighttime	56	1	1		3	2		3	49	3	6	4		1									1	
15	Twilight	6	2	2						5															
PARTICULARS OF DECEASED																									
Papers of deceased:																									
59	Licensed by Coast Guard	36		5		1	1			11	3	1	1												
97	Documented by Coast Guard	54	3	6		1	1		1	21	4	3	1	1										1	
228	No license or document	63	2	4		3	1		9	91	6	23	12		2			4	4					4	
5	Other—unknown—foreign	1								1						1									
Status or capacity on vessel:																									
59	Passenger	43		2		1	1			10			1											1	
28	Longshoreman—harbor worker	2	1			1			2	4	2	8	5						2					1	
251	Crewmember	105	3	13		2	2		3	86	9	13	7	1	1			4	1	1				1	
51	Other	4	1			1			5	24	2	8	1		1	1								2	
Activity engaged in:																									
123	Off duty	64	2	10			3			42			2												
73	Deck department duties	15	1	2					3	30	6	10	2	1	1			1	1						
32	Engine department duties	18				1				6	4	1	1												
9	Stewards department duties	6	1			1				1															
23	Handling cargo	1							1	1	1	12	4												
41	Fishing	20		1						15															
0	Drills									9															
41	Passenger	27		2		1				17	2	6	4			1	1							1	
47	Other and unknown	3	1			2			6															3	
Location of vessel:																									
100	At dock	27	4	3		3	3		6	20	6	15	9		1	1								4	
82	At anchor	19		2					3	34	1	12	3					2	2					6	
207	Underway	108	1	10		2			1	70	6	2	2	1	1			2						1	
PART OF BODY INVOLVED																									
45	Head and upper limbs	1	3	5		4	1		3	1	8	16		1	1				1						
1	Back and lower limbs											1													
25	Multiple injuries (Int. and ext.)	1	1				2		3	1	3	8			1			2	1						
146	Death—heart	143							1	1															
134	Death—drowning	3		5		1			1	121								1							
38	Death—diseases, other	6	1	5					3		1	4	14			1		1	1	2					

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD COMMERCIAL VESSEL (Not Involving a Vessel Casualty)

		Nature of Injury																		
		Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects; falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion sprains and strains	Cuts, lacerations, bruises and punctures	Alterations and misconduct	Unknown or insufficient information
1 July 1970 to 30 June 1971 Fiscal year 1971																				
CAUSE OF INJURY																				
Totals		49	44	172	58	191	8	756	32	55	16	2	12	14	1	31	1040	405	71	
49	Intoxication.....	8	3	2	11	1	1	1	3	3	1	1	1	2	3	19	3	11	6	
44	Physical deficiency or handicap.....	5	1	4	6	2	4	5	13	1	4	8	1	1	77	3	1	2	1	
172	Unsafe movement or posture.....	16	2	10	23	2	4	5	5	5	5	5	5	5	17	7	4	1	1	
58	Psychological-immaturity, insanity.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
191	Unsafe practice.....	14	3	4	22	4	4	51	4	9	4	18	3	11	18	4	17	7	4	
8	Violation of law or regulation.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
756	Human errors.....	120	12	10	121	8	8	96	4	57	13	22	2	34	77	2	41	38	3	11
32	Decks—slippery or cluttered.....	2	2	16	12	5	2	11	5	9	2	1	1	1	1	1	1	1	1	
55	Weather conditions.....	1	1	9	5	2	1	11	1	9	1	1	2	5	8	1	2	1	1	
16	Poor maintenance or housekeeping.....	1	1	3	4	1	1	5	1	2	1	1	1	1	1	1	1	1	1	
	Inadequate lighting.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	Inadequate rails or guards.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
56	Failure of equipment.....	2	1	1	1	1	1	3	1	1	1	5	1	4	1	1	2	3	1	
12	Inadequate supervision.....	1	1	1	2	1	1	1	1	1	1	2	1	2	1	1	1	1	1	
	Inadequate life preservers.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
4	Inadequate tools or equipment.....	1	1	1	1	1	1	3	3	3	1	2	1	1	1	1	1	1	1	
14	Inadequate protective equipment.....	2	1	2	3	3	3	3	3	1	2	1	2	1	1	1	1	1	1	
18	Improper use of tools or equipment.....	1	1	1	2	1	1	3	3	2	1	2	1	1	1	1	1	1	1	
31	Miscellaneous causes.....	1	1	1	1	1	1	6	1	2	1	10	1	1	1	2	1	1	1	
TYPES OF VESSELS INVOLVED																				
Inspected Vessels:																				
63	Passenger and Ferry—large.....	3	13	12	1	7	2	2	2	1	1	1	1	6	6	4	2	2	2	
25	Passenger and Ferry—small.....	3	5	7	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	
1087	Freight ships and barges.....	127	20	99	156	4	11	140	6	81	16	44	4	81	78	15	132	46	59	19
146	Tankships and barges.....	31	1	16	22	1	1	17	5	7	1	10	1	1	8	2	12	5	6	2
14	Public.....	4	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	
27	Miscellaneous.....	1	1	1	1	1	1	9	1	1	1	5	3	2	4	1	1	1	1	
Uninspected Vessels:																				
53	Fishing.....	2	4	4	1	2	14	2	2	1	1	1	1	1	1	1	1	1	1	
66	Tugs.....	3	3	3	4	1	14	5	5	1	4	4	1	6	7	8	2	2	2	
10	Foreign.....	2	1	1	1	2	4	2	1	1	1	1	1	1	1	1	1	1	1	
25	Miscellaneous.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
TIME OF DAY																				
1040	Daytime.....	118	9	98	140	7	7	180	12	74	18	45	4	42	78	12	132	46	32	21
405	Nighttime.....	53	11	45	70	5	8	87	3	19	2	15	2	11	26	3	24	11	34	6
71	Twilight.....	6	1	4	5	2	2	12	1	8	1	4	1	6	3	3	9	5	2	2
PARTICULARS OF PERSON INJURED																				
Papers of person injured:																				
251	Licensed by Coast Guard.....	30	8	21	32	2	1	34	4	17	10	17	2	7	13	4	22	9	18	3
1084	Documented by Coast Guard.....	134	16	109	161	6	10	140	7	78	7	38	4	31	80	13	134	44	40	22
181	No license or document.....	12	12	12	22	4	6	46	4	6	3	9	1	21	14	1	9	9	1	4
0	Other—unknown—Foreign.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Status or capacity on vessel:																				
32	Passenger.....	3	5	10	1	4	1	4	1	1	1	1	1	1	1	1	1	1	1	
12	Longshoreman—harbor worker.....	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
1430	Crewmember.....	172	21	136	201	10	16	194	12	100	19	59	6	61	108	17	163	56	66	26
42	Other.....	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Activity engaged in:																				
274	Off duty.....	52	16	22	39	3	3	16	1	12	3	6	1	3	17	5	21	17	34	6
573	Deck department duties.....	55	2	53	86	5	10	126	8	35	3	9	1	33	44	9	70	16	5	4
353	Engine department duties.....	47	3	29	44	1	2	43	3	36	16	34	5	12	24	2	48	14	15	4
185	Stewards department duties.....	16	1	29	31	1	1	9	1	15	8	8	1	1	16	1	24	8	14	13
12	Handling cargo.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
23	Fishing.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
7	Drills.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
24	Passenger.....	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
36	Other and unknown.....	2	2	1	2	2	2	10	1	1	1	6	5	5	1	1	1	1	1	
Location of vessel:																				
491	At dock.....	50	18	30	74	3	3	76	7	28	7	17	2	22	30	1	52	17	37	9
240	At anchor.....	23	3	17	24	4	4	48	3	15	3	15	1	13	17	2	28	11	9	5
755	Underway.....	94	1	96	117	5	14	96	5	58	10	32	4	24	60	16	85	34	22	15

See footnote at end of table.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS¹

	Nature of Casualty																		Total
	Collisions, crossing, meeting and overtaking	Collisions while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total	
1 July 1969 to 30 June 1970 Fiscal year 1970																			
Number of casualties.....	197	163	35	409	289	15	21	8	133	317	223	122	43	23	296	198	90	2,562	
Number of vessels involved.....	645	428	90	692	416	16	22	8	146	430	240	158	47	28	334	198	165	4,063	
Number of inspected vessels involved.....	193	131	23	264	174	11	1	6	40	152	134	15	26	23	170	158	49	1,570	
Number of uninspected vessels involved.....	452	297	67	428	242	5	21	2	106	278	106	143	21	5	164	40	116	2,493	
PRIMARY CAUSE																			
	Number of vessels																		
Personnel fault:																			
Pilots—State.....	15	6	5	17	3					7	17	1					4	75	
Pilots—Federal.....	10	9	3	54	4		1		1	14	23						8	122	
Licensed officer—documented seaman.....	32	26	13	65	29	2		1	7	57	39	6	1	1	8	14	8	304	
Unlicensed—undocumented persons.....	180	67	23	119	52	1			5	105	28	21	1		6		20	628	
All others.....	16	25	9	22	5	3	1		13	13	16	5	1	3	9		25	166	
Calculated risk.....		2		7	3					6	3						1	22	
Restricted maneuvering room.....	8	3		9	5					1	4						1	31	
Storms—adverse weather.....		23		29	23					43	26	19	20	15	59	1	16	274	
Unusual currents.....	4	3		21	5					5	2		16				1	57	
Sheer, suction, bank cushion.....											3							3	
Depth of water less than expected.....				2	3					11	37				1			54	
Failure of equipment.....	7	11		28	14		7	7	31	37	19	21	1	3	143	177	4	510	
Unseaworthy—lack of maintenance.....					2				3	3	1	18	4		49	2	4	86	
Floating debris—submerged object.....	2	2		10	137				5	5		5			7	3	1	172	
Inadequate tug assistance.....	3	6		8	4				5	5	3	1						30	
Fault on part of other vessel or person.....	368	242	37	293	117	1	1		11	111	17	30	4	5	32		35	1,304	
Unknown—insufficient information.....		3		8	10	9	12		75	7	2	31			20	1	42	220	
ADDITIONAL CONTRIBUTING FACTORS TO CAUSE OF CASUALTY																			
Hull and associated parts:																			
Plates and framing—steel.....	2	9		17	58				2	23		17	4		93	1	8	234	
Planks and framing—wood.....		2	1		25		1	1	1	10		3	2		33		5	84	
Tanks.....					3	2	3		8	3		2	1		6	1	1	30	
Holds and hatches.....		1			7				7			2			7		1	25	
Superstructure—bulkheads, decks.....	2			1	1		1		12		1	3	1		11	1	2	36	
Ladders, gangways, rails and guards.....												1			6		1	8	
Masts, booms and cargo gear.....				6	1				1			2			19	2	3	34	
Rudder and stern tube.....	1	3		6	10					5		2	1		11	3		42	
Watertight closures.....										1		12	1	1	6	1	4	26	
Quarters and living spaces.....			1						8									9	
Navigation and safety:																			
Lookout.....	20	5	4	3	8					18		1	1		3			63	
Docks—piers—congested area.....	11	72	3	273	19				2	9	12		4				3	408	
Channels—restricted areas.....	211	43	9	35	54				1	110	109	5			4		13	594	
Buoys—aid to navigation.....				3	38					20	15							76	
Excessive speed.....	12	9	6	15	8				3	3	2	1		1			2	59	
Poor visibility.....	11	11	47	15	9				1	31	18						3	145	
Steering gear.....	6	4		2	4				1	15	7	1				2		42	
Radar.....	3	3	12	4						4	3							29	
Fathometer—depth of water.....					12					4	2		1		1		1	21	
Engine order telegraph.....		3		3						1	1					1		9	
Navigation equipment—other.....	1	1	1	1	1					8	4	1	1		1		1	21	
Navigation lights.....	6	3		2	4													16	
Navigation signals.....	83		11	6	2					1								103	
Weather (generally).....	8	35	2	61	39					37	27	19	16	6	28	1	19	268	
Currents and tides.....	27	41	1	133	27					54	44	12			8	1	25	373	
Lifesaving equipment.....									1									5	
Firefighting equipment.....									3						2			7	
Miscellaneous:																			
Yard repairs.....				2	1	1	2		17	2		4			7	10	1	47	
Improper loading or storage.....		2			3	12	1	1	9	9	2	26	4	20	35	1	7	132	
Tug assisting.....	243	89	18	278	84				6	103	22	20	1	4	18		18	904	
Anchor equipment.....		27	1	2	8				1	12	12				27	2	2	94	
Towing equipment.....	9	6		16	17					19	2	10			8	1	12	101	
Mooring equipment.....	6	110	7	13	18		1		3	10	8	2	11	1	13		87	260	
Fishing equipment.....	7	1		1	2					7		8			1	1	6	33	
Deck equipment—all other.....				2	1				1	1				1	4		1	11	
Engineering:																			
Main propulsion machinery.....	6	12		18	47		14		18	27	9	6	1		35	54	7	264	
Boiler parts and accessories.....				3	2		3	11	11	4		7	1		19	133		194	
Machinery—all other.....					3							2			4			9	
Tools and working spaces.....									1							2		5	
Generators and other electrical equipment.....		1			1		2		13	3	2		1					47	
Wiring, lights, controls.....	1	1		2		1	3		32	4	1	1			9	24		59	
Steward's department:																			
Galley and steward's department equipment.....									12									12	

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS¹—Continued

1 July 1969 to 30 June 1970 Fiscal year 1970																		
TYPE OF VESSEL	Nature of casualty																	
	Collisions, crossing, meeting and overtaking	Collision, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizing and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total
Inspected vessels:																		
Passenger and ferry—large	0	5	3	7	3			1	1	2	3		1	1	2	6		30
Passenger and ferry—small	0	4	4	4	9				7	16	7	5			5	6		52
Freight	13	46	6	90	77	7	1	3	15	40	72	5	13	17	106	111	20	642
Cargo barge	12	6		10	10				1	19	1	2		4	9		4	78
Tankships	17	14	1	35	26	2		2	6	12	36	3	5		20	27	5	211
Tank barge	138	53	9	115	39	2			10	58	12		1		15	7	11	463
Public	1	1			1								1		3	1	1	17
Miscellaneous	6	6		3	9					5	1		3	1	10		2	47
Uninspected vessels:																		
Fishing	48	36	4	9	46		10		48	104	35	45	10		48	38	18	489
Tugs	229	83	23	247	106	1	1	1	29	101	19	46	1	8	47	7	82	976
Foreign	45	54	14	30	13	4			4	27	41	4	2		5	1	4	248
Cargo barge	87	54	9	124	27				4	35	8	26	1	2	39	54	54	470
Miscellaneous	43	70	17	18	50		10	1	21	11	3	22	7		25	4	8	310
GROSS TONNAGE																		
300 tons or less	293	192	42	240	180	1	20	2	96	211	66	108	20	4	129	47	67	1,718
Over 300 to 1000 tons	181	77	22	209	75	2	1		20	81	12	33		3	48	2	57	927
Over 1000 to 10,000 tons	142	127	17	181	112	8	1	3	22	95	83	14	12	10	99	88	25	1,039
Over 10,000 tons	29	32	9	62	49	5		3	8	43	79	3	11	11	58	61	16	479
LENGTH																		
Less than 100 feet	259	171	27	189	162	1	20	2	88	188	56	99	18	2	107	41	54	1,484
100 to less than 300 feet	319	149	45	345	135	3	1		34	158	33	49	6	7	93	9	80	1,466
300 to less than 500 feet	30	58	8	89	43	8		2	15	40	50	6	10	7	54	74	18	492
500 feet and over	37	50	10	89	76	4	1	4	9	44	101	4	13	12	80	74	13	621
AGE																		
Less than 10 years	299	167	38	279	131	7	8		38	148	61	52	9	8	74	26	55	1,400
10 to less than 20 years	103	112	25	212	111	4	5	2	54	127	55	41	9	4	88	22	57	1,121
20 to less than 30 years	101	97	21	189	108	3	1	3	30	97	84	38	26	14	119	129	86	1,038
30 years and over	52	52	6	62	66	2	5	3	15	58	40	27	3	2	53	21	17	484
LOCATION OF CASUALTY																		
Number of casualties																		
Inland—Atlantic	20	24	7	71	46	5	6		27	62	77	16	2	1	29	11	18	417
Inland—Gulf	110	59	12	121	67	3	5		33	76	67	21	14	2	34	12	24	660
Inland—Pacific	11	14	2	48	34	3	4	1	25	53	18	25	6	1	33	27	9	314
Ocean—Atlantic	5	3		6	6	1	1		8	10	1	6	5	12	43	20	4	184
Ocean—Gulf	11	10	2	5	31		2	1	13	19	8	0	2		26	15	5	159
Ocean—Pacific	2			2	13	1		3	8	18	2	20	11	4	35	89	6	184
Great Lakes	4	12		52	40			1	1	23	18	6		1	17	12	1	188
Western rivers	26	16	6	85	32	1	2		13	34	6	15			40	20	298	
Ocean—other		1		3	4					6	5	2	2	1	9	16	1	52
Foreign waters	8	27	3	22	16	1	1	2	5	14	21	2	1	1	30	17	7	178
TIME OF DAY																		
Daylight	77	88	23	222	142	6	15	5	57	140	104	71	23	14	188	129	55	1,369
Nighttime	106	67	9	191	121	9	4	3	60	156	104	39	19	9	95	51	29	1,080
Twilight	15	8	3	26	26		2		7	21	15				13	18	9	173
ESTIMATED LOSSES—UNITS OF THOUSANDS																		
Vessel	4,604	2,294	1,187	3,645	5,554	5,474	572	183	18,292	10,386	26	5,797	1,881	39	8,024	3,780	2,807	99,274
Cargo	738	39	141	437	62	459	14		101	2,099		476	202	891	11,017	19	65	17,960
Property	327	440	13	6,647	1,367		4		56	530	1	37	6		219	16	980	10,639
VESSELS TOTALLY LOST																		
Inspected	1				3	2			5	3		2	1		8	3	2	30
Uninspected	16	6	3	8	39		13		53	45		49	16		53	2	15	318

¹ Statistics concerning recreation and pleasure boating accidents are published in CG 367.

STATISTICAL SUMMARY OF DEATHS/INJURIES DUE TO A VESSEL CASUALTY¹

	Nature of casualty																	
1 July 1969 to 30 June 1970 Fiscal year 1970	Collision, crossing, meeting and overtaking	Collision, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fires—cargo	Explosion and/or fires—vessel's fuel	Explosion and/or fires—boilers, pressure vessel	Explosion and/or fire structure, equip- ment, all others	Grounding with damage	Grounding without damage	Foundering, capsiz- ings and floodings	Heavy weather damage	Cargo damage	Material failure— structure and equipment	Material failure— machinery and engi- neering equipment	Casualty not otherwise classified	Total
Number of casualties.....	8	4	5	3	8	4	6	1	23	5		30	3		26	3	12	141
Number of persons deceased/injured inspected vessels.....	1/1	1/...	7/6	1/1	...	3/2			1/18	1/1		2/2			31/8	1/2	1/6	38/47
Number of persons deceased/injured uninspected vessel.....	7/6	1/2	2/2	1/1	7/4	1/1	1/9	1/4	16/22	4/2		47/...	9/...		22/2	3/...	15/3	140/58
Number of persons deceased/injured.....	8/7	2/2	2/8	1/2	7/4	4/3	1/9	4/4	17/40	4/3		47/2	9/...		53/10	3/2	16/9	178/105
PRIMARY CAUSE																		
Personnel fault:																		
Pilots—State.....							1										1	1
Pilots—Federal.....																		7
Licensed officer—documented seaman.....	1	1	1	1	3	1			3	2		8			1		2	27
Unlicensed—undocumented persons.....	3	1	1	2		1												8
All others.....	2								5									
Calculated risk:																		
Restricted maneuvering room.....																		
Storms—adverse weather.....										1		8	3		4		2	18
Unusual currents.....																	1	1
Sheer, suction, bank cushion.....																		
Depth of water less than expected.....																		
Failure of equipment.....							1	1	7	2					10	3	1	34
Unseaworthy—lack of maintenance.....												2					1	3
Floating debris—submerged object.....					3													3
Inadequate tug assistance.....																		
Fault on part of other vessel or person.....	2	2	3		1				7			12			2		1	9
Unknown—insufficient information.....					1	1	4										3	30
TYPE OF VESSEL INVOLVED																		
Inspected vessels:																		
Tug and ferry—large.....																		10
Tug and ferry—small.....	1/...		6	1					1/1	1		2			30/6	2	3	30/14
Cargo barge.....																		
Tankships.....						2/2			1/13									3/15
Tank barges.....						1/...			4									1/4
Public.....																		1/1
Miscellaneous.....	1/1	1/...													1/2			2/3
Uninspected vessels:																		
Fishing.....	3/1	2	2/...	1/1	6		2		7/6	3/1		28/...	9/...		12/2		9/...	77/13
Tugs.....		2			1/...	1/3			2/1			8/...			2/...		6/3	22/10
Foreign.....	2/...					1/...			2/2			2/...			1/...			8/2
Miscellaneous.....	2/5	1/...	2		1/4		4/4	5/13	1/1			9/...			7/...	3/...		33/33
PARTICULARS OF PERSON DECEASED/INJURED																		
Papers of deceased/injured:																		
Licensed by Coast Guard.....		1	2	1		1/1			1/10	1/...		3/...			8/2		3/1	17/18
Documented by Coast Guard.....					1/1	1/...			2/5			1/1			22/4	2/2	2/3	28/16
No license or document.....	6/7	2/1	2/6	1/1	7/3	1/2	1/9	4/4	12/24	3/3		43/1	9/...		22/4	3/...	11/5	127/70
Other—unknown—foreign.....	2/...				1/...				2/1						1/...			6/1
Status or capacity on vessel:																		
Passenger.....	2/1		6		2/1		1		2/2	1/1		3/...					2	7/12
Longshoreman—harbor worker.....					1/...				2						1/...			2/2
Crewmember.....	6/6	2/1	2/2	1/2	5/3	3/3	5/6	14/33	3/2			42/2	9/...		46/10	3/2	15/7	151/78
Other.....		1				1/3	4/4	3/5	1/...			2/...			6/...		1/...	18/13
Activity engaged in:																		
Off duty.....		1			1/1	3		3/2	5/4			3/...			1/...			12/12
Deck department duties.....	2/2	1/1	2/2	1/1	3/2	2/...	5	2/15	2/2			14/1			12/3		8/6	49/40
Engine department duties.....					1/...			1/4				1/...			1/1	2/2	1/...	4/8
Stewards department duties.....								2									2/1	3/4
Handling cargo.....					1/1			2/1	2/1						1/1			4/2
Fishing.....	3/...	1/...						4/1				18/...	9/...		6/...	3/...	4/...	49/1
Drift.....															1/...			1/1
Passenger.....	2/1		6		2/1		1			1/1		12/...			33/3		2/2	4/12
Other and unknown.....	1/4			1			3	1/...	2/14	2/...		12/...			33/3		1/...	53/28
Location of vessel:																		
At dock.....		2/1	2/...			4/3	6		11/22						6/2		1/1	22/36
At anchor.....						1/3	4/4		2/7	1/...		2/...			6/3			19/19
Underway.....	8/7	1	8	1/2	7/4				4/11	4/2		45/2	9/...		41/5	3/...	15/8	137/80
PART OF BODY INVOLVED																		
Head and upper limbs.....	4		2		1		2	3/...	2/12	1/1					4/4			9/26
Back and lower limbs.....	1	2	1	1	1		2	1/...	5	1/1					1/1		6	1/22
Multiple injuries (internal and external).....	2		5	1/1	2	3	1/5	1/3	6/23	1/...		2			2/3	2/2	1/3	12/57
Death—heart.....									1/...									2/...
Death—drowning.....	7/...	1/...	2/...		6/...	2/...			1/...	3/...		38/...	7/...		38/...		12/...	118/...
Death—other.....	1/...	1/...				2/...			6/...	1/...		9/...	2/...		8/...	3/...	8/...	36/...

¹ Statistics concerning recreational boating accidents are published in CG-387.

STATISTICAL SUMMARY OF DEATHS ON BOARD COMMERCIAL VESSELS¹ (Not Involving a Vessel Casualty)

		Nature of death																								
		Natural Cause	Homicide	Suicide	Disappearance	Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects; falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Alterations and misconduct	Unknown or insufficient information		
1 July 1969 to 30 June 1970 Fiscal year 1970																										
Total	420	CAUSE OF DEATH																								
11	Intoxication							1	1	6	1	2														
178	Physical deficiency or handicap	154				2				12		1										3		4		
59	Unsafe movement or posture						1		2	50	4	1	1													
36	Psychological—immaturity, insanity	2	3	8						22																
47	Unsafe practice					2			3	22	9	5	3									1		1		
2	Violation of law or regulation									2																
45	Human errors	1		1				1	1	25	4	5	1		1		1	1	3							
5	Decks—slippery or cluttered								1	3	1	1														
4	Weather conditions							1		2		1														
1	Poor maintenance or housekeeping																1									
0	Inadequate lighting																									
6	Inadequate rails or guards						2			4																
11	Failure of equipment									1	1	6	1			2										
0	Inadequate supervision																									
3	Inadequate life preservers								1	3																
2	Inadequate tools or equipment																1									
0	Inadequate protective equipment							1		1		2							1							
5	Improper use of tools or equipment																							5		
5	Miscellaneous causes																									
TYPES OF VESSELS INVOLVED																										
Inspected vessels:																										
39	Passenger and ferry—large	22		3						10			1						1		1			1		
17	Passenger and ferry—small	10	1	1						3		1	1	1												
134	Freight ships and barges	70	1	2		3	2	2	5	20	13	6		1				3		2	1			3		
36	Tankships and barges	25	1							9		1														
2	Public	1								1																
19	Miscellaneous	5		1		1		1		6		2			1	1										
Uninspected vessels:																										
62	Fishing	13						1	2	42		2	1				1	1						2		
54	Tugs	8								37		5														
23	Foreign	1		1			1		1	5	6	6														
34	Miscellaneous	2	1	1					1	20	1	4	1			1			1							
TIME OF DAY																										
233	Daytime	89	2	5		3		3	6	79	9	15	5	1	1	2	3	1	5		1			3		
154	Nighttime	55	1	3		1	3	1	3	61	10	5	2					1	1	1	1					
33	Twilight	13		1						13	1	1	1					1								
PARTICULARS OF DECEASED																										
Papers of deceased:																										
43	Licensed by Coast Guard	32		1					1	5		1	2	2							1					
123	Documented by Coast Guard	68	2	4		3	2	2	2	30	1	2	2	1					1		1					
228	No license or document	56		3		1		2	5	113	10	13	5		1	2	3	1	6		1	1				
26	Other—unknown—foreign	1	1	1			1		1	5	9								1					1		
Status or capacity on vessel:																										
52	Passenger	36		2						12			1											1		
32	Longshoreman—harbor worker	2				1			2	5	10	6						5				1				
275	Crewmember	111	2	6		3	3	4	6	104	7	11	4	3	1	1	2		2		2		6			
61	Other	8	1	1					1	32	3	4	3		1	1	1	1					3			
Activity engaged in:																										
125	Off duty	63	1	6		1	3	1	1	38			2								2	1		7		
101	Deck department duties	21		1		1		3	6	52	6	8	1	1			1		1							
29	Engine department duties	17	1			1				3	1	1	1	1		1	1		1							
12	Stewards department duties	9								3																
19	Handling cargo								1	1	2	7							5							
48	Fishing	15								29		3						1								
2	Drills	1								1																
44	Passenger	28		2						13																
40	Other and unknown	3	1			1			2	13	8	2	4		1	1	1				1			2		
Location of vessel:																										
173	At dock	42	2	4		2	3	2	6	59	19	12	3	1			3		7		3	1		4		
14	At anchor	2								5		2	2			2								1		
233	Underway	113	1	5				2	3	89	1	7	3		1			1						5		
PART OF BODY INVOLVED																										
31	Head and upper limbs			1		3	2	1	6		3	10		1	1				2			1				
0	Back and lower limbs																									
39	Multiple injuries (internal and external)		1					2	3		11	11				2	2		5							
148	Death—heart	142	1	1						3																
162	Death—drowning	1	4				1	1		148	3															
40	Death—disease, other	14	1	3		1		1		2	3		5				1	1			2			3		

¹Statistics concerning recreation and pleasure boating accidents are published in CG-367.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD COMMERCIAL VESSELS¹ **(Not Involving a Vessel Casualty)**

Total	1 July 1969 to 30 June 1970 Fiscal year 1970	Nature of injury																		
		Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects; falling dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Alterations and misconduct	Unknown or insufficient information
1923	CAUSE OF INJURY																			
55	Intoxication	7	2	3	16	2				3		2			1		2	5	9	3
72	Physical deficiency or handicap	5		2	8					3							43	4	2	5
561	Unsafe movement or posture	81	18	41	79	2	4	30		46	1	6		7	12	1	173	38	2	10
66	Psychological—immaturity, insanity	1		1	3													13	41	1
426	Unsafe practice	32	3	8	51	1	4	93	3	18	9	30	5	17	40	1	49	48	2	14
25	Violation of law or regulation																1	2	22	
278	Human errors	24	6	20	31	2	2	38		25	3	18	1	7	35	1	18	36	3	11
131	Decks—slippery or cluttered	16	2	51	13			2		10		1		1	2	1	26	3	2	2
122	Weather conditions	4		13	20	1		19		13		3		1	10	10	10	16	1	9
15	Poor maintenance or housekeeping	2		1	3			6									2	1		
2	Inadequate lighting				3			1				1					1	1		
5	Inadequate rails or guards			1	7			1												
81	Failure of equipment	3		1	1		1	42		1		7	1	1	1	1	6	8		2
12	Inadequate supervision			1	1			4				2		1	1			2		
0	Inadequate life preservers																			
8	Inadequate tools or equipment							2				1					2	3		
6	Inadequate protective equipment							2		1		2						1		
60	Improper use of tools or equipment	3			4			10		1	10	4		2	1		3	20		2
8	Miscellaneous causes				2			1		1				1	1			2		
	TYPES OF VESSELS INVOLVED																			
126	Inspected vessels:																			
19	Passenger and ferry—large	9	1	23	17			15		9		3	1	1	6		23	11	3	4
1,487	Passenger and ferry—small	1	1	2	4			2						2				5	2	
122	Freight ships and barges	146	27	103	183	4	10	191	3	96	19	60	4	18	74	10	290	148	61	40
1	Tankships and barges	14	2	6	16	1	1	9	1	9	3	9		1	3	2	17	19	7	2
32	Public				1															
32	Miscellaneous	1		1	8			7		1		1	2		2	1	1	3	2	2
55	Uninspected vessels:																			
40	Fishing			1	3			12		1	1	4		9	7	3	1	10		3
2	Tugs	2		2	4	2		9		5				5	4		4	3		
39	Foreign	2																		
39	Miscellaneous	3		4	5	1		5		1		2		1	6		3	4	3	1
	TIME OF DAY																			
1,354	Daytime	127	17	90	180	4	5	205	2	79	19	57	6	25	76	12	242	157	40	41
477	Nighttime	42	12	46	78	4	5	40	2	39	3	17	1	9	24	2	73	40	33	7
92	Twilight	9	2	6	13		1	5		4	1	5		3	2	2	24	6	5	4
	PARTICULARS OF PERSON INJURED																			
190	Papers of person injured:																			
1,547	Licensed by Coast Guard	20	6	11	25		1	21		11	4	16	1	2	8	2	33	29	7	2
176	Documented by Coast Guard	182	24	117	199	6	8	195	4	102	19	53	5	20	76	11	293	152	65	46
1	No license or document	6	1	14	17	2	2	34		9		10	1	15	18	3	13	22	5	4
1	Other—unknown—foreign																			
27	Status or capacity on vessel:																			
7	Passenger		1	6	6			2		1		1		1	3	1	1	3	1	1
1,847	Longshoreman—harbor worker	177	30	136	230	7	9	233	4	120	23	71	7	35	94	15	337	194	75	50
42	Crewmember	1			5	1	2	10						1	5			6	2	1
296	Other																			
766	Activity engaged in:																			
498	Off duty	27	16	25	56	3	1	5	2	19		2		1	13	3	30	38	48	7
255	Deck department duties	54	7	56	112	5	5	166		54	5	9	1	24	31	7	157	66	1	6
6	Engine department duties	59	5	27	44		3	55	2	30	17	51	4	2	20	1	107	58	11	2
45	Stewards department duties	35	2	27	17			12		17		9	2		24	2	42	25	6	35
6	Handling cargo							3		1										1
22	Fishing			4	1			12			1			9	6	2	1	9		
30	Drills	2			2									1	1			1		
866	Passenger	1	1	8	6			1		1		1		1	3	1	1	3	2	1
1,041	Other and unknown				3		2	6				7		4						
16	Location of vessel:																			
866	At dock	72	29	44	103	7	7	123	2	46	7	36	6	21	52	2	152	74	58	25
16	At anchor	1		3	3			6						1				2		
1,041	Underway	105	2	95	135	1	4	121	2	76	16	48	1	15	50	14	187	127	20	27

See footnote at end of table.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD COMMERCIAL VESSELS¹

Continued

(Not Involving a Vessel Casualty)

Total	1 July 1969 to 30 June 1970 Fiscal year 1970	Nature of injuries																			
		Slips and falls - ladders	Slips and falls-gangways	Slips and falls-on deck	Slips and falls-other	Falls from vessel-into water	Falls into holds or tanks	Struck by objects; falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Alterations and misconduct	Unknown or insufficient information	
97	Part of body injured:	5		5	24			22		14								10	14	2	
69	Head and neck.....	1			4		1	37		1								3	8		
133	Eye and face.....	14	2	16	20	1		15		11							17	8	2	4	
350	Arm and shoulder.....	10	2	17	13	1		29		14	20				73		27	86	5	25	
231	Hand.....	23	6	21	33	1	2	30	1	35	1				6	1	26	36	3	1	
287	Leg and hip.....	23	9	12	18	1	2	62		16	1				4	2	91	22	3	6	
261	Foot.....	31	2	33	30	1		5		11	1						129	7	4	5	
56	Back.....	11	1	5	7			1		1	1				1		8	4	3		
101	Body-external.....	15	4	10	23	1	1	5	1	8				1	3	2	12	6	5	4	
21	Body-internal.....	1		2	2			1									16				
293	Hernia.....	1						1													
24	Multiple body injuries.....	41	5	20	62	4	4	37		10		23		4	6	10	13	22	32	4	
	All other injuries.....	3		1	5	2	1	1	1	1		2	1					1	1	4	
ADDITIONAL CONTRIBUTING FACTORS TO CAUSE OF INJURY																					
597	Human element.....	36	7	54	63	1	2	52	1	26	13	19	1	9	15	4	111	59	80	14	
70	Decks-slippery or cluttered.....	7	2	19	18	1	1	4		4					1	1	12	6	2		
49	Weather conditions.....	2		8	3			3		4		2			10	1	6	1	1		
16	Poor maintenance or housekeeping.....	3		2	3			1		2							1	2	1		
16	Inadequate lighting.....	1			4		3	2		3				1			2	2	1		
17	Inadequate rails or guards.....	3	1		3	1	1								1	1		4			
8	Failure of equipment.....							3		1		1					2	1			
57	Inadequate supervision.....	1		2	6			21		1		5		4	2	1	11	2		1	
19	Inadequate tools or equipment.....				5			3					1	1			7	1		1	
32	Inadequate protective equipment.....	1		1	3			12		2	1	3		1			1	6	1	1	
124	Improper use of tools or equipment.....	2		13				36		9	7	9		2	10		10	22	6	3	
113	Hull structure.....	8		22	31			6		7		1		2	3	6	21	7			
51	Holds, hatches, tanks.....	3		1	16		4	3	1	2		2		5			8	5	1		
168	Ladders, gangways, stairs.....	91	12	3	13	1	2	6		10				1			28	4		2	
66	Masts, booms, cargo gear.....	2		1	7		1	17		3				3			16	1			
27	Watertight closures.....			1				2		2				12			4	1			
58	Living spaces.....	2		8	13			3	1	8		1		1	4	2	1	6			
17	Fishing equipment.....							4						5							
2	Navigation equipment.....																				
14	Lifesaving equipment.....	1			5					2								2			
3	Firefighting equipment.....																				
0	Communications equipment.....			1				1													
0	Yard repairs.....																				
23	Improper loading, stowage and ventilation.....	2		4	4			1		2					3	2	5				
12	Ground tackle.....							2						4	2		2	2			
4	Tugs and towing equipment.....				2			2													
87	Mooring equipment.....			1	3			46		1				10	3	1	13			2	
4	Miscellaneous deck department equipment.....				3					1											
39	Main propulsion machinery.....	1						1		2	1	16	1		3		5	4		1	
42	Roller parts and accessories.....	6		3	8			4		6	1	4					8	4			
6	Auxiliary machinery.....							1		1	1	1	2				1				
66	Electrical equipment.....							1		1								2			
	Galley equipment.....	2		7	8			5		1		7		4	1		10			19	

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS ¹

1 July 1968, to 30 June 1969
Fiscal year 1969

1 July 1968, to 30 June 1969 Fiscal year 1969	Nature of casualty																	
	Collisions, crossings, meeting, and over- taking	Collisions, while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire— cargo	Explosions and/or fire— vessel's fuel	Explosion and/or fire— boilers, pressure vessel	Explosion and/or fire— structure, equipment— all others	Grounding with damage	Grounding without damage	Foundering, capsizings, and floodings	Heavy weather damage	Cargo damage	Material failure— structure and equipment	Material failure— machinery and engineering equipment	Casualty not otherwise classified	Total
Number of casualties.....	233	194	21	389	272	30	27	13	147	352	215	250	54	4	149	273	61	2,664
Number of vessels involved.....	746	494	87	649	390	36	30	14	152	454	236	205	58	4	187	274	127	4,183
Number of inspected vessels involved.....	244	181	23	277	178	24	4	12	48	143	138	35	46	4	118	233	48	1,754
Number uninspected vessels involved.....	502	313	34	372	212	12	26	2	104	311	98	170	8		69	41	79	2,429

PRIMARY CAUSE

Personnel fault:																			
Pilots—State.....	13	13		16	7					9	14		1					1	74
Pilots—Federal.....	3	6	1	7	5					5	9								36
Licensed officer—documented sea-																			
man.....	58	22	20	60	27	3	2	8	9	58	32	14		1	8	30	4	365	
Unlicensed-undocumented persons.	140	50	13	87	44	4	4		8	112	41	30			4	4	4	541	
All others.....	33	20	2	18	8		9		14	11	18	12		1	10	4	15	177	
Calculated risk.....	10	29		31	17					17	16	3			1			124	
Restricted maneuvering room.....	6	7		12	1					3	3							32	
Storms—adverse weather.....	3	23	7	35	18					32	18		44	46	2	21	6	5	233
Unusual currents.....	4	2		27	2					3	2		5					1	46
Sheer, suction, bank cushion.....	27	6		7	2					5	4		1					5	57
Depth of water less than expected.....				10	13					23	28		2						76
Failure of equipment.....	12	21		42	20	3	16	6	62	65	17	37	9		83	216	7	610	
Unseaworthy—lack of maintenance.....		2					2		8	5		84	1		13	17	1	133	
Floating debris—submerged object.....		2		6	114				3	6		11			7	1	1	151	
Inadequate tug assistance.....	3	6		39	6					2	5		1					1	63
Fault on part of other vessel or person.....	430	284	21	241	102	4	2		7	92	26	53	1		5	2	63	1,333	
Unknown—insufficient information.....	4	1		2	4	13	2		41	6	3	8			5	4	19	112	

ADDITIONAL CONTRIBUTING FACTORS TO CAUSE OF CASUALTY

Hull and associated parts:																			
Plates and framing—steel.....	12	19		8	40				3	23	1	37	5		32		9	180	
Planks and framing—wood.....	3	4		2	27				3	18		51	2		8		1	119	
Tanks.....		1		2	6	4	1		2	4		7	1	1	19	5		53	
Holds and hatches.....	1			1	5							6			2			16	
Superstructure—bulkheads, decks.....	1	3		3	6	1			11	3		14	8		10		3	62	
Ladders, gangways, rails and guards.....				1	1								3		2			6	
Masts, booms and cargo gear.....		2		1	2								6		23		3	27	
Rudder and stern tube.....				2	9					11		7	1		8	6		44	
Watertight closures.....										1		26				1		27	
Quarters and living spaces.....							1			15		1					1	16	
Navigation and safety:																			
Lookout.....	73	23	8	7	18					13								142	
Docks—piers—congested area.....	14	64	1	230	14				2	9	16	2					2	354	
Channels—restricted areas.....	161	33	5	37	32					90	86	6			1		6	457	
Buoys—aids to navigation.....	1			1	13					17	15							47	
Excessive speed.....	61	29	21	25	8					11	3	5	1	1				185	
Poor visibility.....	11	12	10	6	15		1			29	16	2						102	
Steering gear.....	17	11	13	7					2	28	9		1		2	9		90	
Radar.....	3	4	23	1	1					17	8	2					1	60	
Fathometer—depth of water.....				14						19	5	1						38	
Engine order telegraph.....	1	10		10	2				1	2	2							28	
Navigation equipment—other.....	72	11	2	10	11				3	87	26	4					1	227	
Navigation lights.....	26	13		1	6						1							48	
Navigation signals.....	157	5	15	5	14					1								197	
Weather (generally).....	16	28		76	30					46	36	29	2		3	1	6	273	
Currents and tides.....	41	25		148	22					39	36	14	1		3		47	376	
Lifesaving equipment.....										1		1	8		21		2	33	
Firefighting equipment.....						2			3							1		6	
Isellaneous:																			
Yard repairs.....	3			2		8			13	4	1	5	1		2	9	2	50	
Improper loading or stowage.....	8	5		4	5	27	5	1	9	4	7	67	17	6	23	2	4	134	
Tug assisting.....	249	117	12	216	64	4			4	78	22	26	1				13	806	
Anchor equipment.....		22		5	7					32	14	3	6		35	4	4	132	
Towing equipment.....	12	18		31	16					27	7	25	4		2		12	164	
Mooring equipment.....		40		32	15					10	6	16	5		6	1	49	180	
Fishing equipment.....	19	2		1	7					9	2	6	1		2		3	82	
Deck equipment—all other.....		7		7	8				3	1		6	5		6		1	43	
Engineering:																			
Main propulsion machinery.....	11	32		31	84		19		41	38	8	33	1		11	140	6	455	
Boiler parts and accessories.....		3		1	4	1	8	22	25	5	2	2			2	212		287	
Machinery—all other.....				1	10		1		1	3		28			5	1		60	
Tools and working spaces.....									9			7			1	5		22	
Generators and other electrical equipment.....		1		2		3	3		26	4	2	2				54		97	
Wiring, lights, controls.....		3		2					38		1	1	3		1	6	1	50	
Steward's department:																			
Galley and steward's department equipment.....						3			17									20	

See footnotes at end of table.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS¹ Continued

Nature of casualty																		
TYPE OF VESSEL	Collisions, crossings, meeting, and overtaking	Collisions, while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion; and/or fires—cargo	Explosions and/or fires—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment—all others	Grounding with damage	Grounding without damage	Foundering, capsizings, and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total
Inspected vessels:																		
Passenger and ferry—large	3	4		12	4				3	2	3	1	1			5	1	38
Passenger and ferry—small	13	7	6	4	13		2		9	10	4	4	1		2	1	77	
Freight	31	88	5	107	78	11		12	22	47	96	11	29	4	89	178	827	
Cargo barge	14	3	1	12	7		1		1	12	2	4	2		22	6	73	
Tankships	13	17		27	33	2			7	23	24	2	8		2	45	234	
Tank barge	166	55	5	106	35	9			2	47	8	11	2		2	1	464	
Public				1	1				1							2	7	
Miscellaneous	4	7	1	8	7	2	1		3	2	1		1		3	1	42	
Uninspected vessels:																		
Fishing	60	35	2	9	55		12	1	47	133	39	108	5		13	25	6	550
Tugs	252	80	13	242	90	2	5		22	100	24	81	4		7	7	1,047	
Cargo barge	87	46	6	94	20	5			4	32	10	40	1		4	4	387	
Foreign	43	70	6	18	16	5	1	1	4	20	18	2			4	1	212	
Miscellaneous	60	82	7	19	31		8		27	26	7	41	2		11	8	335	
GROSS TONNAGE																		
300 tons or less	344	179	25	236	175	5	28	1	102	249	78	238	10		27	31	30	1,763
Over 300 to 1,000 tons	219	95	12	174	55	9			13	74	12	52	2		11	2	54	794
Over 1,000 to 10,000 tons	158	157	11	191	113	17	2	12	24	92	96	13	29	2	76	166	35	1,194
Over 10,000 tons	85	63	9	48	47	5		1	13	39	50	2	17	2	43	70	8	449
LENGTH																		
Less than 100 feet	303	154	19	207	164	3	28	1	91	233	68	210	7		27	32	20	1,567
100 to less than 300 feet	368	171	22	275	101	16	1		26	140	34	86	7		13	13	79	1,352
300 to less than 500 feet	48	88	5	86	68	12	1	11	21	30	62	6	23	3	64	141	22	674
500 feet and over	27	81	11	81	57	5		2	14	51	72	3	21	1	53	88	6	573
AGE																		
Less than 10 years	335	181	24	215	123	9	9		37	124	55	82	13		28	36	54	1,325
10 to less than 20 years	227	138	16	201	89	10	11		39	141	51	83	11		20	20	33	1,094
20 to less than 30 years	140	127	9	155	127	14	5	14	52	120	99	72	32	4	92	196	30	1,268
30 years and over	44	48	8	78	51	3	5		24	69	31	68	2		17	22	10	470
LOCATION OF CASUALTY																		
NUMBER OF CASUALTIES																		
Inland—Atlantic	43	47	3	81	47	11	6	1	33	82	85	28	1		13	18	2	501
Inland—Gulf	91	46	7	114	61	5	6	1	30	53	34	46	2		8	12	9	525
Inland—Pacific	10	33	1	37	43	2	7	4	24	73	28	37	4	1	16	22	7	329
Ocean—Atlantic	6				12	2	1		13	23	1	25	14	2	17	37	2	176
Ocean—Gulf	14	3	4	4	26		2	1	20	29	5	40	5		6	16	2	279
Ocean—Pacific	11	3		3	24		3	3	15	26	3	31	24	1	45	102	3	302
Great Lakes	4	14		68	23		3		3	21	17	4	1		11	15	2	183
Western rivers	42	11	2	55	16	3	1		4	29	6	38			6	8	19	235
Ocean—other	3	4	1	3	3			1	1	2	3		3		5	17		46
Foreign waters	9	33	2	24	17	6	1	2	4	14	33	1			22	18	15	201
TIME OF DAY																		
Daylight	85	126	10	214	151	19	16	5	70	170	124	139	26	1	100	167	38	1,401
Nighttime	141	60	8	156	104	9	10	8	57	167	80	98	25	2	45	86	20	1,076
Twilight	7	8	3	19	17	2			20	15	11	13	3	1	4	20	2	147
ESTIMATED LOSSES—IN U.S. DOLLARS																		
Vessel	7,422	2,088	3,222	4,107	3,314	1,470	520	593	11,260	8,892	6	11,414	796	1	3,307	4,150	5,715	68,267
Cargo	1,072	51	6	293	91	1,488	17	4	72	310	0	1,019	540	14	121	43	5,128	10,269
Property	2,046	114		4,099	239		14	1	212	89	3	228			19	24	240	7,926
VESSELS TOTALLY LOST																		
Inspected	6			3	4	2	2		3	2		8	1					31
Uninspected	15	11	1	4	30	1	16	2	56	67		126	2		7	1	3	342

¹ Statistics concerning recreation and pleasure boating accidents are published in CO-357.

STATISTICAL SUMMARY OF DEATHS/INJURIES DUE TO A VESSEL CASUALTY¹

1 July 1968, to 30 June 1969 Fiscal year 1969		Nature of casualty																	
		Collisions, crossing, meeting, and overtaking	Collisions, while anchored, docking, or unloading	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vent's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment—all others	Grounding with damage	Grounding without damage	Foundering, capsizing, and flooding	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total
Number of casualties	20	8	5	2	8	9	8	4	14	3	1	36	2	17	4	6	147		
Number of deceased/injured—inspected vessels	21/47	..1	..8	..7	..7	6/9	..1	1/4	4/2	..1	..2	..2	..2	3/4	..3	1/4	36/63		
Number of deceased/injured—uninspected vessels	62/10	6/6	1/1	..2	3/3	..10	1/8	..17/16	5/1	..1	66/9	2/..	..13/12	1/1	4/..	181/80			
Number of persons deceased/injured	83/67	6/7	1/9	..2	3/10	6/19	1/9	1/4	21/18	5/2	..1	66/9	2/2	16/16	1/4	5/4	217/173		
PRIMARY CAUSE		Number of casualties																	
Personnel fault:		3																3	
Pilots—State		3																21	
Pilots—Federal		1																27	
Licensed officer—documented seaman		5	2	5	1	1	1	3	2	1	1	4	2	1	2	3	1	22	
Unlicensed—undocumented persons		6	1			1	3	1	4	1	1	2	2					4	
All others		1	1															18	
Calculated risk																		1	
Restricted maneuvering room																		31	
Storms—adverse weather						1				1		11	2		1		2	4	
Unusual currents																		1	
Sheer, suction, bank cushion																		6	
Depth of water less than expected																		2	
Failure of equipment		2				2	1	3	2	4	1			3		10	3	31	
Unseaworthy—lack of maintenance														4				4	
Floating debris—submerged object			1		1	3								1				6	
Inadequate tug assistance			1															1	
Fault on part of other vessel or person			1														1	2	
Unknown—insufficient information							3		1								3	7	
DEATH/INJURED BY VESSEL TYPE		Number of persons deceased/injured																	
Inspected vessels:																			
Passenger and ferry—large		..1	..1	..3	..6	..1	..1	1/4	..1	..2	..2	..2	..2	1/..	..1	..1	..1	1/18	
Passenger and ferry—small		21/46	..4	..1	..1	..1	..1	..1	..1	..1	..1	..1	..1	1/4	..1	1/4	..1	24/65	
Freight																		3/6	
Cargo barge							6/5		3/..	..1	..1	..1	..1	..1	..1	..1	..1	6/7	
Tankships																		2/1	
Tank barges																			
Miscellaneous																			
Uninspected vessels:																			
Fishing		2/..	..3	..1	2/1	..5	1/5	..3/2	5/1	..33/3	2/..	..2/1	..4/..	..54/16					
Tugs		3/3	..1	..1	..1	..5	..1	2/2	..1	8/2	..1	..1	..13/17						
Foreign		26/3			..5	..5	..1	1/1	..1	..1	..1	..1	..32/17						
Miscellaneous		31/4	6/2	1/1	1/1	..2	..2	11/11	..25/4	..7/4	..1	..1	..82/30						
PARTICULAR OF PERSON DECEASED/INJURED																			
Papers of deceased/injured:																			
Licensed by Coast Guard		5/8	..1	..2	..1	1/1	..2	1/1	1/..	..5/..	..8/1	..2/1	..1/4	..1/2	..1	..1	..14/18		
Documented by Coast Guard		16/25	..5	..1	..1	1/3	..2	..2	..2	..8/1	..2/1	..12/12	..1/..	..26/46					
No license or document		20/20	6/6	1/2	..2	3/9	4/15	1/7	19/17	5/1	..1	52/8	..1	129/102					
Other—unknown—foreign		42/4							1/1	..1	..1	..1	..3/..	..1	..1	..48/7			
Status or capacity on vessel:																			
Passenger		10/15	3/1	1/..	1/7	2/10	..3	..1	2/5	..7/..	..1	..2/..	..24/27						
Longshoreman—harbor worker		1/..	..1	..1	..1	2/10	..1	..1	2/5	..7/..	..1	..2/..	..6/23						
Crewmember		70/42	2/6	..9	2/3	3/8	1/6	1/3	7/8	5/2	..1	58/9	2/1	11/9	1/4	5/4	168/114		
Other and unknown		3/..		..1	..1	1/1	..1	..1	12/7	..1	..1	..1	..19/9						
Activity engaged in:																			
Off duty		..3	..1	..1	..1	..2	..2	..2	2/1	..8/1	..1	..8/1	..10/10						
Deck department duties		21/17	1/2	1/6	2/1	3/3	..2	..1	14/9	1/2	..1	16/6	2/..	8/5	..1	3/2	72/57		
Engine department duties		20/11	..1	..1	..1	1/1	..1	1/3	1/..	..1	..1	2/..	..1	1/..	1/2	..1	27/19		
Stewards department duties		10/11	..2	..1	..1	..1	..2	..1	..1	..1	..1	..1	..1	..1	..1	..1	11/17		
Handling cargo																	2/10		
Fishing			..1	..1	..1	..1	..2	..1	..1	..2	..1	..1	..1	..1	..1	..1	33/2		
Drills																			
Passenger		10/15	3/1	..1	1/7	2/10	..3	..1	2/5	..7/..	..1	..2/..	..19/27						
Other and unknown		22/..	2/1	..1	..1	1/1	..1	..1	4/8	1/..	..1	7/2	..1	3/4	..1	..1	43/31		
Location of vessel:																			
At dock			..1	..1	..1	1/3	1/5	..3	5/5	..11/11	..1	..1	..1	5/10	1/2	1/..	13/39		
At anchor			2/1	..1	..1	1/1	..1	..1	11/11	..1	..1	..1	..1	8/4	..1	..1	19/18		
Underway		83/87	4/5	1/9	..2	3/10	5/5	..8	1/1	5/2	5/2	..1	66/9	2/2	6/2	..2	4/4	185/116	
PART OF BODY INVOLVED																			
Head and upper limbs		..9	..1	..2	..1	..3	..1	..1	..1	..1	..2	..1	..3/3	..1	..1	..1	3/25		
Back and lower limbs		..1	..4	..2	..1	..1	..2	..1	..1	..1	..4	..1	..1	1/2	..1	..1	1/21		
Multiple injuries (internal and external)		14/47	..2	..5	..6	..6	..8	..3	5/16	..2	..1	..1	..1	3/11	..4	1/2	24/127		
Death—heart																	1/..		
Death—drowning		19/..	1/..	1/..	2/..	4/..	1/..	1/..	7/..	5/..	42/..	1/..	5/..	..1	..1	..1	87/..		
Death—other		50/..	5/..	..1	1/..	1/..	1/..	1/..	9/..	..1	24/..	1/..	4/..	..1	..1	..1	101/..		

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF DEATHS ON BOARD COMMERCIAL VESSELS¹

(Not Involving a Vessel Casualty)

1 July 1968, to 30 June 1969
Fiscal year 1969

		Nature of death																						
		Natural causes	Homicide	Suicide	Disappearance	Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects; falling, dropped, or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains, and strains	Cuts, lacerations, bruises, and punctures	Alterations and misconduct	Unknown or insufficient information
Total	428	CAUSE OF DEATH																						
15	Intoxication					1					12		2											
194	Physical deficiency or handicap	88					1				2												1	1
23	Unsafe movement or posture										18	1	1							1				
52	Psychological—immaturity, insanity		1	20							31													
16	Unsafe practice									1		3	3	1	1									
5	Violation of law or regulation		4								7													
76	Human errors					3	1				52	5	7	1		1								
6	Decks—slippery or cluttered										6													
9	Weather conditions										7		1								1			
0	Poor maintenance or housekeeping										2													
2	Inadequate lighting										2													
9	Inadequate rails or guards									5	1	2							1					
4	Failure of equipment											4												
1	Inadequate supervision								1															
5	Inadequate life preservers									5														
0	Inadequate tools or equipment																							
2	Inadequate protective equipment									2														
4	Improper use of tools or equipment								1	2		1												
5	Miscellaneous causes												5											
TYPES OF VESSELS INVOLVED																								
Inspected vessels:																								
43	Passenger and ferry—large	33		1							7		2											
20	Passenger and ferry—small	14	1	1							3		1											
134	Freight ships and barges	77		13		3	1		1	3	20	6	6	1						1	1		1	1
42	Tankships and barges	22	3			1				1	13		2											
4	Public	3									1													
10	Miscellaneous	3		1					1	3		1												
Uninspected vessels:																								
64	Fishing	17	1	1			1			34		3	5						1	1				
45	Tugs	12								30		1	1	1										
23	Foreign	3		3					1	12	3	1			1									
43	Miscellaneous	4							4	26	1	6				1				2				
TIME OF DAY																								
230	Daytime	110	1	8		3	1		8	64	7	13	8	1	1				1	2	1		1	1
170	Nighttime	69	2	10		1	1		2	73	3	5	1					1	1					
28	Twilight	9	2	2						12		2							1					
PARTICULARS OF DECEASED																								
Papers of deceased:																								
58	Licensed by Coast Guard	41		4		1				8	2	1		1										
142	Documented by Coast Guard	78	3	10		2	1		4	36		2	3					1		1			1	1
213	No license or document	67	2	4		1	1		6	98	6	15	6		1									
15	Other—unknown—foreign	2		2						7	2	2												
Status capacity on vessel:																								
52	Passenger	39	1	1						10														1
23	Longshoreman—Harbor Worker	2							1	7	3	5	4											
305	Crewmember	138	4	19		3	1		4	115	3	7	4	1				2	1	1			1	
48	Other	9				1	1		5	17	4	8	1		1				1					
Activity engaged in:																								
157	Off duty	86	1	14		1	1			40	1		2										1	
91	Deck department duties	21	2	1					4	51	1	6	1	1					1	2				
31	Engine department duties	17		3		1				5	2	2	1											
15	Stewards department duties	8				1				5														
16	Handling cargo								1		3	5	5											
39	Fishing	19	1	1			1			14		3												
1	Drills	1																						
42	Passenger	32		1						8														1
36	Other and unknown	4	1			1			5	16	3	4			1				1					
Location of vessel:																								
165	At dock	59	2	4		2	2		7	55	8	13	7		1	1			2	3				
15	At anchor	2							2	9			1											
248	Underway	127	3	16		2			1	85	2	7	1						1	1			1	1
PART OF BODY INVOLVED																								
33	Head and upper limbs	1	3	5		2			2		6	10		1	1									
1	Back and lower limbs																							
26	Multiple injuries (internal-external)	1	1	1		1			6	2	2	0						1	2					
173	Death—heart	170					1			1													1	
163	Death—drowning			13		1			1	166	1	1												1
32	Death—other	16	1	1			1		1				9							1				

¹Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD COMMERCIAL VESSELS¹ **(Not Involving a Vessel Casualty)**

Total	1 July 1968, to 30 June 1969 Fiscal year 1969	Nature of injury																		
		Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects; falling, dropped, or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains, and strains	Cuts, lacerations, bruises, and punctures	Altercations and misconduct	Unknown or insufficient information
2167	CAUSE OF INJURY																			
59	Intoxication	11	8	11	9	1				4		2			4					
53	Physical deficiency or handicap	5	1	7	8			2	1	3	1						2	6	8	3
272	Unsafe movement or posture	20	4	15	41	1	2	6		31	3		2		9		16	12	3	8
114	Psychological—immaturity, insanity	1			7					3							1	7	3	3
186	Unsafe practice	19	1	5	23		4	44	1	8	6	16	1	6	12	1	25	9	2	5
4	Violation of law or regulation								2	1									1	
936	Human errors	145	34	131	78	3	3	137	1	78	18	48	4	29	81	3	59	58	1	25
105	Decks—slippery or cluttered	11	1	82	10		1	1		4		1					10	3	3	1
110	Weather conditions	10	1	12	16	1		15		14		2			12		6	17	1	1
17	Poor maintenance or housekeeping	1			2			3		1		3	1		2			2	1	1
24	Inadequate lighting	5		3	7		2			3		2					1	3		
10	Inadequate rails or guards	2			3			1		6	2	2			1	1				1
74	Failure of equipment	3	2		9		2	33	7	2	2	6	2		4		1	8		
19	Inadequate supervision				2					2		4			3		1			
0	Inadequate life preservers																			
7	Inadequate tools or equipment		1					2		1	1	1		1						4
56	Inadequate protective equipment	7		3	2			21		2	7		2				2	6		
82	Improper use of tools or equipment	1		2	8			20		8	11	1	1	1	6		7	10	8	8
23	Miscellaneous causes			1				4		1		3	1				1	5	3	4
TYPES OF VESSELS INVOLVED																				
204	Inspected vessels:																			
10	Passenger and ferry—large	30	6	33	16			25		15	2	10	1	1	7		30	9	9	10
1,046	Passenger and ferry—small			5		1												2		1
	Freight ships and barges	172	45	179	184	2	9	208	5	189	32	79	8	19	109	8	197	117	85	49
148	Tankships and barges	27	1	26	15		2	23		3	3	6		1	5		13	10	10	3
17	Public	4		1	1			4				6					1	1		1
26	Miscellaneous	1		1	3			5		1	2			2	7		3	1		
54	Uninspected vessels:																			
35	Fishing	3		2	1			14		2	5	1		12	4		7	3		
4	Tugs	3		2	4	2		13		2	1	1	1	3			2			1
23	Foreign	1								1										
	Miscellaneous			2	1	1	3	4		3			1	1	1		1	4	1	1
TIME OF DAY																				
1,470	Daytime	151	24	166	149	4	4	235	4	101	37	69	10	28	95	6	192	98	46	51
589	Nighttime	78	27	75	67	1	9	48	1	61	7	26		10	30	2	55	39	53	10
108	Twilight	12	2	13	9	1	1	13		13	1	4		2	9		7	10	6	5
PARTICULARS OF PERSON INJURED																				
192	Papers of person injured:																			
1,809	Licensed by Coast Guard	24	5	18	18		1	22	2	13	3	28		2	8	1	21	11	10	5
161	Documented by Coast Guard	207	47	219	194	3	9	241	3	143	33	67	10	18	112	7	224	123	91	58
5	No license or document	10		17	13	3	4	33		9	9	3		19	12		8	13	4	
	Other—unknown—foreign													1			1			
18	Status or capacity on vessel:																			
12	Passenger		1	6	2	1		1		2	1							3		1
2,107	Longshoreman—harbor worker	1		1	2			4				2								
30	Crewmember	238	52	245	218	5	14	281	5	180	42	97	10	38	128	8	233	143	105	65
	Other	2		2	3			10		2	2			2	5		1	1		
385	Activity engaged in:																			
882	Off duty	53	42	54	45	2	1	11		40		5	1		19	1	14	21	69	7
493	Deck department duties	82	5	105	118	3	11	182	3	54	20	9	3	32	45	5	117	70	15	3
307	Engine department duties	68	4	33	36		2	55		42	17	66	6	3	27	1	79	31	11	10
9	Stewards department duties	35	1	53	19			25		23	1	16			28	1	35	15	10	45
42	Handling cargo			1	1										1					
18	Fishing	3		4	2	1		11		1	3	1		4	5		6	2		
14	Drills							5		1		1								
23	Passenger		1	4	1			1		2	1	1		4			4	3		1
	Other and unknown				3			6		2	3	1		1	5			2		
942	Location of vessel:																			
35	At dock	93	49	88	88	3	6	140	1	60	16	50	5	19	63		103	56	71	31
1,190	At anchor	4	1	7	6	1		4				2		1	5		4			
	Underway	144	3	159	131	2	8	152	4	105	29	47	5	20	66	8	147	91	34	33

See footnote at end of table.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD COMMERCIAL VESSELS¹

Continued

(Not Involving a Vessel Casualty)

Total	1 July 1968, to 30 June 1969 Fiscal year 1969	Nature of injury													
		Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects: falling, dropped, or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Pinching and crushing
119	Part of body injured:														
79	Head and neck	19	1	13	13			26		18	3	3	1		
162	Eye and face	3			3			36		2	3	9	1		
435	Arm and shoulder	19	3	26	21		1	21		13	2	11	2		1
296	Hand	24	2	29	18			43		28	27	17	2	23	101
321	Leg and hip	29	10	39	34	2	5	40	1	48	4	8	1	6	9
307	Foot	24	24	35	30		1	78	1	17	3	15	2	15	2
91	Back	53	4	63	37			10	1	13	2	1			112
67	Body—external	12	1	6	9	1		11	2	9	1	10	1		18
18	Body—internal	12	4	9	14		1	3		8	1				1
251	Hernia	1						1		1					15
31	Multiple body injuries	42	4	32	42	1	6	26	1	6	3	24	2	5	6
	All other injuries	3		1	4	2		1		2		1			4
	ADDITIONAL CONTRIBUTING FACTORS TO CAUSE OF INJURY														
549	Human element	46	17	55	49	1	5	62		40	10	15	3	3	34
154	Decks—slippery or cluttered	21		70	26	2		7		9	1	1		1	12
85	Weather conditions	10	3	16	11	2	1	8		5	1	2		11	6
59	Poor maintenance or housekeeping	7		17	12			2		6		2		2	4
29	Inadequate lighting	4		10	4		3	1		3				1	2
26	Inadequate rails or guards	4	1		10		1	2				2		3	2
24	Failure of equipment				4			7	2	1	1	3			2
140	Inadequate supervision	5	1	2	23		2	48	1	4	3	16		3	10
21	Inadequate tools or equipment	1			7			2		1	1			1	3
97	Inadequate protective equipment	9		14	5			33	1	3	2	13	1	4	10
147	Improper use of tools or equipment	4	1	6	18		1	35		9	12	12	3	8	13
123	Hull structure	5	2	48	22			8		11					3
73	Holds, hatches, tanks	9		4	16		9	5	1		3	1		1	5
187	Ladders, gangways, stairs	103	26		4	1		10		9				2	7
109	Mast, booms, cargo gear	3		8	14		1	26		7	3			6	13
88	Watertight closures			8	12			8	1	9					34
132	Living spaces	11	1	27	31			8		19	1			11	10
27	Fishing equipment			1	1			9			1			7	4
36	Navigational equipment	2		9	7			3		7			1	1	1
25	Lifesaving equipment		1		7			5				1	1		5
9	Firefighting equipment							5							1
0	Communications equipment									2					
4	Yard repairs			1	1							2			
96	Improper loading, stowage, and ventilation	1		18	10			14	2	13		1			4
16	Ground tackle			2	3			8		3	1			2	2
18	Tugs and towing equipment			2	3	2		7						2	2
116	Mooring equipment			7	6			65		2	2			12	2
66	Miscellaneous deck department equipment	3		3	6			15		3	5	5	1	6	4
4	Main propulsion machinery				1					1					
88	Boiler parts and accessories			1	2			10		8		55			2
198	Auxiliary machinery	22	1	18	18		1	21	1	27	9	13		1	15
27	Electrical equipment				1			6		1	3			7	3
178	Galley equipment	13		21	10			13		16	1	17	2	1	15
29	Causes not otherwise classified	3		1	2		2	1		3	1				8

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-387.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS ¹

	Nature of casualty																		
	Collisions, crossing, meeting, and overtaking	Collisions while anchored, docking, or undocking	Collisions, fog	Collisions with piers and bridges	Collisions, all others	Explosions and/or fires—cargo	Explosions and/or fires—vessel's fuel	Explosions and/or fires—boilers, pressure vessel	Explosions and/or fire—structure, equipment—all others	Grounding with damage	Grounding without damage	Foundering, capsizings, and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total	
July 1, 1967, to June 30, 1968																			
Fiscal year 1968																			
Number of casualties	227	165	26	383	246	25	32	12	122	300	225	260	164	9	94	243	37	2,670	
Number of vessels involved	686	422	62	680	371	31	32	12	125	390	236	325	175	11	101	244	78	4,011	
Number of inspected vessels involved	216	156	23	280	158	23	6	9	26	130	155	37	81	8	83	157	20	1,577	
Number uninspected vessels involved	470	266	39	400	213	8	26	3	99	260	111	288	94	3	18	87	40	2,434	
PRIMARY CAUSE																			
Number of vessels																			
Personnel fault:																			
Pilots—State	24	3		1	3					8	11						2	52	
Pilots—Federal	5	4	1	6	2					6	8	1			2		1	36	
Licensed officer—documented seaman	69	9	18	16	20		2	3	1	72	30	12		2	1	22	2	283	
Unlicensed—undocumented persons	149	35	13	24	41	1	4		12	103	47	43		2	1	1	6	485	
All others	24	12	3	9	12	11			10	7	11	11	1		8		9	128	
Error in judgement—calculated risk	9	41		167	42					11	25	6			1		2	307	
Restricted maneuvering room	4	8		21	5					4	6	1					1	50	
Storms—adverse weather	3	45		92	23					42	16	47	166	4	4	2	2	446	
Unusual currents	12	7		36	4				1	4	4	2						70	
Sheer, suction, bank cushion	19	3		5	1					4	4						2	34	
Depth of water less than expected				4	34					27	40	5						110	
Failure of equipment	15	22		39	18	3	20	8	56	19	14	33	4	1	62	206	20	640	
Unseaworthy—lack of maintenance	1			1	2		3		14	2	3	90	1		11	7		135	
Floating debris—submerged object		1		11	70					3	2	8				2		97	
Inadequate tug assistance	1	10		15	2					1	4	1						34	
Fault on part of other vessel or person	351	222	23	232	90	7		1	9	80	39	48	3	2	8	1	26	1,142	
Unknown—insufficient information			1	1	2	6	3		22	1	2	17			3	3	2	62	
ADDITIONAL CONTRIBUTING FACTORS TO CAUSE OF CASUALTY																			
Hull and associated parts:																			
Plates and framing—steel	53	72	3	60	39				1	46	5	41	28	1	20		18	287	
Planks and framing—wood	12	11	4	3	23				3	17		64	4				2	140	
Tanks					3	7				4		3	1		6	1		28	
Holds and hatches												2	1		4	1		16	
Superstructure—bulkheads, decks	5	3		6	2				7	1		12	12		3			51	
Ladders, gangways, rails and guards				1								1	1					3	
Masts, booms, and cargo gear				4								4	4		12	1	1	27	
Rudder and stern tube		1		1	10				1	10		5	1		2	2		33	
Watertight closures												18	1					19	
Quarters and living spaces				1					5						1			7	
Navigation and safety:																			
Lookout	79	18	3	11	14					15	5							145	
Docks—piers—congested area	11	50		179	11					12	8	5	2					278	
Channels—restricted areas	151	43		91	60	3				83	100	7	1					643	
Buoys—aid to navigation	1	1		2	29					27	20	2						43	
Excessive speed	64	33	26	23	10					7	1	9			2		11	154	
Poor visibility	41	8	30	21	8					34	28	2			1		2	176	
Steering gear	32	9		12	8				1	16	10	6	1		4	8		107	
Radar	22	1	14	2	6					28	22	2						96	
Fathometer—depth of water		3			2				1	7	5							16	
Engine order telegraph				4	1													8	
Navigation equipment—other	10	7		6	3		1			87	10	3			1			78	
Navigation lights	19	12	2	3	9					2	1							46	
Navigation signals	146	2	6	3	5					1	1							163	
Weather (generally)	8	25		48	27					21	15	16	4	1	3	2		170	
Currents and tides	31	29	3	111	20					13	22	13	9		16		1	258	
Lifesaving equipment	5	3		1								3			15		4	40	
Firefighting equipment						2			3			2						7	
Miscellaneous:																			
Yard repairs												2						11	
Improper loading or stowage				1	2	11	1			5		37	25	7	6	2	2	98	
Tug assisting	66	36	1	99	36					30	13	26	1	1	3	1	1	314	
Anchor equipment	1	5		5	3				1	22	2	5	4		22	4		74	
Towing equipment	6	12		12	15					19	10	3	4		2	1	4	88	
Mooring equipment	1	12		35	7	1				1	3	8	4	1			33	106	
Fishing equipment	3								1			3						10	
Deck equipment—all other												1						1	
Engineering:																			
Main propulsion machinery	1	22		35	66		21	1	26	40	10	20	3	1	4	153	2	405	
Boiler parts and accessories	1	4		2	1		5	10	20	1		19			1	88		152	
Machinery—all other												10						10	
Tools and working spaces					1				15			6				1	1	21	
Generators and other electrical equipment						1	2	1	12	3					1	25		45	
Wiring, lights, controls	1					4	5		30	1	1	1			2	6	1	52	
Steward's department:																			
Galley and steward's department equipment							1	1	11									13	

See footnote at end of table.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS ¹—Continued

July 1, 1967, to June 30, 1968 Fiscal year 1968		Nature of casualty																	Total
		Collisions, crossings, meeting, and over- taking	Collisions, while anchored, docking, or undocking	Collisions, fog	Collisions with piers and bridges	Collisions, all others	Explosions and/or fire— cargo	Explosions and/or fire— vessel's fuel	Explosions and/or fire— boilers, pressure vessel	Explosions and/or fire— structure, equipment— all others	Grounding with damage	Grounding without damage	Foundering, capsiz- ings, and floodings	Heavy weather damage	Cargo damage	Material failure— structure and equipment	Material failure— machinery and en- gineering equipment	Casualty not otherwise classified	
TYPE OF VESSEL																			
Inspected vessels:																			
Passenger and ferry—large		1	1	2	11	4			1	4	4		2	1	2	9		45	
Passenger and ferry—small		7	6	2	3	14		2	7	3	3	8						61	
Freight		42	78	7	117	51	11	3	14	42	89	11	49	7	60	110	17	716	
Cargo barge		16	1	2	23	15	2		14	14	11	3	8		1	1	2	49	
Tankships		30	19	1	29	34	1	1	1	25	33	2	15		14	28	3	227	
Tank barge		117	39	3	85	29	9		2	35	11	7	3		4	2	5	351	
Public		1	5	5					1							1		13	
Miscellaneous		12	7	1	11	11			3	3	4	5	2			4	1	64	
Uninspected vessels:																			
Fishing		71	25	6	17	51		13	2	45	112	49	107	80		82	7	672	
Tugs		205	84	11	204	79	2	8	1	23	82	34	90	9	2	5	2	460	
Cargo barge		48	39	12	17	12	1		8	15	12	1			2	1	2	170	
Foreign		94	45	6	151	36	2		3	34	14	58	2	1	4		24	474	
Miscellaneous		52	73	4	12	35	3	5		20	17	2	33	4		2	7	271	
GROSS TONNAGE																			
300 tons or less		325	194	21	199	171	4	28	3	90	200	87	241	93	3	15	92	23	1,789
Over 300 to 1,000 tons		158	67	13	230	75	10		9	66	35	64	7	1	6	3	28	772	
Over 1,000 to 10,000 tons		151	119	18	205	87	15	3	5	21	93	83	16	45	5	60	108	22	1,051
Over 10,000 tons		52	42	10	46	38	2	1	4	5	31	61	4	30	2	20	46	5	399
LENGTH																			
Less than 100 feet		269	154	20	166	147	2	23	3	79	174	81	212	86	3	13	87	18	1,537
100 to less than 300 feet		312	135	18	335	134	13	5		23	132	49	102	20	1	11	13	38	1,341
300 to less than 500 feet		44	73	12	92	40	13	3	5	16	41	68	6	34	3	47	8	15	600
500 feet and over		61	60	12	87	50	3	1	4	7	43	68	5	35	4	30	36	7	833
AGE																			
Less than 10 years		315	159	22	250	128	10	6		34	113	80	76	57	6	19	49	22	1,348
10 to less than 20 years		209	119	9	189	97	7	8	2	29	96	45	101	47		19	46	20	1,042
20 to less than 30 years		105	98	22	147	93	11	13	10	45	112	108	69	64	4	54	124	24	1,103
30 years and over		57	46	9	95	53	3	5		17	69	33	79	7	1	9	23	12	520
LOCATION OF CASUALTY		Number of Casualties																	
Inland—Atlantic		28	25	4	59	51	10	5	6	20	72	59	34	2		9	20	8	467
Inland—Gulf		96	48	4	109	160	7	6	2	28	45	49	71	80	1	5	13	6	680
Inland—Pacific		10	14	2	37	27	2	10	1	20	57	44	34	2	2	9	28	3	307
Ocean—Atlantic		10	2	3	17	17			1	5	9	6	19	33	5	4	40		156
Ocean—Gulf		15	6	3	6	25	1	5		12	33	7	31	3		6	52	1	256
Ocean—Pacific		19	5	2	3	12		5	1	11	20	8	24	28	1	23	54	1	217
Great Lakes		7	12	3	72	19	1			4	19	19	3	4		11	18	4	191
Western rivers		34	19	3	71	21	3			17	27	5	42			4	1	6	253
Ocean—other		1	1		1	5				1	6	6	1	4		11	6		45
Foreign waters		7	33	2	25	9	1	1	1	4	11	22	1	8		13	14	13	165
TIME OF DAY																			
Daylight		95	96	14	214	135	10	20	8	67	146	127	132	86	5	68	147	23	1,363
Nighttime		127	61	12	146	99	13	11	4	47	144	78	118	72	3	24	87	11	1,060
Twilight		5	8		23	12	2	1		8	10	20	10	6	1	2	16	3	127
ESTIMATED LOSSES—UNITS OF THOUSANDS																			
Vessel		5,650	9,990	1,840	3,064	2,562	1,220	2,414	520	5,775	9,664	95	11,917	2,167	13	586	3,612	1,099	63,306
Cargo		407	298	74	228	30	743	1,003		15	252	13	1,217	584	203	7	98	14	5,186
Property		138	318	2	5,861	1,314	109	4		4,108	271	28	874	24	1	11	3	115	12,676
VESSELS TOTALLY LOST																			
Inspected		2					3			3	5		10	1					24
Uninspected		20	6	1	9	21	1	16	2	44	34		127	28		1		7	317

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-367.

STATISTICAL SUMMARY OF DEATHS/INJURIES DUE TO A VESSEL CASUALTY¹

Nature of casualty																		Total	
July 1, 1967, to June 30, 1968 Fiscal year 1968	Collisions, crossing, meeting and overtaking	Collisions, while anchored, docking, or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment—all others	Grounding with damage	Grounding without damage	Foundering, capsi- ngs, and floodings	Heavy weather damage	Cargo damage	Material failure— structure and equipment	Material failure— machinery and en- gineering equipment	Casualty not otherwise classified	Total	
Number of casualties.....	12	6	3	.....	5	6	5	1	17	1	.....	30	.....	.....	5	2	3	96	
Number of deceased/injured—inspected vessels.....	..5	..10	..7	.....	.....	3/7	..1	..1	4/3	..1	.....	38/..	.....	.....	3/..	..2	.....	48/37	
Number of deceased/injured—unin- spected vessels.....	22/2	4/4	2/..	.....	5/3	.....	1/5	.....	12/20	.....	.....	44/14	.....	.....	..92	.....	2/2	92/52	
Number of persons deceased/injured.....	22/7	4/14	2/7	.....	5/3	3/7	1/6	..1	16/23	..1	.....	82/14	.....	.....	3/2	..2	2/2	140/89	
PRIMARY CAUSE																			
Number of casualties																			
Personnel fault:																		1	
Pilots—State.....	1																	1	
Pilots—Federal.....																			
Licensed officer—documented sea- man.....	3																	12	
Unlicensed—undocumented persons.....	5	2	1														1	13	
All others.....	4	1	.....														1	12	
Error in judgement—calculated risk.....																		2	
Restricted maneuvering room.....																		2	
Storms—adverse weather.....																		5	
Unusual currents.....																		1	
Sheer, suction, bank cushion.....																		2	
Depth of water less than expected.....																		1	
Failure of equipment.....	1																	1	
Unseaworthy—lack of maintenance.....																		21	
Floating debris—submerged object.....																		5	
Inadequate tug assistance.....	1																	1	
Fault on part of other vessel or person.....	1																	2	
Unknown—insufficient information.....																		8	
DEATH/INJURED BY VESSEL TYPE																			
Number of Persons Deceased/Injured																			
Inspected vessels:																		1/1	
Passenger and ferry—large.....																		2/7	
Passenger and ferry—small.....																		37/9	
Freight.....	..6	..1	..6														..1		
Cargo barge.....																		1/11	
Tankships.....																		3/6	
Tank barges.....																		4/2	
Miscellaneous.....																		.....	
Uninspected vessels:																		40/15	
Fishing.....	1/																	2	
Tugs.....	1/2																	17/5	
Foreign.....	12/																	26/27	
Miscellaneous.....	8/	4/4																.....	
PARTICULARS OF PERSON DECEASED/INJURED																			
Papers of deceased/injured:																		21/21	
Licensed by Coast Guard.....	..1	..12	..1														2/5		
Documented by Coast Guard.....	..2																		102/61
No license or document.....	10/4	4/2	2/6	3/2	2/5	..6	.....	12/23	..1									15/2	
Other—unknown—foreign.....	12/																		
Status or capacity on vessel:																		11/9	
Passenger.....	5/	..2	..6														3/5		
Longshoreman—harbor worker.....																		110/61	
Crewmember.....	15/7	..12	2/1	3/2	1/3	1/6	..1	8/13									16/14		
Other and unknown.....	2/	4/																.....	
Activity engaged in:																		9/8	
Off duty.....	..1																		65/29
Deck department duties.....	12/5	..6	1/	..1	3/4	..2	.....	..7									5/8		
Engine department duties.....	2/	.....	.....														2/6		
Stewards department duties.....	.....	..4																1/1	
Handling cargo.....																		24/2	
Fishing.....																		.....	
Drills.....																		.....	
Passenger.....	4/	..1	..6														3/8		
Other and unknown.....	4/1	1/1																29/27	
Location of vessel:																		8/23	
At dock.....																		7/16	
At anchor.....	22/7	4/3	2/7	5/3	.....	1/3	.....	5/8	.....	7/12	..1							125/30	
Underv.....																		.....	
PART OF BODY INVOLVED																			
Head and upper limbs.....	..1/	1/5	..2														2/15		
Back and lower limbs.....	..2																		18
Multiple injuries (internal and external).....	..4	..9	..5	..1	2/5	1/5	.....	2/15	1/8									6/36	
Death—heart.....																		.....	
Death—drowning.....	8/	3/	2/	2/	.....	.....	.....	1/									59/		
Death—other.....	14/																		73/

¹ Statistics concerning recreational boating accidents are published in CG-357.

STATISTICAL SUMMARY OF DEATHS ON BOARD COMMERCIAL VESSELS¹

(Not Involving a Vessel Casualty)

		Nature of death																								
July 1, 1967, to June 30, 1968 Fiscal year 1968		Natural cause	Homicide	Suicide	Disappearance	Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects, falling, dropped, or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains, and strains	Cuts, lacerations, bruises, and punctures	Alterations and misconduct	Unknown or insufficient information		
Total	CAUSE OF DEATH	213	2	7	3	9	1	2	13	125	8	28	6	2		2	1	1	4				1	6		
434																										
19	Intoxication	3		2		1		1		11														2		
218	Physical deficiency or handicap	207				3	1		3	10																
18	Unsafe movement or posture									9		1						1								
32	Psychological—immaturity, insanity	1		5						23		1											1	1		
15	Unsafe practice	1							1	4	3	3	1				1		1							
4	Violation of law or regulation		2							1																
77	Human errors				2	5		1	7	42	3	9	2	2					2					1		
1	Decks—slippery or cluttered									1														2		
10	Weather conditions									8		1					1									
1	Poor maintenance or housekeeping											1														
1	Inadequate lighting										1															
4	Inadequate rails or guards									2		1							1							
16	Failure of equipment								1	2		12				1										
2	Inadequate supervision													2												
6	Inadequate life preservers									6																
1	Inadequate tools or equipment													1												
2	Inadequate protective equipment								1	1																
	Improper use of tools or equipment																									
7	Miscellaneous causes	1			1					5																
TYPES OF VESSELS INVOLVED																										
Inspected vessels:																										
49	Passenger and ferry—large	36		1		1				9									1					1		
18	Passenger and ferry—small	12		2						2		1												1		
159	Freight ships and barges	100	1	2		4			7	23	4	9	3			2		2					1	1		
33	Tankships and barges	16		1	1					10		2	1											2		
4	Public	3				1																				
18	Miscellaneous	9								4		1	2						1							
Uninspected vessels:																										
55	Fishing	18	1		2					31		1						1						1		
43	Tugs	11		1		1			3	22	2	2		1												
20	Foreign	4				2	1		1	5	2	5														
35	Miscellaneous	4						2	2	19		7					1									
TIME OF DAY																										
248	Daytime	128		3		5	1	1	9	59	3	20	4	2		2		1	4				1	5		
160	Nighttime	75	1	4	1	2		1	4	59	4	5	2				1							1		
26	Twilight	10			2	2				7	1	3														
PARTICULARS OF DECEASED																										
Papers of deceased:																										
60	Licensed by Coast Guard	52		1						5			1			1										
145	Documented by Coast Guard	82		4	1	4		1	5	33	2	5	2			1			1				1	3		
224	No license or document	78	2	2	2	5	1	1	8	85	5	22	3	2			1	1	3					3		
5	Other—unknown—foreign	1								2	1															
Status capacity on vessel:																										
57	Passenger	44		2		1				7		1				1								1		
40	Longshoreman—Harbor worker	5	1			4			3	10	2	12		1		1		1								
295	Crewmember	155	1	5	3	4		2	8	89	5	9	3	1		1		1	3				1	4		
42	Other	9				1			2	19	1	6	3	1										1		
Activity engaged in:																										
167	Off duty	111	2	3	2	3		1	2	41														2		
87	Deck department duties	23				2			1	35	7	6	1	2		1										
21	Engine department duties	13								2		1	1			1										
13	Stewards department duties	6		2	1					3																
25	Handling cargo	3				1				6		11	1													
26	Fishing	8		1						14																
	Drills																									
52	Passenger	41		1		1				7		1												1		
43	Other and unknown	8				2	1		1	17	1	8	3			1								1		
Location of vessel:																										
176	At dock	68	2	1		8	1	2	8	48	6	22	3	1		1			4					1		
29	At anchor	10		1	2				1	11		1	1	1		1								1		
229	Underway	135		5	1	1			4	66	2	5	2	1		1		1					1	4		
PART OF BODY INVOLVED																										
29	Head and upper limbs			1		6		1	6		3	11				1										
3	Back and lower limbs											1														
33	Multiple injuries (internal-external)		1			2	1	1	5	1	3	13		2		1			2					1		
194	Death—heart	189								4													1			
128	Death—drowning			4	3	1			1	116																
47	Death—other	24	1	2					1	4	2	3	4				1		1					8		

¹ Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD COMMERCIAL VESSELS¹ (Not Involving a Vessel Casualty)

		Nature of injury																		
		Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects, falling, dropped, or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Flooding and crushing	Heavy weather	Overexertion, sprains, and strains	Cuts, lacerations, bruises, and punctures	Alterations and misconduct	Unknown or insufficient information
July 1, 1967, to June 30, 1968 Fiscal year 1968																				
CAUSE OF INJURY																				
Total	2167																			
48	Intoxication	6	4	12	7	3		1		1		1			3		1	2	6	1
50	Physical deficiency or handicap	8	2	5	3			6		4							16	1	5	3
240	Unsafe movement or posture	16	1	18	43	3	2	6		29	1	6			2		103	7	3	3
153	Psychological—immaturity, insanity				2	2		2		2								4	139	2
210	Unsafe practice	23	2	12	29	2	1	47	3	6	11	21		6	17	1	10	13		6
6	Violation of law or regulation																		3	2
957	Human errors	140	25	135	102	6	8	155		67	21	39	2	31	68		63	56		39
113	Decks—slippery or cluttered	10	3	70	15			1			1							1		11
142	Weather conditions	4	3	21	22			21		20	4	3			17	5		1		10
20	Poor maintenance or housekeeping	3		5				5		3		2	1				1	5		
6	Inadequate lighting	3		1				1		1										
13	Inadequate rails or guards				6			1		2	1			1	1					
65	Failure of equipment	1	1	3	8			42		1	3	2					1	1		1
28	Inadequate supervision			2	3			9	1	1	3	4			1		1			3
	Inadequate life preservers																			
12	Inadequate tools or equipment	1	1		3			2				2			1			5		4
33	Inadequate protective equipment	1	1					10		1	2	2		1	2			5		2
50	Improper use of tools or equipment	1		1	4			11		2	13	2			2		1	11		2
21	Miscellaneous causes	1			1			12		2		3						1		1
TYPES OF VESSELS INVOLVED																				
Inspected vessels:																				
239	Passenger and ferry—large	31		39	22	1		31		13	4	8		1	11		28	9	20	21
15	Passenger and ferry—small			5	3	1		1		1					2			1		
1536	Freight ships and barges	169	42	207	181	7	10	227	1	106	37	70	2	20	83	5	150	85	98	56
159	Tankships and barges	11	1	19	27			17	3	6	5	7		3	6	1	15	8	22	7
16	Public	3		1	2			2		2							2	3	3	1
30	Miscellaneous	2		1	4			9		2	1		1		2		3	3		
Uninspected vessels:																				
80	Fishing	2		8	6			20		5	11	1		14	5		2	3	1	2
51	Tugs	1		5	4	4	1	16		4	1	2		2	4		2	3		2
1	Foreign							1												
21	Miscellaneous			1	3			6		1	2	1			1		3		2	1
TIME OF DAY																				
1,513	Daytime	145	20	187	177	8	7	249	4	99	55	72	3	29	83	4	170	72	56	73
557	Night/time	63	23	89	65	8	4	69		33	5	15		10	24	2	30	29	78	10
98	Twilight	11		10	7			13		8	1	2		1	7		5	11	13	8
PARTICULARS OF PERSON INJURED																				
Papers of person injured:																				
166	Lie used by Coast Guard	12	1	16	34	3	2	22	1	8	9	18	1	2	6	4	12	7	7	1
1,825	Documented by Coast Guard	200	42	252	200	8	8	259	3	123	40	67	2	20	96	2	189	96	133	85
176	No license or document	7		18	15	5	1	50		9	12	4		18	12		4	9	8	4
Other—unknown—foreign																				
Status or capacity on vessel:																				
17	Passenger			7	3			3		2					1		1			
13	Longshoreman—harbor worker	1			1	2		8		1										
2,114	Crewmember	218	43	276	245	14	11	315	4	135	60	89	3	39	111	6	203	112	145	89
19	Other			3				5		2	1				2		1	3		1
Activity engaged in:																				
391	Off duty	51	34	48	40	7		16		35		7			18	3	13	14	96	10
846	Deck department duties	62	7	118	119	7	10	209	4	42	26	16		28	37		90	50	18	8
471	Engine department duties	54	2	44	63		1	52		34	29	49	3	3	24	1	61	35	9	7
355	Steward's department duties	50		61	14			27		21		15			29	2	33	11	29	63
7	Handling cargo							4												
37	Fishing	1		4	3			11		2	4				1		1			1
19	Drills	1		2	4			2		1	1				3		3			1
15	Passenger			2	3			4		3	1	2		2	2		1	2	2	
26	Other and unknown			2	2	2														
Location of vessel:																				
899	At dock	79	34	111	92	10	7	172		50	16	36	1	19	47		76	35	89	24
115	At anchor	5	7	13	14	4	1	18		6	3	6			7		7	7	13	6
1,154	Underway	135	2	162	143	2	3	143	4	84	42	47	2	21	60	6	122	70	46	60

See footnote at end of table.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD COMMERCIAL VESSELS¹—Continued

(Not Involving a Vessel Casualty)

Total		July 1, 1967, to June 30, 1968 Fiscal year 1968	Nature of injury																			
			Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects, falling, dropped, or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Crushing and crushing	Heavy weather	Overexertion, sprains, and strains	Cuts, lacerations, bruises, and punctures	Altercations and misconduct	Unknown or insufficient information	
115	Part of body injured:																					
97	Head and neck	12	4	18	12	2		29		18	1								2	16	1	
160	Eye and face	1	1	11	4			30		2	7	4							5	29	3	
431	Arm and shoulder	23		33	20	1	1	22		15	1	8					10	9	13	4		
262	Hand	12	5	24	11	1		59		37	40	17	1	28	4		8	65	14	41	7	
308	Leg and hip	25	11	38	34	1	1	56		27	4	20	1	2	12	1	19	14	2	7		
285	Foot	31	7	32	44	2	1	63		27	4	20	1	2	12	1	19	14	2	7		
98	Back	44	4	66	35	1	1	5		15	1	3		1			96	1	6	6		
74	Body—external	8	3	12	16	1		12		3	1	13			1	2	8	3	11	4		
24	Body—internal	10	2	20	15	1		7	1	5	1						1		7	4		
291	Hernia	1								1							19			1		
22	Multiple body injuries	49	6	29	54	3	7	47	1	9	1	18	1	3	3	1	6	3	43	8		
	All other injuries	3		1	4	3		1	3			2						1	1	4		
ADDITIONAL CONTRIBUTING FACTORS TO CAUSE OF INJURY																						
431	Human element	23	7	59	34	4		47		28	15	18		2	22	1	32	11	107	21		
104	Decks—slippery or cluttered	4	1	64	18			7		7	1				1		2	3		3		
68	Weather conditions	9	2	13	10	2		6		4	1	2			10	1	3	3		2		
27	Poor maintenance or housekeeping	1	1	9	6			4									1	1		4		
27	Inadequate lighting	3		7	7	1	3	1		3							1	1		1		
10	Inadequate rails or guards			1	5						2							1		1		
12	Failure of equipment			2	3	1		4												2		
75	Inadequate supervision	5	1	4	10			26	3	3	2	2		2	2		11	3		1		
10	Inadequate tools or equipment	1		1	1			3		1	1						1			1		
34	Inadequate protective equipment	1		1	2	1		11		3	2	4		3	3		6	4		1		
55	Inproper use of tools or equipment	2		2	2			9		4	12	3		2	2		3	11		2		
328	Hull structure	25	9	131	72	2		26		11	1	4		3	5	1	26	9		3		
105	Holds, hatches, tanks	10		11	35	1	10	9	3	4	2	1			8		10	1				
306	Ladders, gangways, stairs	180	34	5	20	7		5		18		2		3	7		23	2				
146	Mast, booms, cargo gear	5		15	19		1	55		7	5	2		6	7		11	11		2		
107	Watertight closures			12	7		1	14		17					46		5	4		1		
138	Living spaces	9	1	24	28			5	26		4				10	3	10	6	10	2		
41	Fishing equipment			3	3			13		2	8			11	2		1	1				
19	Navigational equipment	2	2	4	3	1		4							1		2					
31	Lifesaving equipment	1		4	9			5		1	1	1			1		6	2		1		
12	Firefighting equipment				2			5		1							3					
1	Communications equipment																	1				
	Yard repairs																					
83	Inproper loading, stowage, and ventilation	1		7	24	1		21	1	3	2	2			5		9	6		1		
27	Ground tackle	1		2	1			11		1	1			1	1		4	4				
20	Tugs and towing equipment				1			10		1				4			3					
175	Mooring equipment			13	7		1	94		3	5	2		14	4		18	13				
74	Miscellaneous deck department equipment	3		5	10	1		19		3	1	3		6	4		13	6				
11	Main propulsion machinery			1	2	1		3							1			2				
93	Boiler parts and accessories	1		4	12			5		7	1	41	1		3		8	6		4		
235	Auxiliary machinery	17		20	26		1	28		28	26	14		1	16		27	16	2	3		
32	Electrical equipment				4			8		6				2	2		7	3				
212	Galley equipment	16		36	9			14		10		18			16		10	9	9	56		
26	Causes not otherwise classified	3		3	6			3		8							1	1	1			

¹ Statistics concerning recreational boating accidents are published in CG-357.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS*

	Nature of Casualty																		Total
	Collisions, crossing, meeting and overtaking	Collisions, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total	
Number of casualties.....	160	154	42	365	298	26	29	14	99	282	180	230	50	8	126	252	38	2,353	
Number of vessels involved.....	483	344	108	540	418	33	29	14	100	336	198	255	51	8	128	252	76	3,373	
Number of inspected vessels involved.....	147	135	33	248	164	23	7	12	23	113	130	33	47	8	93	135	25	1,376	
Number uninspected vessels involved.....	336	209	75	292	254	10	22	2	77	223	68	222	4		35	117	51	1,997	
Primary cause																			
Personnel fault:																			
Pilots—State.....	10	4	10	2						3	3						1	33	
Pilots—Federal.....		1		1	1					1							1	5	
Licensed officer—documented seaman.....	31	9	8	9	6	2	1	4		15	9	5	1	1	2	18		121	
Unlicensed—undocumented persons.....	83	19	14	18	21		4		7	63	8	13			2		10	262	
All others.....	12	7	9	15	11	12			7	14	9	10	1	1	9	7	3	127	
Error in judgment—calculated risk.....	20	44	9	119	49	1		1	1	69	61	9				1	2	386	
Restricted maneuvering room.....	11	22		95	13	2				11	22						1	177	
Storms—adverse weather.....	3	19		10	28					38	12	26	47	6	10	1	2	212	
Unusual currents.....		1	3	23	2			1		3	1							34	
Sheer, suction, bank cushion.....	17			3	3					4	4							31	
Depth of water less than expected.....	2	1		3						20	37							63	
Failure of equipment.....	9	16		30	7	6	5	2	23	21	8	26	1		79	134	9	376	
Unseaworthy—lack of maintenance.....		11		2	2	1	19	6	49	5	1	116	1		23	87	1	324	
Floating debris—submerged object.....					147					3	1	2				2	1	157	
Inadequate tug assistance.....	1	6		48	12					14	5	18					4	105	
Fault on part of other vessel or person.....	282	183	55	182	111	5			2	50	17	33			2	1	36	947	
Unknown—insufficient information.....	2				5	4			4	2		2			1	1	2	23	
Additional contributing factors to cause of casualty																			
Hull and associated parts:																			
Plates and framing—steel.....	6	8	2	9	34					8		34	11		29	1	3	145	
Planks and framing—wood.....	4	2		2	32				2	5		69	2		1			119	
Tanks.....	1			2		4			3	1		7	4		6		3	31	
Holds and hatches.....						5				1		8	4	2	5			25	
Superstructure—bulkheads, decks.....	1	3			1	3			7	1		17	27		6	1	3	70	
Ladders, gangways, rails and guards.....	1											2			2			5	
Masts, booms and cargo gear.....												1	2		13	2	2	20	
Rudder and stern tube.....	1	1		1	8					7		2			12	7	1	40	
Watertight closures.....										1		33	1	1	2			38	
Quarters and living spaces.....									6			1			1			8	
Navigation and safety:																			
Lookout.....	50	19	10	2	18					8	2	1						116	
Docks/piers—congested area.....	32	98	2	183	36			1	1	25	22	7	1				6	416	
Channels—restricted areas.....	157	35	25	99	73					75	90	4					2	550	
Buoys—aims to navigation.....	1				10					10	12							33	
Excessive speed.....	25	12	27	9	4					3	5	3						90	
Poor visibility.....	7	8	15	9	6					23	19	2					1	91	
Steering gear.....	16	5	1	10	2					22	6	2			4	4		72	
Radar.....	6	4	19	1	1				1	4	2							38	
Fathometer—depth of water.....					17					2			1					24	
Engine order telegraph.....		1		8	1					4								14	
Navigation equipment—other.....	9	1	1	1	3					50	12	1					1	78	
Navigation lights.....	7	3	1		10					1		1						23	
Navigation signals.....	117	3	27	2	11							4						164	
Weather (generally).....	11	17	1	72	26					28	25	32	3		7	1	3	226	
Currents and tides.....	48	36	4	141	29	2				32	31	7	4	3			4	334	
Lifesaving equipment.....									1						11			23	
Firefighting equipment.....		1		1		2	1		5						1			11	
Miscellaneous:																			
Yard repairs.....				2	1	8			8		1	5	1		2	12	1	41	
Improper loading or stowage.....		2		6	16				2	2	1	34	11	8	15	1	2	100	
Tug assisting.....	161	42	21	174	74	3			2	62	19	25			2		4	599	
Anchor equipment.....	2	46	4	5	10					35	7	4	1		18	2	2	136	
Towing equipment.....	5	2		8	8					7	2	8						40	
Mooring equipment.....	3	83	4	25	20	2			1	10	6	20	3	1	2		12	192	
Fishing equipment.....	6		1	1	3					6	1	6			1		5	30	
Deck equipment—all other.....		1													1			2	
Engineering:																			
Main propulsion machinery.....	2	14		15	76		17		12	18	2	18	1		22	148	9	354	
Boiler parts and accessories.....		2		3	1	3	17	21	7	1	2	11	2		4	131		205	
Machinery—all other.....					4				1			32	1		1			39	
Tools and working spaces.....							11		21			7				2	1	42	
Generators and other electrical equipment.....				3		3	7		42	3	2		2		5	32		99	
Wiring, lights, controls.....		1		1	4		1		15	1					2	3	1	30	
Steward's department:																			
Galley and steward's department equipment.....								1	22									23	

See footnote at end of table.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS*—Continued

	Nature of casualty																		
	Collisions, crossing, meeting and overtaking	Collisions, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Total	
1 July 1966 to 30 June 1967 Fiscal year 1967																			
Type of vessel																			
Inspected vessels:																			
Passenger and ferry—large	8	6	1	11	6		3	1	9	3	2				1	1		32	
Passenger and ferry—small	20	69	16	112	82	12	3	10	10	38	74	5	5	6	72	93	15	665	
Freight	5	9	2	7	14					9	5				2		2	66	
Tankships	11	14	2	24	25	2	1	1	2	20	32	6	12	1	14	30	2	199	
Tank barge	98	27	11	80	22	8			1	33	9	4	1		1	1	4	309	
Public	1	4		3	4					1	3	2	2		3	4		27	
Miscellaneous	4	3	1	4	4				1	3	1		1			6	2	32	
Uninspected vessels:																			
Fishing	53	30	7	12	51		15		39	94	20	98	3		16	111	16	565	
Tugs	108	52	28	172	103	3	4	1	14	69	16	61			3	4	6	704	
Cargo barge	51	26	10	69	32	2			2	25	5	37	1		9		23	492	
Foreign	33	63	25	25	13	4			4	25	23	1			1	1	4	222	
Miscellaneous	31	34	5	14	55	2	3	1	18	10	4	25			6		2	215	
Gross tonnage																			
300 tons or less	231	124	34	184	200	3	26	2	76	173	44	197	4		19	117	24	1,458	
Over 300 to 1,000 tons	130	54	21	124	68				9	55	14	35	3		17	3	26	588	
Over 1,000 to 10,000 tons	98	120	43	169	112	18	2	10	11	80	82	15	21	5	59	87	20	952	
Over 10,000 tons	24	46	10	63	38	3	1	2	4	28	58	8	23	3	33	45	6	395	
Length																			
Less than 100 feet	204	105	28	159	173	3	25	2	68	155	33	185	3		18	113	23	1,297	
100 to less than 300 feet	218	89	43	200	121	12	1		19	102	34	55	6		18	13	30	964	
300 to less than 500 feet	35	87	23	76	70	16	1	9	8	44	57	7	15	5	46	70	17	586	
500 feet and over	26	63	14	105	54	2	2	3	5	35	74	8	27	3	46	56	6	529	
Age																			
Less than 10 years	198	111	47	193	134	12	8	1	18	94	48	55	16	3	16	71	31	1,056	
10 to less than 20 years	148	97	30	148	113	9	12	1	34	89	39	83	2		21	60	28	904	
20 to less than 30 years	100	94	21	132	130	10	5	11	29	97	83	66	30	5	71	109	20	1,013	
30 years and over	37	42	10	67	41	2	4	1	19	56	28	51	3		20	12	7	400	
Location of casualty																			
Inland—Atlantic	17	23	7	53	40	6	3	2	16	67	49	29	1		15	10	5	241	
Inland—Gulf	80	40	11	122	83	5	9	4	28	45	45	55		1	15	28	6	311	
Inland—Pacific	6	25	4	31	47	4	0	1	17	47	21	35	3		11	9	3	257	
Ocean—Atlantic	2	1	7	1	1				4	8	6	14	15	2	16			110	
Ocean—Gulf	10	3		4	25	1	7		13	16	2	39	1		14		5	247	
Ocean—Pacific	5	1	3		18	3	2	2	9	29	2	25	21	4	19	43	2	180	
Great Lakes	4	11		64	14	1	2	1	4	32	27	3			18	10	3	141	
Western rivers	26	10	6	54	21	3		1	4	19	5	24			7	1	8	187	
Ocean—other				1	5				1	4	1	4	2		3		1	29	
Foreign waters	10	40	4	35	34	3		3	3	15	22	2	7		10	16	5	212	
Time of day																			
Daylight	75	91	24	219	165	19	15	5	54	136	97	134	27	5	83	136	26	1,311	
Nighttime	79	58	18	128	130	6	9	6	39	128	72	84	23	3	39	101	12	925	
Twilight	6	5		18	13	1	5	3	6	18	11	12			4	15		117	
Estimated losses—units of thousands																			
Vessel	4,038	3,479	3,260	5,381	3,499	457	4,024	185	5,058	10,566	20	6,777	770	7	1,413	3,187	979	53,090	
Cargo	3,152	509	51	218	102	275	782		188	1,700		1,325	46	1,124	65	3	261	9,801	
Property	34	346		5,857	187	1	4		262	273	5	71	20	3	10		5,169	12,262	
Vessels totally lost																			
Inspected	1					2	2		4	2		6			1			18	
Uninspected	17	11	4	3	36	1	20		42	50		88			4			276	

*Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF DEATHS/INJURIES DUE TO A VESSEL CASUALTY*

1 July 1966 to 30 June 1967 Fiscal year 1967	Nature of casualty																	Total
	Collisions, crossing, meeting and overtaking	Collisions while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fires—cargo	Explosion and/or fires—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment all others	Grounding with damage	Grounding without damage	Foundering, capsizing and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	
Number of casualties.....	10	6	3	2	7	4	2	4	12	4	.....	24	1	.....	9	4	4	96
Number of deceased/injured—inspected vessels.....	..8	.....	..1	..1	.....	4/3	8/2	2/4	3/3	.....	.....	3/..	.....	.....	28/3	..5	7/2	63/32
Number of deceased/injured—uninspected vessels.....	42/16	1/9	1/1	..1	5/7	9/1	..3	.....	11/12	..6	.....	44/6	..3	.....	9/16	1/..	..5	123/86
Number of persons deceased/injured.....	42/24	1/9	1/2	..2	5/7	13/4	8/5	2/4	14/15	..6	.....	47/6	..3	.....	37/19	1/5	7/7	178/118
Primary cause	Number of casualties																	
Personnel fault:																		
Pilots—State.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Pilots—Federal.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Licensed officer—documented seaman.....	2	2	2	.....	2	.....	.....	1	2	.....	.....	3	.....	.....	.....	.....	.....	9
Unlicensed—undocumented persons.....	4	1	.....	.....	1	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	13
All others.....	3	.....	.....	.....	2	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	8
Error in judgment—calculated risk.....	.....	2	.....	2	.....	1	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	9
Restricted maneuvering room.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Storms—adverse weather.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	7
Unusual currents.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sheer, suction, bank cushion.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Depth of water less than expected.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Failure of equipment.....	.....	1	.....	.....	1	2	1	.....	5	2	.....	2	.....	.....	7	2	.....	23
Unseaworthy—lack of maintenance.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	11	.....	.....	.....	.....	.....	19
Floating debris—submerged object.....	.....	.....	.....	.....	1	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	1
Inadequate tug assistance.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2
Fault on part of other vessel or person.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Unknown—insufficient information.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	2	3
Death/injured by vessel type	Number of persons deceased/injured																	
Inspected vessels:																		
Passenger and ferry—large.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/..	.....	.....	.....	.....	.....	1/5
Passenger and ferry—small.....	..5	.....	..1	.....	.....	.....	.....	1/2	2/2	.....	.....	.....	.....	.....	28/3	..5	7/2	38/16
Freight.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cargo barge.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tankships.....	..2	.....	.....	..1	.....	4/3	8/2	1/2	1/1	.....	.....	.....	.....	.....	.....	.....	.....	10/8
Tank barges.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2/..	.....	.....	.....	.....	.....	6/3
Public.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Uninspected vessels:																		
Fishing.....	.....	1/..	.....	.....	..1	.....	..3	.....	2/4	..3	.....	28/4	..3	.....	1/..	.....	.....	32/18
Tugs.....	.....	..1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19/7
Foreign.....	40/11	..2	.....	.....	.....	3/..	.....	.....	3/3	.....	.....	.....	.....	.....	6/..	.....	.....	45/35
Miscellaneous.....	2/5	..6	1/1	.....	5/6	2/1	.....	.....	6/5	.....	.....	9/..	.....	.....	2/1	.....	..1	27/26
Particulars of person deceased/injured	Number of persons deceased/injured																	
Papers of deceased/injured:																		
Licensed by Coast Guard.....	..2	..1	..1	.....	.....	6/1	2/..	1/2	1/1	.....	.....	.....	.....	.....	8/1	..1	2/..	14/6
Documented by Coast Guard.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
No license or document.....	2/11	1/6	..1	.....	5/7	7/3	..3	1/2	11/14	..6	.....	43/6	..3	.....	20/1	..4	5/1	43/14
Other—unknown—foreign.....	40/11	..2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9/17	.....	.....	81/81
Status or capacity on vessel:																		
Passenger.....	..8	..3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/11
Longshoreman—harbor worker.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10/23
Crewmember.....	2/4	1/4	1/2	..2	..3	7/2	8/5	1/2	6/7	..3	.....	89/6	..3	.....	35/2	..5	7/5	107/55
Other and unknown.....	40/12	..2	.....	.....	5/4	.....	.....	.....	7/5	..3	.....	6/..	.....	.....	2/1	.....	..2	90/29
Activity engaged in:																		
Off duty.....	1/1	..2	.....	.....	.....	.....	7/5	.....	3/2	.....	.....	.....	.....	.....	25/1	.....	..1	39/17
Deck department duties.....	1/..	.....	..2	.....	.....	2/..	.....	.....	1/..	..2	.....	4/1	.....	.....	3/..	.....	.....	11/7
Engine department duties.....	.....	..2	1/..	.....	.....	1/..	1/..	1/2	2/2	.....	.....	.....	.....	.....	.....	..9	7/..	16/13
Stewards department duties.....	..1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/6
Handling cargo.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12/19
Fishing.....	.....	..2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19/6
Drills.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/4
Passenger.....	..5	..1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/9
Other and unknown.....	40/14	1/2	.....	.....	5/6	..1	.....	1/2	8/6	..4	.....	16/..	.....	.....	7/1	.....	..2	78/38
Location of vessel:																		
At dock.....	.....	..3	.....	.....	..2	13/4	.....	2/4	6/7	.....	.....	.....	.....	.....	2/16	1/..	..5	24/41
At anchor.....	.....	1/2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/1	.....	.....	8/11
Underway.....	42/24	..4	1/1	..2	5/5	.....	8/5	.....	2/3	..5	.....	47/6	..3	.....	34/2	..4	7/2	146/66
Part of body involved	Number of persons deceased/injured																	
Head and upper limbs.....	..3	.....	.....	.....	..1	2/..	..1	..1	..2	.....	.....	.....	.....	.....	.....	.....	.....	2/15
Back and lower limbs.....	..3	.....	.....	.....	..3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7/21
Multiple injuries (internal and external).....	..18	..5	.....	.....	.....	8/4	8/3	2/1	9/12	..5	.....	.....	.....	.....	.....	.....	.....	35/82
Death—heart.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Death—drowning.....	1/..	1/..	.....	.....	2/..	2/..	.....	.....	5/..	.....	.....	41/..	.....	.....	36/..	.....	.....	88/..
Death—other.....	41/..	.....	1/..	.....	3/..	1/..	.....	.....	.....	.....	.....	6/..	.....	.....	1/..	.....	.....	53/..

*Statistics concerning recreational boating accidents are published in CG-357.

STATISTICAL SUMMARY OF DEATHS ON BOARD COMMERCIAL VESSELS*

(Not Involving a Vessel Casualty)

			Nature of death																								
1 July 1966 to 30 June 1967 Fiscal year 1967			Natural cause	Homicide	Suicide	Disappearance	Ships and falls	ladders	gangways	on deck	Ships and falls	other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns (caught in lines, chains or wire ropes)	Punching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and fractures	Altercations and misconduct	Unknown or insufficient information	
Total	Cause of death	473																									
28	Intoxication	5			1	1	1		3		3	8			2	2											2
226	Physical deficiency or handicap	220			1	2	1				1	4			1												
5	Unsafe movement or posture										1	3															
46	Psychological immaturity, insanity		5	16	1						1	23			2	2	5		1								1
18	Unsafe practice		1								1	5			1	1											
2	Violation of law or regulation										5	49	9	2	2	3			2	1	2	3				1	1
87	Human errors					1	3				5	49	9	2	2	3			2	1	2	3				1	1
7	Decks—slippery or cluttered										1	3															
6	Weather conditions						1	1			1	3															
	Food maintenance or housekeeping																										
1	Inadequate lighting										1	2			1	1											
7	Inadequate rails or guards										1	2			1	1				1							
19	Failure of equipment										2	4			11	5	2	2			1	1	1				
15	Inadequate supervision																										
2	Inadequate life preservers																										
2	Inadequate tools or equipment																		1								
1	Inadequate protective equipment										1																
1	Improper use of tools or equipment												1														
3	Miscellaneous causes												3														
Types of vessels involved																											
Inspected vessels:																											
55	Passenger and ferry—large	43			6								3		3												
19	Passenger and ferry—small	10			3		1						3		1												
172	Freight ships and barges	104	2		4	2	5	3	10	19	3	4	8	5	1						2					1	2
43	Tankships and barges	26			4	1						2			4					1							1
7	Public	4																									
14	Miscellaneous	4									1	4	1	2						1	1						
Uninspected vessels:																											
59	Fishing	14	4			1			2	32			2		2						3						1
46	Tugs	15								27			3		3												
28	Foreign	2			1				1	10			6	2	2	1						1					
52	Miscellaneous	3							2	19			1	6	1						1						
Time of day																											
267	Daytime	135	5	7	1	3	2	12	54	11	17	3	2	2	2	2	2	2	2	2	4					1	4
184	Nighttime	82	1	11	3	2	3	4	54	3	8	9		3					2	2	1						
22	Twilight	8			1				12					1													
Particulars of deceased																											
Papers of deceased:																											
74	Licensed by Coast Guard	59			3		1	1			1	6			1						1	1	1				5
163	Documented by Coast Guard	95	2		6	3	1	4			8	24	3	3	7	1				1	1	1				1	2
214	No license or document	70	4		8	2	4				7	79	7	21	3	1				1	1	2					
22	Other—unknown—foreign	1			1							11	4	1	2					2							
Status or capacity on vessel:																											
61	Passenger	43	2	8	1	1					6																1
31	Longshoreman—Harbor worker	2					3				3	8		7	6		1										1
349	Crewmember	175	4	10	4	2	5	12	96	7	9	9	1					4	1	3	3					1	3
32	Other	5						1	10		12	3							1								
Activity engaged in:																											
177	Off duty	111	1	6	4	1	5	2	36	1		3									1						2
99	Deck department duties	26	1	1				8	38	6	7	4	1						2	1		2					1
32	Engine department duties	19	1						8	3											1						
16	Stewards department duties	11	1						4																		
14	Handling cargo	1				1			1	4	3	3		1													
30	Fishing	10							1	12																	1
3	Drills	2							1																		
59	Passenger	40	2	8	1	1		7																			
43	Other and unknown	5			1	2			3	13	1	14	3							1							
Location of vessel:																											
176	At dock	65	2	2		4	5	11	46	8	15	8	1						4			2				1	2
37	At anchor	14						1	13	1	4	1								1	1	1					
260	Underway	146	4	16	5	2		4	61	6	7	3	1							1	2	1					2
Part of body involved																											
6	Head and upper limbs										1		1	3							1						
	Back and lower limbs																										
3	Multiple injuries (internal and external)						1				1		1														
195	Death—heart	194										1															
116	Death—drowning																										
153	Death—other	31	6	11	5	5		13	20	12	21	12	2						4	2	2	3				1	1

*Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD COMMERCIAL VESSELS* (Not Involving a Vessel Casualty)

		Nature of injury																		
1 July 1966 to 30 June 1967 Fiscal year 1967		Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects, falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, cables or wire ropes	Punching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Alterations and misconduct	Unknown or insufficient information
Total	Cause of injury	1966																		
74	Intoxication	14	10	8	17	2	1	1		4		1			2		1	4	8	1
22	Physical deficiency or handicap	4	1	3	4			1		2										6
165	Unsafe movement or posture	6	3	6	27	3	1	4		5							108	1	17	12
29	Psychological immaturity, insanity									1	1	2						4		2
95	Unsafe practice	22	3	5	23	2		12	1	1	5			7	2		4	4		
	Violation of law or regulation																			
897	Human errors	129	15	65	136	6	7	124		64	8	44		29	64		36	57	80	33
151	Decks—slippery or cluttered	16	3	98	47		1			6		1		1			5	3		
154	Weather conditions	10	4	12	43	1		10		41	1	6		1	19	2	1	2		1
61	Poor maintenance or housekeeping	7	1	17	15			4		3		1					3	11		
20	Inadequate lighting	4		3	8		2			3										
10	Inadequate rails or guards	2		2	1					1				1						2
107	Failure of equipment	5		2	14			59		2	3	14		1	3		2	4		
97	Inadequate supervision			3	5			53		8	1	12		7	2					
	Inadequate life preservers																			
7	Inadequate tools or equipment						1						1				1	1		2
23	Inadequate protective equipment							4										9		2
72	Improper use of tools or equipment			1	3		1	21		6	12	4		1	3		3	13		4
4	Miscellaneous causes							2		1										1
Types of vessels involved																				
247	Inspected vessels:																			
16	Passenger and ferry—large	25	4	36	35		1	25		24	2	15		1	17		26	15	10	11
1417	Passenger and ferry—small	2		2	5			4		1							1			
145	Freight ships and barges	162	32	129	270	11	11	193		108	22	64	1	30	64	1	124	91	76	30
27	Tankships and barges	20	3	15	20			22		8	6	10			7		8	5	15	6
26	Public	7		3	4			4		1		1					3	1	1	2
	Miscellaneous		1	1	1	1		10		1		2		1	2		3	3		
	Uninspected vessels:																			
57	Fishing			4	2	1		21		2	2			11	3			2	1	8
32	Tugs	1		2	3	1	1	12		2				4	1	1		2		
3	Foreign				1			1												
18	Miscellaneous	2		3	1			4		2		1		2				1		1
Time of day																				
1389	Daytime	148	14	115	245	7	9	229	1	94	26	76	1	37	77	1	130	88	39	52
505	Nighttime	62	20	67	89	6	5	54		45	5	15		10	14	1	30	24	53	5
94	Twilight	9	6	11	10	2		13		8		3		2	4		5	8	13	
Particulars of person injured																				
Papers of person injured:																				
187	Licensed by Coast Guard	22	5	15	33		2	22		11	6	20		4	9		10	13	7	8
1654	Documented by Coast Guard	185	35	167	292	12	11	228		130	23	69	1	31	80	1	152	102	94	41
145	No license or document	12		11	18	3	1	46	1	6		5		14	5		5	5		8
2	Other—unknown—foreign				1										1					
Status or capacity on vessel:																				
16	Passenger	4		2	7					1		1								1
15	Longshoreman—harbor worker	2		1	1			10												
1945	Crew member	212	40	190	335	1	15	283	1	145	31	90	2	49	94	1	184	120	105	54
12	Other	1						3		1		2			1		1			2
Activity engaged in:																				
374	Off duty	56	38	33	71	6	1	11		30		7		22			9	18	66	6
74	Deck department duties	61	2	90	127	7	9	186	1	59	12	10		87	29	1	80	42	11	6
419	Engine department duties	54		23	69		3	52		25	17	59	1	2	13		41	37	10	13
26	Stewards department duties	35		34	80			18		25		14		1	21		30	19	15	26
	Handling cargo	1		3	10			8		1	1	1		2						
	Fishing			3	1	1		15		1				8	3			1	1	3
	Boats	1		3	5			5		3	1			1	3		2			
	Passenger	4		1	6			7		1		1		1						1
	Other and unknown	7		3	5	1	1	7		2		2		2		1	3	3	2	1
Location of vessel																				
	At dock	81	27	75	113	11	10	144	1	45	5	37		22	31		55	40	58	21
	At anchor	28	12	24	32	2		20		15	4	11	1	5	5	1	18	20	16	8
	At sea	115	1	94	199	2	4	132		87	22	46		22	59	1	92	60	31	28

* Merchant and pleasure boating accidents are published in CG-887

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD COMMERCIAL VESSELS*—Con.
(Not Involving a Vessel Casualty)

1 July 1966 to 30 June 1967 Fiscal year 1967		Nature of injury														
		Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects, falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Punching and crushing	Heavy weather
Total	Part of body injured:															
142	Head and neck	21	3	15	19	2		30		15	2	2		1		
57	Eye and face			3	7			11				8				
167	Arm and shoulder	23	3	25	35	1	1	28		14	1	7		2		
384	Hand	15	2	13	19			52		35	21	11	1	29		
262	Leg and hip	20	7	34	65	5	2	61		21	5	8		7		
282	Foot	37	10	27	44	2		57		20	1	13		10		
256	Back	49	1	34	51	1	2	7		11		1		1		
121	Body—external	12	2	12	29			13		8		20				
115	Body—internal	16	3	14	25	2	3	16		15				1	1	
12	Hernia							1		1						
166	Multiple body injuries	23	3	15	45	2	3	19		7	1	22		3	1	
24	All other injuries	3			5		1	1								
Additional contributing factors to cause of injury																
287	Human element	22	7	12	26	2	1	32		12	3	16		4	13	
43	Decks—slippery or cluttered	1	1	18	14	1				3						
39	Weather conditions	2	3	14	10			3		1	1					
23	Poor maintenance or housekeeping	2		6	7			3						1		
8	Inadequate lighting		1	2	4											
5	Inadequate rails or guards	1			1		1									
5	Failure of equipment				4			1								
35	Inadequate supervision	1	1		4			11		1	2	7		1	2	
1	Inadequate tools or equipment									1						
9	Inadequate protective equipment				2			3				2				
15	Improper use of tools or equipment	1			2			6			2	1				
283	Hull structure	14	1	112	93			5		32				1	6	
153	Holds, hatches, tanks	12		12	56		14	15	1	8		6		11		
291	Ladders, gangways, stairs	199	39	3	6			6		10				2		
145	Masts, booms, cargo gear			15	21		7	46		14	3	2		10	3	
106	Watertight closures	1		7	15			10		13				51	2	
201	Living spaces	15		23	78			4		26		6		18	11	
33	Fishing equipment				1			14		1	1			10	3	
18	Navigational equipment	1			5					4				1		
34	Lifesaving equipment			2	9			9		3	1	1		4	3	
2	Firefighting equipment									1						
1	Communications equipment															
1	Yard repairs	1														
69	Improper loading, stowage and ventilation	4		12	19			12	1	4		3		5		
16	Ground tackle	1			1			4		2				3	2	
47	Tugs and towing equipment							28		3				8	1	
119	Mooring equipment			13	5	2		6		6				10		
227	Miscellaneous deck department equipment	6		12	36	2	2	85		18	6	4		11	6	1
12	Main propulsion machinery							3								
82	Boiler parts and accessories	2		1	7			9		5		46				
318	Auxiliary machinery	36		13	61			47		26	22	27		2	11	
21	Electrical equipment	1						6		1	2	2		2		
206	Galley equipment	10		18	36			16		15		17		1	15	

*Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS*

	Nature of casualty																		Totals
1 July 1965 to 30 June 1966 Fiscal year 1966	Collisions, crossing, meeting and overtaking	Collisions, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire— cargo	Explosion and/or fire— vessel's fuel	Explosion and/or fire— boilers, pressure vessel	Explosion and/or fire— structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	Cargo damage	Material failure— structure and equipment	Material failure— machinery and engineering equipment	Casualty not otherwise classified	Totals	
Number of casualties	151	141	31	272	327	31	23	10	111	302	251	315	69	4	98	243	35	2,408	
Number of vessels involved	453	304	71	376	467	34	23	10	118	364	270	351	64	4	99	243	42	3,293	
Number of inspected vessels involved	137	128	32	175	183	23	4	10	24	131	173	29	51	4	82	136	28	1,350	
Number of uninspected vessels involved	316	176	39	201	284	11	19		94	233	97	322	13		17	107	14	1,943	
Primary cause																			
Personnel fault:																			
Pilots—State	14	1	4		2					4	8	1					5	39	
Pilots—Federal	2	3	4	1	3					4	1						1	19	
Licensed officer—documented seaman	29	6	12	15	8	2	1	1	1	23	9	1		3	3	16	1	131	
Unlicensed—undocumented persons	54	10	13	5	9	1	3		5	53	9	12				3	1	177	
All others	28	8	5	20	13	14	1		29	10	15	14			11	5	11	257	
Error in judgment—calculated risk	23	26	3	71	34					40	51	5	1				7	219	
Restricted maneuvering room	9	41		75	24					12	40	1					4	374	
Storms—adverse weather		22		17	14	1			1	71	14	113	60		10	2	1	50	
Unusual currents	2	4		2	3					5	6	3						36	
Sheer, suction, bank cushion	13	4		14	14					36	54	1						100	
Depth of water less than expected	1			5	3					20	19	14	2		53	119	3	311	
Failure of equipment	6	14		20	11	3	3		24	20	19	14			14	94	2	340	
Unseaworthy—lack of maintenance				3	3	3	15	9	49	9	7	133	1	1			1	153	
Floating debris—submerged object				3	136				1	3	2	8						167	
Inadequate tug assistance	5	13		25	41				17	11	23	18				1	5	137	
Fault on part of other vessel or person	265	149	30	90	112	3			4	50	18	2			2		1	746	
Unknown—insufficient information	2	3			5	7			4	1		2			2	3		29	
Additional contributing factors to cause of casualty																			
Hull and associated parts:																			
Plates and framing—steel	1	11		9	40				1	8	2	65	15		26	4	4	186	
Planks and framing—wood	1	2		3	22				5	7		62	1		6	1	1	105	
Tanks				2	1	7			1	1		12	3	3	5	2		29	
Holds and hatches					6				4	1		7	4	1	5	1		53	
Superstructure—bulkheads, decks					2	1			7	1		14	22		2	3		5	
Ladders, gangways, rails and guards												1	3				3	27	
Masts, booms and cargo gear				1					1			2	1		18	10		39	
Rudder and stern tube	1			1	8					11		2	1		5			62	
Watertight closures		1		1	1							53	2	2	2	1		17	
Quarters and living spaces									14			2	1						
Navigation and safety:																			
Lookout	30	9	6	2	7					4		1					4	59	
Docks—piers—congested area	37	77	5	141	51				1	30	57	5					1	406	
Channels—restricted areas	109	26	7	27	41					65	77	5						358	
Buoys—marks to navigation	1	1			21					18	16	1						58	
Excessive speed	33	5	22	9	7					2	4	2					6	90	
Poor visibility	6	4	16	12	12					28	28	1						107	
Steering gear	12	5		9	6					14	12	2			2			62	
Radar	2		14	1	1					8	5							31	
Fathometer—depth of water					12					1		1	1					16	
Engine order telegraph		2		5						1								9	
Navigation equipment—other	9		2	1						38	10	2						62	
Navigation lights	13	4	2	6	3							1						29	
Navigation signals	93	6	22	3	2					2		73	8		7	2		128	
Weather (generally)	6	25	1	52	67					72	33	73					3	346	
Currents and tides	18	23		64	36					26	35	15	5				3	220	
Lifesaving equipment		1		1	3							4	5		12		3	29	
Firefighting equipment					5			1	2									8	
Miscellaneous:																			
Yard repairs					8		1		6	1		3	1		3	8	4	35	
Improper loading or storage		1			4		1		2			36	15	2	10		2	95	
Tug assisting	139	48	10	96	94	3				55	19	35	2		3		2	506	
Anchor equipment		22		6	8					25	12	8	3		23	3	5	113	
Towing equipment	5	8		9	12					7	6	18					3	68	
Mooring equipment	2	60		24	40	2				22	6	35	3			1	13	208	
Fishing equipment	3			1	5				2	6		8	2		2	1	2	32	
Deck equipment—all other													1		1			2	
Engineering:																			
Main propulsion machinery	5	8		17	70		18		17	16	12	21			2	155	5	346	
Boiler parts and accessories		3			1	4	11	12	11	1	6	7			1	87		114	
Machinery—all other				1	1							8						11	
Tools and working spaces					2	5	1	1	26			8				4		46	
Generators and other electrical equipment																			
Wiring, lights, controls				2	3	2	5		41	1	3	2				32		93	
Steward's department:				1			1		19	1	3				1			26	
Galley and steward's department equipment									10									10	

See footnote at end of table.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS*—Continued

Nature of casualty																		
Type of vessel	Collisions, crossing, meeting and overtaking	Collisions, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fires—cargo	Explosion and/or fires—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified	Totals
1 July 1965 to 30 June 1966 Fiscal year 1966																		
Type of vessel																		
Inspected vessels:																		
Passenger and ferry—large	2	3	3	10	13			1		8	11	1	3		1	9	1	66
Passenger and ferry—small	3	3	2	6	14		3		9	10	6	9				8	3	80
Freight	25	60	15	86	69	13		7	10	38	84	3	30	3	57	73	18	591
Cargo barge	6	4	2	7	19					7	9	2			2		1	62
Tankships	15	22	6	22	25	2		2	2	21	42	3	11	1	14	29	2	219
Tank barge	82	23	3	37	33	8	1		1	39	9	10	1		1	1	2	251
Public	8	1	1	7					2	4	6		1		3	10		43
Miscellaneous	5			6	3					4	6		2		4	6	1	38
Uninspected vessels:																		
Fishing	33	16	11	5	82		10		44	86	18	89	4		8	96	2	474
Tugs	163	52	10	117	116	2	3		20	74	19	77	4			9	6	672
Foreign	44	53	11	16	23	5	2		6	32	45	1					3	245
Cargo barge	55	29	5	50	45	2			10	32	8	107	2		5		1	351
Miscellaneous	21	26	2	13	46	2	4		14	9	7	48	3		4	2	2	203
Gross tonnage																		
300 tons or less	216	91	25	119	207	4	20		81	173	53	228	11		10	114	14	1,366
Over 300 to 1,000 tons	114	57	9	88	98	9	1		18	70	29	101	3		7	9	4	617
Over 1,000 to 10,000 tons	102	109	22	128	116	15	1	6	13	82	114	19	26	3	57	70	12	895
Over 10,000 tons	21	47	15	41	46	6	1	4	6	39	74	3	24	1	25	50	12	415
Length																		
Less than 100 feet	189	74	23	99	176	3	20		77	163	45	202	8		7	110	11	1,207
100 to less than 300 feet	194	102	15	145	161	15	1		23	112	48	145	10		13	19	7	1,010
300 to less than 500 feet	45	66	15	62	76	9	1	6	12	40	94	1	20	3	49	52	14	565
500 feet and over	25	62	18	70	54	7	1	4	6	49	83	3	26	1	30	62	10	511
Age																		
Less than 10 years	199	114	20	127	147	13	4	1	27	101	72	90	16		22	78	12	1,045
10 to less than 20 years	158	69	20	106	124	6	10	1	29	105	57	126	7		11	62	12	887
20 to less than 30 years	64	78	26	101	140	14	5	8	36	83	94	72	33	4	57	89	18	922
30 years and over	32	43	5	48	56	1	4		26	75	47	63	6		9	14	4	429
Location of casualty																		
Inland—Atlantic	14	16	7	40	46	10	5	3	20	72	84	40	2	1	17	20	9	406
Inland—Gulf	68	55	5	67	101	8	5	3	32	62	71	101	5		6	8	5	602
Inland—Pacific	8	15	5	30	41	2	4		17	36	20	20		1	10	13	10	232
Ocean—Atlantic	11	1	1	2	14	2	2	1	5	12	10	12	20	1	5	26	2	119
Ocean—Gulf	11	1	1	3	26	3	3		13	24	3	43	5		8	99	2	242
Ocean—Pacific	5		4	3	13	3	1		12	13	2	25	20	1	16	27	4	147
Great Lakes	6	15	1	60	25				4	27	38	6			9	19	1	213
Western rivers	22	14	1	45	28	3	3		6	36	1	65	2		4	1	1	232
Ocean—other	1	2		1	6				4	2	3	3			3	6		38
Foreign waters	16	22	3	21	27	3		3	2	16	20		2		20	24	8	182
Time of day																		
Daylight	60	76	16	154	169	21	14	6	54	111	126	147	37		68	143	25	1,227
Nighttime	86	60	15	103	140	9	8	4	53	178	112	151	25	4	26	91	9	1,074
Twilight	5	5		15	18	1	1		4	13	13	17	1		4	9	1	107
Estimated losses—units of thousands																		
Vessel	8,671	2,262	3,018	2,041	6,303	2,730	1,608	157	4,877	15,746		40,255	2,213	1	889	3,833	535	95,139
Cargo	448	30	91	462	157	606	1	2	120	663		2,908	577	105	1,272	1	13	7,454
Property	60	38		2,352	295	76	4		70	62		28			23		121	3,131
Vessels totally lost																		
Inspected	3		1	1	3	2	2		3	7		10	1					33
Uninspected	24	6	5	6	31	3	14		49	46		114	4		1		2	335

*Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF DEATHS/INJURIES DUE TO A VESSEL CASUALTY*

	Nature of casualty																	Total
	Collisions, crossing, meeting and overtaking	Collisions, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire—cargo	Explosion and/or fire—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and equipment	Casualty not otherwise classified	
1 July 1965 to 30 June 1966																		
Fiscal year 1966																		
Number of casualties.....	18	4	3	1	10	9	6	2	20	2	.....	30	5	1	8	2	3	124
Number deceased/injured—inspected vessels.....	16	.....	1	7	.....	10	1	2	8	.....	.....	.....	2	1	8	2	4	62
Number deceased/injured—uninspected vessels.....	55	4	20	.....	22	17	10	.....	36	4	.....	63	4	.....	8	.....	1	274
Number of persons deceased/injured.....	66/35	4/0	18/3	0/7	10/12	9/18	2/9	0/2	20/24	4/0	0/0	60/3	2/4	0/1	6/10	0/2	1/4	202/134
Primary cause																		
Personnel fault:																		
Pilots—State.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	3
Pilots—Federal.....	6	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	2
Licensed officer—documented seaman.....	2	1	.....	.....	1	1	3	.....	1	1	.....	1	.....	.....	.....	.....	.....	10
Unlicensed—undocumented persons.....	7	1	1	.....	1	.....	.....	.....	4	.....	.....	.....	.....	.....	1	.....	.....	21
All others.....	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	5
Error in judgment—calculated risk.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Restricted maneuvering room.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
Storms—adverse weather.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	13	4	.....	.....	.....	.....	18
Unusual currents.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sheer, suction, bank cushion.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Depth of water less than expected.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Failure of equipment.....	.....	.....	.....	.....	.....	1	.....	.....	6	.....	.....	1	.....	.....	4	2	1	15
Unseaworthy—lack of maintenance.....	.....	.....	.....	1	.....	2	2	2	7	.....	.....	8	.....	.....	.....	.....	.....	25
Floating debris—submerged object.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	3
Inadequate tug assistance.....	.....	1	.....	.....	2	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	7
Fault on part of other vessel or person.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Unknown—insufficient information.....	.....	.....	.....	.....	.....	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	3
Type of vessel involved																		
Inspected vessels:																		
Passenger and ferry—large.....	.....	.....	.....	7	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	8
Passenger and ferry—small.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
Freight.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	8	1	1	13
Cargo barge.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tankships.....	13	.....	1	.....	.....	7	.....	1	1	.....	.....	.....	.....	1	.....	.....	.....	25
Tank barges.....	.....	.....	.....	.....	.....	8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Public.....	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
Uninspected vessels:																		
Fishing.....	4	.....	.....	.....	4	.....	7	.....	25	4	.....	38	3	.....	2	.....	.....	87
Tugs.....	20	1	.....	.....	11	1	.....	.....	5	.....	.....	14	.....	.....	.....	.....	.....	53
Foreign.....	56	1	20	.....	.....	14	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	95
Miscellaneous.....	5	2	.....	.....	7	2	3	.....	2	.....	.....	11	1	.....	6	.....	.....	39
Particulars of person deceased/injured																		
Papers of deceased/injured:																		
Licensee by Coast Guard.....	8/2	.....	.....	.....	0/3	1/3	.....	0/1	2/5	.....	.....	2/0	0/1	.....	1/1	0/2	.....	14/18
Documented by Coast Guard.....	12/12	1/0	0/1	.....	0/1	0/5	.....	0/1	0/1	.....	.....	2/2	0/1	0/1	1/2	.....	.....	16/27
No license or document.....	7/8	2/0	.....	0/7	10/8	7/8	2/9	.....	14/18	4/0	.....	56/1	2/2	.....	4/7	.....	1/4	109/70
Other—unknown—foreign.....	39/15	1/0	18/2	.....	1/2	.....	.....	.....	4/0	.....	.....	.....	.....	.....	.....	.....	.....	63/19
Status or capacity on vessel:																		
Passenger.....	2/0	1/0	.....	0/3	0/1	.....	0/2	.....	.....	.....	.....	2/0	.....	.....	.....	.....	0/2	5/8
Longshoreman—harbor worker.....	.....	1/0	.....	.....	6/6	.....	.....	.....	1/5	.....	.....	.....	.....	.....	2/2	.....	0/1	10/14
Crewmember.....	63/34	2/0	18/3	0/4	8/9	3/12	2/6	0/2	18/19	4/0	.....	56/2	2/4	0/1	4/3	0/2	1/1	181/102
Other.....	1/1	.....	.....	.....	2/2	.....	0/1	.....	1/0	.....	.....	2/1	.....	.....	0/5	.....	.....	6/10
Activity engaged in:																		
Off duty.....	1/10	.....	9/3	0/2	3/6	2/1	1/5	.....	8/1	2/0	.....	3/2	.....	.....	.....	.....	.....	10/25
Deck department duties.....	30/8	1/0	7/0	.....	2/1	0/3	0/1	0/2	2/7	.....	.....	27/0	1/3	.....	3/1	.....	0/2	87/31
Engine department duties.....	18/5	.....	2/0	0/2	0/1	0/2	.....	.....	.....	.....	.....	10/0	.....	.....	.....	0/1	1/0	41/20
Stewards department duties.....	12/8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1/3	.....	.....	.....	.....	10/13
Handling cargo.....	.....	1/0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0/1	0/2	.....	.....	1/5
Fishing.....	2/2	.....	.....	.....	3/0	.....	1/0	.....	0/2	2/0	.....	13/0	.....	.....	.....	.....	.....	22/4
Drills.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Passenger.....	2/0	.....	.....	0/3	0/1	.....	0/2	.....	.....	.....	.....	.....	.....	.....	.....	.....	0/2	2/8
Other and unknown.....	1/2	.....	.....	.....	2/2	6/8	0/1	.....	5/8	.....	.....	7/1	0/1	.....	3/7	0/1	.....	24/28
Location of vessel:																		
At dock.....	.....	1/0	.....	.....	4/11	1/3	0/2	6/9	.....	.....	.....	2/0	.....	0/1	0/2	0/1	0/1	14/30
At anchor.....	.....	1/0	.....	.....	4/7	0/3	.....	1/1	.....	.....	.....	6/0	.....	.....	3/5	.....	.....	16/16
Underway.....	66/35	2/0	18/3	0/7	10/12	1/0	1/3	.....	13/14	4/1	.....	52/3	1/4	.....	3/3	0/1	1/3	172/88
Part of body involved																		
Head and upper limbs.....	0/4	.....	.....	0/2	0/1	0/4	0/2	.....	0/2	.....	.....	.....	0/3	.....	0/3	.....	0/3	0/24
Back and lower limbs.....	.....	.....	0/1	0/3	.....	0/1	.....	0/1	0/3	.....	.....	0/1	0/1	.....	0/5	0/1	.....	0/17
Multiple injuries (internal and external).....	1/31	1/0	0/2	0/2	0/11	0/13	0/7	0/1	4/19	.....	.....	0/2	.....	0/1	2/2	0/1	0/1	8/93
Death—heart.....	.....	.....	.....	.....	1/0	.....	.....	.....	.....	.....	.....	1/0	.....	.....	.....	.....	.....	2/0
Death—drowning.....	12/0	2/0	18/0	.....	8/0	1/0	2/0	.....	3/0	4/0	.....	29/0	2/0	.....	.....	.....	.....	81/0
Death—disease, other.....	53/0	1/0	.....	.....	2/0	8/0	.....	.....	13/0	.....	.....	30/0	.....	.....	4/0	.....	1/0	112/0

*Statistics concerning recreation and pleasure boating accidents are published in CG-157.

STATISTICAL SUMMARY OF DEATHS ON BOARD COMMERCIAL VESSELS*

(Not Involving a Vessel Casualty)

		Nature of death													
		Natural cause	Homicide	Brick	Disappearance	Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects falling, dropped or moving	Exposure and asphyxiation	Struck against or shed, bumped into objects	Opening machinery and tools
1 July 1965 to 30 June 1966 Fiscal year 1966 Cause of death															
Totals	392	204	5	8	3	4	13	106	12	15	2	4	4	3	7
18 Intoxication	204	2			2	2		10	1	1					
203 Physical deficiency or handicap	201	1					1	1							
2 Unsafe movement or posture		1													
33 Psychological immaturity, insanity		1	8					24							
12 Unsafe practice							1	6							
72 Violation of law or regulation															
9 Human errors	1	3			1	1	6	44	8	2		1		1	3
5 Decks—slippery or cluttered								7	1			1			
5 Weather conditions								4				1			
1 Poor maintenance or housekeeping								1				1			
4 Inadequate lighting							1	3							
5 Inadequate rails or guards						1		2						1	
17 Failure of equipment							2	3	1	9	1			1	2
9 Inadequate supervision							1								
4 Inadequate life preservers															
2 Inadequate tools or equipment															
2 Inadequate protective equipment															
2 Improper use of tools or equipment															
Types of vessels involved															
42 Inspected vessels:															
19 Passenger and ferry—large	30		4			1		7							
131 Passenger and ferry—small	10		1					8							
31 Freight ships and barges	90	3	2		1			12	5	5	2	2		1	
4 Tankships and barges	21					1		4	1						
8 Public	4														
57 Miscellaneous	2							1		2					
39 Uninspected vessels:															
20 Fishing	18	2						34	1					2	
41 Tugs	18		1		1			17		1		1			
Foreign	1				1	2		4	4	1		1		5	
Miscellaneous	10						3	19	1	6				1	
Time of day															
233 Daytime	127	2	4		1	3		57	8	8	1	2		3	6
140 Nighttime	65	3	4		2	1		45	4	7	1	2		1	1
19 Twilight	12							4							
Particulars of deceased															
40 Papers of deceased:															
139 Licensed by Coast Guard	35							2				1	1		
198 Documented by Coast Guard	105	1	3			2		20	2	2					
15 No license or document	61	4	5		2		9	80	9	13	1	2	3	3	4
43 Other—unknown—foreign	3				1	2		4	1						
28 Status or capacity on vessel:															
39 Passenger	27		5					11							
282 Lushoreman—Harbor worker	3	2			1			5	8	7	1	1		3	5
28 Crewmember	170	2	3		2	4		78	4	5	1	3	1	2	2
28 Other	4	1					3	12		3				1	2
160 Activity engaged in:															
74 Off duty	122	1	2		1	3		30			1	1			
23 Deck department duties	23				1	1		32	4	5	1			1	1
23 Engine department duties	17							2							
9 Steward's department duties	6	1	1					1							
23 Handling cargo	2				1			3	4	6	1	1		3	
23 Fishing	8							13						2	
42 Drills															
38 Passenger	26		5					11							
28 Other and unknown	2	1					7	14	4	4			2	2	
126 Location of vessel:															
51 At dock	53	4			3	4		26	10	6	2	2	3	6	
215 At anchor	22							4	13	1	7			1	1
Underway	129	1	8				2	67	1	2		2	1	2	
Part of body involved															
28 Head and upper limbs						2		6	1	7	6				2
1 Back and lower limbs															
33 Multiple injuries (internal and external)		1	1		1			6	1	3	8			4	5
182 Death—heart	182														
115 Death—drowning	2		6			4		103	1	2	2			1	
33 Death—disease, other	20	4	1				1								

*Statistics concerning recreation and pleasure boating accidents are published in CG-387.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD ALL COMMERCIAL VESSELS* (Not Involving a Vessel Casualty)

1 July 1965 to 30 June 1966 Fiscal year 1966 Cause of injury		Nature of injury																		
		Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects, falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Punching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Allegations and misconduct	Unknown or insufficient information
Totals	1810	160	21	118	272	9	25	297	4	154	14	90	3	66	68	5	196	189	82	37
66	Intoxication	14	7	4	12	1				4	1			1	1		2	6	9	4
16	Physical deficiency or handicap				4	1		1	1	2							1	2		4
130	Unsafe movement or posture			2	8	1	1	1		3							112	1	1	1
3	Psychological—immaturity, insanity																	1		2
97	Unsafe practice	18			24	2	1	11	3	5	3	9	1	8	1			11		
	Violation of law or regulation																			
814	Human errors	89	14	17	116	3	10	132		81	6	45	2	37	37		55	80	73	17
165	Docks—slippery or cluttered	13		73	41		4			15		1		2			7	8		
135	Weather conditions	7		11	25	1		18		28				1	18	5	7	13		1
49	Poor maintenance or housekeeping	12		8	11			1		2	1		1	1			5	4		3
30	Inadequate lighting	3		2	9		6	1		1		1		1			3	4		
8	Inadequate rails or guards	1			3		2					1						1		
94	Failure of equipment	2			11		1	53		4		16		2	1			4		
111	Inadequate supervision	1			5			60		5		7		11	5		3	13		1
	Inadequate life preservers																			
1	Inadequate tools or equipment									1		6						15		3
32	Inadequate protective equipment			1				6				1					1	26		1
59	Improper use of tools or equipment				3			14		3	3	3		2	3					
Types of vessels involved																				
Inspected vessels:																				
230	Passenger and ferry—large	17	1	31	40	1		42		22		10		1	7		24	19	7	8
17	Passenger and ferry—small	2		1	6			1									3			
1233	Freight ships and barges	116	15	74	189	5	19	181	2	105	12	64	3	37	51	1	142	132	60	25
135	Tankships and barges	14	4		23			21		13		8		3	2	1	15	12	11	1
36	Public	6		1				4		4	1	3		2			5	4	4	2
45	Miscellaneous	2			7		1	11		4		1		2	3		5	9		
Uninspected vessels:																				
53	Fishing	2		2	1	1	2	16		2		1		15		3		7		1
42	Tugs	1	1	1	4	1	3	13		2		2		0	5		1	2		
5	Foreign							2	2											
14	Miscellaneous			1	2			6			1						1	3		
Time of day																				
1242	Daytime	110	5	79	170	7	14	232	4	113	11	66	2	14	53	3	161	142	39	27
456	Nighttime	43	16	34	87	2	10	56		34	2	18	1	19	11	2	29	45	37	10
72	Twilight	7		5	15		1	9		7	1	6		3	4		6	2	6	
Particulars of person injured																				
Papers of person injured:																				
173	Licensed by Coast Guard	16	2	6	27	2	7	23		6	4	30	2	5	2	1	17	20	1	2
1473	Documented by Coast Guard	138	19	106	225	5	11	229	1	138	9	55	1	40	62	1	169	149	81	34
158	No license or document	6		6	20	2	6	42		10	1	5		21	4	3	10	20		1
6	Other—unknown—foreign					1		3	2											
Status or capacity on vessel:																				
18	Passenger	2		3	5	1				4							3			
11	Longshoreman—harbor worker				2			5	1		1									
1738	Crewmember	158	21	115	200	8	23	280	3	147	13	88	3	63	66	5	188	178	82	37
43	Other				5		2	12		3		1		2	2		5	11		
Activity engaged in:																				
331	Off Duty	46	18	14	68	5	1	17		29		3		3	10		19	35	55	8
687	Deck department duties	52	3	52	102	2	17	171	1	54	6	9		39	19	4	85	54	8	8
419	Engine department duties	32		14	52		4	58	1	35	7	61	3	10	16	1	49	60	6	10
251	Stewards department duties	27		31	35		1	18	1	22		15		21			30	23	16	11
14	Handling cargo			1	2			6	1			1					1	2		
34	Fishing	1		1	1	1		11		1				14				4		
13	Drills									2										
17	Passenger	2		3	4	1				4							3	2		
44	Other and unknown				8		2	12		3	1	1			2		6	9		
Location of vessel:																				
629	At dock	61	20	31	90	6	13	107	3	43	4	38		22	18		60	55	43	15
218	At anchor	9	1	7	34	2	4	36		17	2	14		9	8		27	35	9	4
963	Underway	90		80	148	1	8	186	1	94	8	38	3	35	42	5	109	99	30	18

See footnote at end of table.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD ALL COMMERCIAL VESSELS*— Continued

(Not Involving a Vessel Casualty)

Total injuries	July 1965 to 30 June 1966 Fiscal year 1966	Nature of injury																		
		Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects, falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Allegations and misconduct	Unknown or insufficient information
133	Part of body injured:	15	3	5	23	2	28	17	13	1	1	1	1	1	1	2	2	13	20	4
100	Head and neck	2	1	2	4	1	18	7	1	1	1	1	1	1	1	1	1	25	21	5
156	Eye and face	24	1	18	33	2	1	15	2	10	2	9	1	10	1	1	6	11	2	1
381	Arm and shoulder	17	1	18	32	1	45	27	10	13	7	7	1	26	56	11	11	94	9	11
242	Hand	20	5	17	48	2	72	28	1	21	1	18	1	9	3	1	14	12	2	4
288	Leg and hip	25	6	11	33	4	73	21	1	18	1	1	1	7	7	1	46	25	3	6
250	Feet	29	1	34	49	2	3	18	1	1	1	1	1	2	1	1	95	3	4	1
98	Back	7	1	3	15	2	2	11	1	1	1	1	1	1	1	1	5	6	10	2
125	Body—external	19	2	8	31	2	8	17	1	1	1	1	1	2	2	1	17	9	9	1
22	Body—internal	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	Hernia	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15	Multiple body injuries	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	All other injuries	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Additional contributing factors to cause of injury																			
476	Human element	33	3	27	60	4	5	44	33	2	14	18	15	1	66	47	100	4		
22	Decks—slippery or cluttered	3	10	6	43	25	21	1	11	1	3	2	2	4	1	1	14	4	1	1
42	Weather conditions	5	10	4	4	1	7	1	1	1	3	1	1	1	1	1	2	4	1	2
11	Poor maintenance or housekeeping	1	1	4	4	1	1	1	1	1	1	1	1	1	1	1	1	2	1	
7	Inadequate lighting	1	1	4	4	1	1	1	1	1	1	1	1	1	1	1	1	2	1	
3	Inadequate rails or guards	1	1	4	4	1	1	1	1	1	1	1	1	1	1	1	1	2	1	
3	Failure of equipment	1	1	4	4	1	1	1	1	1	1	1	1	1	1	1	1	2	1	
24	Inadequate supervision	1	1	4	4	1	1	1	1	1	1	1	1	1	1	1	1	2	1	
24	Inadequate tools or equipment	1	1	4	4	1	1	1	1	1	1	1	1	1	1	1	1	2	1	
5	Inadequate protective equipment	1	1	4	4	1	1	1	1	1	1	1	1	1	1	1	1	2	1	
10	Improper use of tools or equipment	1	1	4	4	1	1	1	1	1	1	1	1	1	1	1	1	2	1	
214	Hull structure	11	4	73	63	2	5	1	18	1	1	1	1	3	1	1	17	14	2	
134	Holds, hatches, tanks	2	6	43	25	21	1	11	1	3	2	2	2	4	1	1	14	4	1	1
236	Ladders, gangways, stairs	153	20	5	19	4	8	10	10	3	2	3	3	3	3	3	25	9	1	2
149	Masts, booms, cargo gear	6	1	4	11	17	12	10	10	3	2	11	11	3	3	3	3	8	1	2
103	Watertight closures	1	1	4	11	17	12	10	10	3	2	11	11	3	3	3	3	8	1	2
191	Living spaces	12	17	63	24	9	9	24	4	4	4	15	13	13	4	15	18	13	3	
37	Fishing equipment	4	2	3	14	1	1	1	1	1	1	1	1	1	1	1	4	5	3	
22	Navigational equipment	4	4	3	9	1	1	1	1	1	1	1	1	1	1	1	4	5	3	
31	Lifesaving equipment	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
2	Firefighting equipment	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
1	Communications equipment	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
1	Yard repairs	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
63	Improper loading, stowage and ventilation	1	3	13	2	16	2	4	1	1	1	1	1	1	1	1	12	6	2	
13	Ground tackle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
25	Tugs and towing equipment	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
97	Mooring equipment	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
193	Miscellaneous deck department equipment	4	1	6	27	42	1	18	3	9	4	5	5	5	5	5	30	42	1	
6	Main propulsion machinery	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
77	Boiler parts and accessories	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
302	Auxiliary machinery	20	6	38	53	2	26	10	30	2	8	5	5	5	5	5	41	48	3	7
17	Electrical equipment	2	16	19	16	1	12	18	1	1	1	1	1	1	1	1	23	21	11	
147	Galley equipment	2	16	19	16	1	12	18	1	1	1	1	1	1	1	1	23	21	11	

*Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF DEATHS ON BOARD COMMERCIAL VESSELS* (Not Involving a Vessel Casualty)

		Nature of death																							
1 July 1964 to 30 June 1965																									
Fiscal year 1965																									
Cause of death		Natural cause	Homicide	Suicide	Disappearance	Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects; falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains, and strains	Cuts, lacerations, bruises, and punctures	Alterations and misconduct	Unknown or insufficient information	
Total..	403	193	3	27	2	3	1		5	101	16	18	12	2		7	2		4					7	
15	Intoxication.....	1								10	1														
201	Physical deficiency or handicap.....	192								7	1					1									
5	Unsafe movement or posture.....			1						3	1														
38	Psychological-immaturity, insanity.....		3	26	1					7														1	
29	Unsafe practice.....					2			3	8	1	2	5			5	1		1					1	
	Violation of law or regulation.....																								
54	Human errors.....									40	6	2			1				2					3	
7	Decks—Slippery or cluttered.....									4	2													1	
13	Weather conditions.....						1		1	11															
1	Poor maintenance or housekeeping.....												1												
4	Inadequate lighting.....									2	2														
3	Inadequate rails or guards.....									1	1						1								
19	Failure of equipment.....								1	2	1													1	
6	Inadequate supervision.....									1									1						
	Inadequate life preservers.....																								
	Inadequate tools or equipment.....									1	1														
2	Inadequate protective equipment.....																								
1	Improper use of tools or equipment.....											1													
5	Miscellaneous causes.....				1					4			1												
Types of vessels involved																									
Inspected vessels:																									
47	Passenger and ferry—large.....	37		8						1									1						
23	Passenger and ferry—small.....	19		3																					
121	Freight ships and barges.....	79	1	8	1	1	1		4	10	7	6							1					2	
25	Tankships and barges.....	16	1	2						4		1	1												
6	Public.....	5	1																						
12	Miscellaneous.....	8								1		1					1		1						
Uninspected vessels:																									
59	Fishing.....	9		3					1	38	1	1	3			1								2	
33	Tugs.....	8		1						17	4	2					1								
28	Foreign.....	4		2						8	6	2	1											1	
49	Miscellaneous.....	8			1	2				21	2	3	5	2		2			1					2	
Time of day																									
244	Daytime.....	120	1	16	2	1			5	54	12	12	9	2		1	1		3					5	
148	Nighttime.....	69	2	10		2	1			44	4	4	3			6	1							1	
11	Twilight.....	4		1						3		2												1	
Particulars of deceased																									
Papers of deceased:																									
42	Licensed by Coast Guard.....	31		4						4	1	2												1	
130	Documented by Coast Guard.....	91	3	8		1	1		3	13	1	2	4				1		1					6	
218	No license or document.....	70		13	2	2			2	79	11	13	7	2		7			3						
13	Other—unknown—foreign.....	1		2						5	3	1	1												
Status or capacity on vessel:																									
64	Passenger.....	48		11	1				1	3															
37	Longshoreman—barber worker.....	3		1	1	1				8	7	8	2			2			2					2	
290	Crewmember.....	140	3	15		1	1		3	85	8	10	9	2		5	2		2					4	
12	Other.....	2				1			1	5	1													1	
Activity engaged in:																									
148	Off duty.....	94	1	13		1	1			29	2		5			1								1	
84	Deck department duties.....	20		2					3	33	5	7	4			5	1		2					1	
26	Engine department duties.....	18	1							3	1			2			1								
10	Stewards department duties.....	6	1	1						2															
22	Handling cargo.....	1								6	6	7							1					1	
20	Fishing.....	3								16		1													
1	Drills.....	1																							
62	Passenger.....	42		11	1				1	3															
30	Other and unknown.....	4			1	1			1	9	2	3	3			1			1					4	
Location of vessel:																									
143	At dock.....	53	2	3	1	3			1	37	12	10	7			7			3					4	
44	At anchor.....	16					1			12	1	2	5	2			1		1					3	
216	Underway.....	124	1	24	1				4	52	3	6					1							3	
	Unknown.....																								
Part of body involved																									
2	Head and upper limbs.....											2													
	Back and lower limbs.....																								
1	Multiple injuries (internal and external).....																							1	
178	Death—heart.....	175				1				1	1														
121	Death—drowning.....			22	2	1	1			92	1													2	
101	Death—disease, other.....	18	3	5		1			5	8	14	16	12	2		7	2		4						

*Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF DEATHS/INJURIES DUE TO A VESSEL CASUALTY

	Nature of casualty														Total
	Collisions, crossing meeting and overtaking	Collisions, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fires—cargo	Explosion and/or fires—vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsize, and floodings	Heavy weather damage	Cargo damage	
1 July 1964 to 30 June 1965															
Fiscal year 1965															
Number of casualties	12	3	2	7	4	4	9	3	17	4		28	1	8	108
Number of inspected vessels involved	25	4			1	7	3	2	15			5		5	89
Number of uninspected vessels involved	17	3	2	7	3	2	9	6	21	35		55	1	4	172
Number of persons deceased/injured	17/25	3/4	1/1	2/5	2/2	1/8	0/12	0/8	11/25	34/1		45/15	1/0	4/5	125/116
Primary cause															
Personnel fault:															
Pilots—State															
Pilots—Federal	2	1													3
Licensed officer—documented seamen	4						1	1				1		1	8
Unlicensed—undocumented persons	3		2		2		2		5	1		1		1	18
All others	3	1				2	1	2	2	1		1		1	14
Error in judgment—calculated risk				1											1
Restricted maneuvering room				1											1
Storms—adverse weather					1					2		8	1		12
Unusual currents															1
Sheer, suction, bank cushion															
Depth of water less than expected															
Failure of equipment		1		1		2			4			2		4	16
Unseaworthy—lack of maintenance							4		2			11		2	20
Floating debris—submerged object				1	1							1			1
Inadequate tug assistance												2			4
Fault on part of other vessel or person				2											3
Unknown—insufficient information							1		4			1			6
Type of vessel involved															
Inspected vessels:															
Passenger and ferry—large					1				2			5		4	1
Passenger and ferry—small	25					1			10						38
Freight									3					1	10
Cargo barge		4													9
Tankships						5	3	2							10
Tank barges															
Public															
Miscellaneous														1	1
Uninspected vessels:															
Fishing	2		1	1			3	3	6	2		33	1		54
Tugs	8	1		4	1	2	5	3	1			9			36
Foreign			1						6	32		1		1	41
Miscellaneous	7	2		2	2		1		6	1		12		3	59
Particulars of person deceased/injured															
Papers of deceased injured:															
Licensed by Coast Guard	3/3			0/1	1/0	0/2	0/2	0/2	1/0	1/1		2/2		1/0	10/15
Documented by Coast Guard	8/16	1/4		2/4	1/2	1/6	0/10	0/6	2/0			0/0		0/1	17/22
No license or document	6/6	2/0	1/1						6/21	1/0		37/13	1/0	3/4	64/74
Other—unknown—foreign									2/4	32/0					34/4
Status or capacity on vessel:															
Passenger							0/1					1/0			1/1
Longshoreman—harbor worker							0/3	0/3	0/2			2/0		1/3	4/11
Crewmember	15/24	3/4	1/1	1/4	1/0	1/4	0/8	0/3	8/9	34/1		41/14	1/0	3/1	112/80
Other	2/1			1/1	1/2	0/4		0/2	3/14			1/1		0/1	8/24
Activity engaged in:															
Off duty	5/8	0/2							4/4	1/0		5/0			15/14
Deck department duties	4/8	0/1	1/0	0/4	1/0	1/1	0/4		4/1	12/1		10/10		2/1	35/32
Engine department duties	4/6	1/0			0/1	0/1	0/5	0/3	0/2	16/0		1/0	1/0	1/4	28/22
Stewards department duties	2/2	0/1								4/0					6/8
Handling cargo						0/1			0/2					0/3	0/8
Fishing				1/0						1/0		20/3			24/3
Drills															
Passenger															
Other and unknown	2/1	2/0	0/1	1/1	1/1	0/5	0/3	0/5	3/16			9/2		1/1	20/36
Location of vessel:															
At dock						1/8	0/6	0/6	7/22			0/1		2/6	11/47
At anchor			0/1				0/2		0/1						1/4
Underway	17/25	3/4	1/0	2/5	2/2		0/4	0/3	4/2	34/1		48/14	1/0	2/0	113/85
Unknown															
Part of body involved															
Head and upper limbs	1/2	0/1	0/1	0/3			0/2	0/3	0/4	0/1		0/5		1/0	2/23
Back and lower limbs	0/5	0/3		0/1	0/1			0/1						0/2	0/13
Multiple injuries (internal and external)	0/18			0/1	1/1	3	0/10	0/4	1/21			0/10		1/3	3/80
Death—heart										1/0					1/0
Death—drowning	12/0	2/0		1/0	1/0				1/0	32/0		23/0		2/0	72/0
Death—disease, other	4/0	1/0	1/0	1/0		1/0			9/0	1/0		22/0	1/0	1/0	47/0

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS*

	Nature of casualty																	Total
1 July 1964 to 30 June 1965 Fiscal year 1965	Collisions, crossing meeting and overtaking	Collisions, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all other	Explosion and/or fire— cargo	Explosion and/or fire— vessel's fuel	Explosion and/or fire— boilers, pressure vessel	Explosion and/or fire— structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings, and floodings	Heavy weather damage	Cargo damage	Material failure— structure and equipment	Material failure— machinery and engineering equipment	Casualty not otherwise classified	Total
Number of casualties	147	166	22	307	278	18	25	11	116	242	286	223	41	10	91	158	38	2,179
Number of vessels involved	427	379	51	438	387	24	26	11	122	314	309	257	41	12	91	160	46	3,095
Number of inspected vessels in- volved	133	140	20	210	173	12	3	4	30	123	208	22	34	7	81	117	18	1,335
Number of uninspected vessels in- volved	294	239	31	228	214	12	23	7	92	191	101	235	7	5	10	43	28	1,760
Primary cause																		
Personnel fault:																		
Pilots—State	13	3	3	6	3					1	8						2	39
Pilots—Federal	10	2	1	2	1					5	5							26
Licensed Officer—Docu- mented seaman	58	9	9	13	12		1	3	1	23	22	2			5	11	2	171
Unlicensed—undocumented persons	61	20	11	20	42		3		6	32	13	12			2	1	8	231
All others	18	15	4	17	9	9	1	2	17	13	15	7	1		3	3	7	141
Error in judgement—calculated risk	6	25		45	7				1	26	34	3				1	5	155
Restricted maneuvering room	14	23	1	60	16					14	43				1			173
Storms—adverse weather	7	15		40	34					25	13	51	35	7	11	2	4	244
Unusual currents	2	8		33	11					4	7	3						68
Sheer, suction, bank cushion	13	5		10	1					3	6							38
Depth of water less than expected		1		4	5					44	88							142
Failure of equipment	6	20		22	11	5	1	2	15	24	18	17	5	1	53	114	2	316
Unseaworthy—lack of maintenance	1	4		3	3	1	16	4	50	8	3	90		1	11	23	3	227
Floating debris—submerged object				3	120					6		16				1		146
Inadequate tug assistance	5	25		35	25					28	7	17			1		2	145
Fault on part of other vessel or person	213	201	20	123	67	6			6	57	25	24		3	1	2	8	776
Unknown—insufficient information		3		2		3	4		26	1	2	9			3	2	2	57
Additional contributing factors to cause of casualty																		
Hull and associated parts:																		
Plates and framing—steel	23	12	1	20	36	1			2	10		43	17		14		3	182
Planks and framing—wood	2	2		1	17				3	5		60	1		2	1	2	96
Tanks						3	2		4			4	2		3	1	2	21
Holds and hatches						6			3			1	2		1			13
Superstructure—bulkheads, decks		6		2	2				12	2		11	9		3	1	1	49
Ladders, gangways, rails and guards		1			3										1			5
Masts, booms, and cargo gear				2	1							2			16		2	23
Rudder and stern tube					5					2			1		2			10
Watertight closures										1		28		1	1			31
Quarters and living spaces									13						1			13
Navigation and safety:																		
Lookout	27	8	6	1	9						1						1	53
Docks—piers—congested area	20	111	1	190	34					20	44		1			1	4	426
Channels—restricted areas	158	29	6	18	62					70	121	2		1			1	468
Buoys— aids to navigation		1		2	19					14	26							62
Excessive speed	19	5	12	3	6					2	5	3					5	60
Poor visibility	26	4	20	7	11					34	28					1		131
Steering gear	10	8		6	13					13	9	4			1	7		71
Radar	6		6		1					3								16
Fathometer—Depth of water										1	1	1			1		1	16
Engine order telegraph		6		6												3		15
Navigation equipment—other			1		1					20	9							31
Navigation lights	12	8			6							1						27
Navigation signals	129	2	15	2	9					2	1						1	161
Weather (generally)	7	28		61	26					83	35	50	3	2	4		1	250
Currents and tides	12	46		91	34					34	45	4			3			269
Lifesaving equipment		1							1						11		3	21
Firefighting equipment									4						1			5
Miscellaneous:																		
Yard repairs				1		2	1	1	8			3				3	2	21
Improper loading or storage	2	2			1	20	1		6	1		30	6	13	9		3	96
Tug assisting	133	69	8	136	66				1	65	24	35		1	1	2	2	543
Anchor equipment	1	30	1	6	8			1	1	24	10	4	3		28	11	6	134
Towing equipment	6	7		8	10				1	15	2	14					3	65
Mooring equipment	2	16		22	18				3	10	6	12	3	1			7	100
Fishing equipment	5				2				1	4	1	8					2	23
Deck equipment—all other																1		3

See footnote at end of table.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS*—(Continued)

	Nature of casualty																		Total
	Collisions: crossing meeting and overtaking	Collisions: while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all other	Explosion and/or fires—cargo	Explosion and/or fires—Vessel's fuel	Explosion and/or fire—boilers, pressure vessel	Explosion and/or fire—structure, equipment, all others	Grounding with damage	Grounding without damage	Founders, capstans, and floodings	Heavy weather damage	Cargo damage	Material failure—structure and equipment	Material failure—machinery and engineering equipment	Casualty not otherwise classified		
1 July 1964 to 30 June 1965 Fiscal year 1965																			
Engineering:																			
Main propulsion machinery	1	10		20	65		16	2	14	23	10	8	1		5	72	3	250	
Boiler parts and accessories	1			2	1		12	10	6	4	5	15			4	82	1	143	
Machinery—all other					3					2		18						24	
Tools and working spaces					1		7		19			8			1			36	
Generators and other electrical equipment	1			6	1		6		34	1	4	1	2		4	25		85	
Wiring, lights, controls	1			3	1	1	1	1	23		3	1			3	3		41	
Steward's department:																			
Galley and steward's department equipment								4	18			1						23	
Type of vessel																			
Inspected vessels:																			
Passenger and ferry—large	2	5		10	6				1	7	20	1	1			10	1	64	
Passenger and ferry—small	3	6	2	5	10		1		7	11	8	3			1	4	2	63	
Freight	28	63	8	113	70	9		3	13	35	25	8	25		58	73	8	613	
Cargo barge	14	6	1	13	12				2	13	5	5	1	3	2		2	70	
Tankships	21	20	4	21	33	1			3	18	67	1	5		13	21	3	231	
Tank barge	61	29	5	39	26	2	2	1	4	35	9	3	1		2	2		221	
Public	2	2		1	3					3	1				4	6	1	23	
Miscellaneous	2	9		8	13					1	3	1	1		1	1	1	41	
Uninspected vessels:																			
Fishing	34	23	2	6	37		11	4	47	57	11	82	6			37	3	390	
Tugs	147	82	12	115	106	2	7	3	17	72	26	65	1	2		5	11	673	
Foreign	31	69	11	24	17	6	1		11	24	49	6				1	3	266	
Cargo barge	53	39	2	13	36	2			1	24	10	47		3	3		3	286	
Miscellaneous	29	26	4	10	18	2	4		16	14	5	35			4		8	175	
Gross tonnage																			
300 tons or less	197	144	16	121	163	4	23	6	82	133	58	190	8	4	4	47	17	1,217	
Over 300 to 1,000 tons	96	59	11	104	69	3	1	2	14	72	22	47	1	1	4	7	13	526	
Over 1,000 to 10,000 tons	98	122	15	104	113	15	2	2	19	81	140	18	22	5	57	69	10	962	
Over 10,000 tons	36	54	9	49	42	2		1	7	28	89	2	10	2	26	37	6	400	
Length																			
Less than 100 feet	170	128	15	99	149	3	21	5	76	118	44	161	6	2	4	36	12	1,049	
100 to less than 300 feet	175	106	15	172	109	5	4	3	22	124	54	88	4	4	6	20	19	932	
300 to less than 500 feet	40	72	9	85	74	13	1	3	15	30	102	6	27	3	48	54	9	584	
500 feet and over	42	73	12	82	55	3			9	42	169	2	11	3	31	50	6	530	
Age																			
Less than 10 years	176	138	17	154	106	6	5	3	24	95	82	53	4	1	13	30	14	921	
10 to less than 20 years	143	103	14	117	116	12	7	2	36	89	68	90	5	6	18	27	14	867	
20 to less than 30 years	82	96	16	105	116	6	8	4	37	90	105	60	28	5	51	86	13	908	
30 years and over	26	42	4	62	49		6	2	25	40	54	54	4		9	17	5	599	
Location of casualty																			
Inland—Atlantic	27	26	4	44	46	7	5	3	30	55	98	33	3		14	13	7	415	
Inland—Gulf	49	41	6	80	68	4	9	4	28	37	55	52		2	7	15	3	460	
Inland—Pacific	9	26		33	39		2		23	47	35	37	5	1	17	18	8	309	
Ocean—Atlantic	2	2	1	1	17	1	1	1	7	7	4	18	12	3	6	27	1	110	
Ocean—Gulf	8	4	1	4	16		1	1	11	11	5	25	1		5	30	3	126	
Ocean—Pacific	5	2	2	3	13	2	2		3	11	4	14	12	1	9	16	5	107	
Great Lakes	5	18	3	63	23			1	5	32	40	12			11	13	2	238	
Western rivers	35	27	2	45	22	1	2	1	6	26	10	25			2	2	6	212	
Ocean—other	1	1		2	4					3	3	6	2		2	5	1	31	
Foreign waters	6	19	3	32	30	3	2	1	3	13	23	1	5		18	19	2	180	
Time of day																			
Daylight	57	87	11	175	166	11	18	10	62	105	136	139	22	6	64	104	24	1,197	
Nighttime	79	70	11	113	106	5	6	1	48	126	130	82	17	4	24	45	9	882	
Twilight	11	9		19	6	2	1		6	11	14	2	2		3	9	5	100	
Estimated losses																			
Vessel	7,940	3,349	681	2,369	2,917	160	623	90	7,094	8,136		8,280	346	25	697	2,671	253	45,710	
Cargo	319	181		323	54	401	2		352	1,081		1,453	44	28.5	293		1	4,799	
Property	2	531		2,306	435		1		245	5		167	34	15		11	118	3,870	
Vessels totally lost																			
Inspected	3						1		4	3		7					1	19	
Uninspected	14	11	1	7	17		16	2	44	28		98			3	1		242	

*Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD ALL COMMERCIAL VESSELS* (Not Involving a Vessel Casualty)

1 July 1964 to 30 June 1965 Fiscal year 1965 Cause of injury		Nature of injury																			
		Slips and falls—ladders	Slips and falls—passways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects, falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains, and strains	Cuts, lacerations, bruises, and punctures	Alterations and misconduct	Unknown or insufficient information	
Total	1,850	173	40	150	272	13	28	318	4	131	27	102	3	45	112	1	28	93	74	36	
81	Intoxication	13	10	5	18	1	1	2		5		1					1	4	21	5	
22	Physical deficiency or handicap	2		3	7			2		1										1	
177	Unsafe movement or posture	1	1	5	22	3	6	2		7				1	1		125	2	1	3	
5	Psychological-immaturity, insanity																			1	
188	Unsafe practice	39	2	8	23	2	1	20	4	8	9	17	2	13	11		17	11	3	1	
	Violation of law or regulation																				
744	Human errors	77	15	22	106	4	15	137		73	6	38		27	61		45	57	50	11	
183	Decks—slippery or cluttered	12	5	85	48	1		2		2		1					23	3		1	
128	Weather conditions	8	4	15	22			21		18		8			18	1	6	4		1	
39	Poor maintenance or housekeeping	12		3						2		6			1		2	3		2	
16	Inadequate lighting	2		2	3					2							2				
5	Inadequate rails or guards	1	1		1						1										
90	Failure of equipment	3	1	1	5		1	52		3	3	7	1	2	5		2	3		1	
74	Inadequate supervision	1	1		4		1	47		3		4			9		2			2	
	Inadequate life preservers																				
	Inadequate tools or equipment										1										
22	Inadequate protective equipment	1						10			1	6					1	2		1	
33	Improper use of tools or equipment				1		1	9		3	6	4			4			2		1	
43	Miscellaneous causes	1		1	4			14		4	1	8			2					8	
Types of vessels involved																					
Inspected vessels:																					
274	Passenger and ferry—large	27	2	42	39	2		34		16	4	20			17		35	17	13	6	
16	Passenger and ferry—small			3	6		2			2				2							
1247	Freight ships and barges	111	33	88	190	6	23	218	1	92	16	59	2	21	76	1	169	65	52	24	
156	Tankships and barges	25	3	11	20		1	22	1	11	2	16		6	6		15	5	8	4	
25	Public	6	1	2	4					2		3			1			2	1		
24	Miscellaneous	1			1			8		3	1	1	1	1	1		4				
Uninspected vessels:																					
38	Fishing	1	1	1	2	2		10		2	2			5	8		1	2		1	
49	Tugs	1		3		2		19		3	1	2		6	3		1				
7	Foreign					2	1					1		1			1				
15	Miscellaneous	1			2	1		2	2		1			3			2			1	
Time of day																					
1251	Daytime	103	13	94	176	7	22	238	4	86	21	70	3	32	84	1	163	72	35	27	
514	Nighttime	62	23	47	86	6	4	67		37	5	25		9	27		57	15	37	7	
85	Twilight	8	4	9	10		2	13		8	1	7		4	1		8	6	2	2	
Particulars of person injured																					
Papers of person injured:																					
162	Licensed by Coast Guard	21	3	7	28	1	6	19	1	12	4	21	1	3	13		15	5	1	1	
1551	Documented by Coast Guard	151	36	133	228	7	18	260	1	111	17	75	2	28	90	1	205	84	73	31	
129	No license or document	1	1	10	14	5	1	38	2	8	6	5		13	9		8	4		4	
8	Other—unknown—foreign				2		3	1						1							
Status or capacity on vessel:																					
20	Passenger			7	7		1	8		3				1			1			2	
14	Longshoreman—harbor worker						1		1			2									
1811	Crewmember	173	39	143	265	13	26	308	3	128	26	100	3	44	112	1	227	92	74	34	
5	Other		1								1							1			
Activity engaged in:																					
330	Off duty	58	35	21	74	3		10		30		6			11		18	14	48	2	
786	Deck department duties	54	4	66	105	9	20	200	2	51	8	13		36	48	1	107	37	5	11	
397	Engine department duties	37		20	57		4	57	2	30	16	54	3	2	28		62	13	6	6	
256	Stewards department duties	24	1	34	24		1	20		13	2	26			21		33	27	15	15	
10	Handling cargo							7		1					1						
18	Fishing			1		1		6		1				4	3			1		1	
15	Drills			1	4			2		1	1			2			4				
20	Passenger			7	7		1			3				1			1				
18	Other and unknown				1		1	7		1		3					3	1		1	
Location of vessel:																					
796	At dock	70	33	56	106	8	13	145	2	50	8	41	3	17	43		96	47	42	16	
134	At anchor	8	6	5	17	1	4	33	1	9	3	12		3	6		14	5	4	3	
920	Underway	95	1	89	149	4	11	140	1	72	16	49		25	63	1	118	41	28	17	
	Unknown																				

See footnote at end of table.

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD ALL COMMERCIAL VESSELS*—Continued

(Not Involving a Vessel Casualty)

Total Injuries	1 July 1964 to 30 June 1965 Fiscal year 1965	Nature of injury																			
		Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects; falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains, and strains	Cuts, lacerations, bruises, and punctures	Alterations and misconduct	Unknown or insufficient information	
151	Part of body injured:																				
66	Head and neck.....	14	3	12	32	3	2	35		16		4					1	4	24	1	
169	Eye and face.....	2		1	3			32		4	1	6	2					1	8	6	
401	Arm and shoulder.....	21	4	25	36			18		23	2	13		5	3		8	4	5	2	
253	Hand.....	12	3	20	30			56		18	22	21	1	20	95		10	66	13	13	
308	Leg and hip.....	20	12	31	48	1	7	62		31		6		8	3		15	4	4	1	
239	Foot.....	35	7	17	35	1	3	78		14		19		8	7		69	11	1	3	
111	Back.....	44	3	19	41		3	9		9		3		1	2	1	98	1	5	1	
100	Body—external.....	10	5	11	23	1	6	11		6		27		1			4	2	4	1	
28	Body—internal.....	14	3	11	20	5	6	15		9	1				2		7		8		
8	Hernia.....			2	3		1			1				1			21				
16	Multiple body injuries.....			1				2			1			1					1		
	All other injuries.....	1				2	1	2	4			3		1					1	4	
	Additional contributing factors to cause of injury																				
481	Human element.....	36	9	53	52	4	5	55	2	19	7	20	2	9	21		73	17	92	5	
20	Decks—slippery or cluttered.....	1		11	4			1		1							2	1			
37	Weather conditions.....	4	2	9	7	1		4		1		1		1	4		2	1			
10	Poor maintenance or housekeeping.....			4	3					1					1		1	1			
7	Inadequate lighting.....	1		2	2												1	1			
6	Inadequate rails or guards.....																	2			
15	Failure of equipment.....	1	1		1			4			1	1		1	1			1			
2	Inadequate supervision.....										1	1						1			
10	Inadequate tools or equipment.....	1		1	1			3			2						1	2			
10	Inadequate protective equipment.....		1		2			3				1					1	2			
3	Improper use of tools or equipment.....							1									1	1			
119	Causes not otherwise classified.....	4		45	31	2		18		11	3				2	1	14	3		1	
142	Hull structure.....	3		1	43		21	2		5	1	7			11		24	1			
282	Holds, hatches, tanks.....	166	39	4	12	3	5	11		14				5	8		18	1		1	
164	Masts, booms, cargo gear.....	6		8	19		1	63		13	2				11		27	11	1	1	
108	Watertight closures.....	1		3	9	1	2	18		13	1			45	6		11	4	1	2	
155	Living spaces.....	10		21	60			8		21		7		6	6		6	1		1	
22	Fishing equipment.....					1		1		2							3	1			
18	Navigational equipment.....	1		4	2			1		6				3	3		4	2			
25	Lifesaving equipment.....				5			5		3							1				
5	Firefighting equipment.....				1			3													
	Communications equipment.....																				
	Yard repairs.....																				
59	Improper loading, stowage, and ventilation.....	1		5	14		2	13		5		3			3		11	2			
6	Ground tackle.....							1		1				3	1		1				
26	Tugs and towing equipment.....			1	2	1		15		1		1		3	1		1				
146	Mooring equipment.....	2		7	4			77		7				22	4		16	2		5	
131	Miscellaneous deck department equipment.....	2		9	20	2		34		10	4	5		3	6		24	9		3	
12	Main propulsion machinery.....				1			2		1	3	2			2		1				
69	Boiler parts and accessories.....				1			4		7	2	38		1	4		7	2		3	
225	Auxiliary machinery.....	12		9	45		5	36	1	15	10	22	1	2	11		42	9		6	
18	Electrical equipment.....							7			2	1	2	1			2	2			
143	Galley equipment.....	1	1	9	14					5	3	26			4		24	29		15	

*Statistics concerning recreation and pleasure boating accidents are published in CG-357.

AD-A100 588

COAST GUARD WASHINGTON D C OFFICE OF MERCHANT MARINE--ETC F/G 13/10
STATISTICS OF CASUALTIES, 1979.(U)

DEC 80

USCG-M-1-81

UNCLASSIFIED

NL

2 of 2
AD-A100 588



END
DATE
FILMED
7-88
DTIC

STATISTICAL SUMMARY OF DEATHS ON BOARD COMMERCIAL VESSELS* (Not Involving a Vessel Casualty)

		Nature of death																							
1 July 1963 to 30 June 1964 Fiscal year 1964 Cause of death		Natural cause	Homicide	Suicide	Disappearance	Slips and falls—ladders	Slips and falls—gangways	Slips and falls—on deck	Slips and falls—other	Falls from vessel—into water	Falls into holds or tanks	Struck by objects, falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machinery and tools	Burns and scalds (other than electrical)	Electrical shock and burns	Caught in lines, chains or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains, and strains	Cuts, lacerations, bruises, and punctures	Alterations and miscellaneous	Unknown or insufficient information	
Total		223	7	23	2	9	4		8	63	24	21	11	3			2		4					1	
19	Intoxication	4	1			2	1		2	6	1		2												
225	Physical deficiency or handicap	218		2					1	4															
1	Unsafe movement or posture		1																						
30	Psychological			21	1					8															
19	Unsafe practice					1	1		1	7	5		3						1						
1	Violation of law or regulation		1																						
86	Human errors		4		1	6	1		1	53	12	6	1						1						
2	Decks—slippery or cluttered									2															
7	Weather conditions						1			6															
3	Inadequate lighting									2					1										
3	Inadequate rails or guards									2	1														
10	Failure of equipment	1								2	1			5										1	
16	Inadequate supervision								1	1			5		1				2	2					
7	Inadequate tools or equip								1	1	2				1										
2	Inadequate protective equip								1	1															
2	Improper use of tools or equip											2													
2	Miscellaneous causes									1		1													
Types of vessels involved																									
Inspected vessels																									
60	Passenger and ferry—large	48		6	1	1				2	1		1												
27	Passenger and ferry—small	18								8		1													
157	Freight ships and barges	101	1	9		5	2		5	10	10	8		4	1				1						
43	Tankships and barges	24	1	3		2			1	6	1			3											
6	Public	2	1	2						1															
3	Miscellaneous	1								1									1						
Uninspected vessels:																									
48	Fishing	14	2	1	1					27		2		1											
26	Tugs	8		1						16		6													
31	Foreign	3	1			1				8	9	6	1	1	1				1						
34	Miscellaneous	4	1	1					2	14	3	3	2				2		1					1	
Time of day																									
226	Daytime	118	4	11	2	5			4	41	14	11	7	3			2		3					1	
187	Nighttime	83	3	10		4	4		4	45	10	9	4						1						
22	Twilight	12		2						7		1													
Particulars of deceased																									
Papers of deceased:																									
58	Licensed by Coast Guard	45	1	3		1				3	4		1												
166	Documented by Coast Guard	103	4	13		7	4		6	18	3	2	4	1					1						
180	No license or document	72	2	7	2	1			2	61	8	15	4				2		2					1	
31	Other—unknown—foreign	3								11	9	4	2	1					1						
Status or capacity on vessel:																									
63	Passenger	49		5	1					8															
40	Longshoreman—harbor																								
	Worker	2				1			1	5	12	13	3												
328	Crewmember	169	7	18	1	8	4		7	78	12	5	8	3			1		2						
9	Other	3								2		3												1	
Activity engaged in:																									
187	Off duty	115	6	17	1	4	4		3	34	1		2												
74	Deck department duties	23				1			3	30	8	2	4	1			1								
27	Engine department duties	16		1		2			1	2															
13	Steward's department duties	8				1				4															
31	Handling cargo	17	1							3	9	13	1				1		3						
27	Fishing	17	1							6		2		1											
55	Passenger	41		5	1					8															
21	Other and unknown	3							1	6	4	4	2											1	
Location of vessel:																									
160	At dock	64	2	6		5	4		6	29	14	16	8				2		4						
40	At anchor	13	1	1	1	1				16	3	1	2	1											
236	Underway	146	4	16	1	3			2	48	7	4	1	2										1	
Part of body involved																									
37	Head and upper limbs		2	2		4	2		2	3	13	7		1					1						
28	Back and lower limbs					1	1		3	4	8	8		1					2						
201	Multiple injuries	200																							
	Death—heart									1															
101	Death—drowning			14	1	1	1		1	82		1													
98	Death—disease, other	23	5	7	1	3			2	3	3	5	11	1			2		1					1	

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD ALL COMMERCIAL VESSELS*

(Not Involving a Vessel Casualty)

		Nature of injury																		
		Slips and falls— ladders	Slips and falls— passways	Slips and falls— on deck	Slips and falls— other	Falls from vessel— into water	Falls into holds or tanks	Struck by objects: falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, bumped into objects	Operating machin- ery and tools	Burns and scalds (other than elec- trical)	Electrical shock and burns	Caught in lines, chains, or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and punctures	Alterations and misconduct	Unknown or Insuf- ficient Informa- tion
1 July 1963 to 30 June 1964 Fiscal year 1964 Cause of injury		175	17	230	228	22	17	328	4	161	87	70	7	39	127	5	200	96	100	48
65	Intoxication	13	6	8	16	5		1		3		1			2		1	2	6	2
31	Physical deficiency or handi- cap	4	2	3	8			1		3		1					4	4		1
131	Unsafe movement or posture	5		4	7	1		5		2					1		105	1		
8	Psychological—immaturity, in- sanity																	6	1	1
141	Unsafe practice	29	1	4	26	5	2	28		2	5	9	3	4	9		9	4		1
	Violation of law or regulation																			
921	Human errors	86	6	111	95	1	5	147	2	87	16	31		21	84		52	47	94	33
64	Decks—Slippery or cluttered	5		44	3		1	3									5	1		
141	Weather conditions	9		33	25	2		14		29		2			12	5	3	4		3
44	Poor maintenance or house- keeping	3		18	10			1		2		1	1				4	4		
14	Inadequate lighting	1		1	5		6										1			
17	Inadequate rails or guards	4	2		3	1	1	1		1				1	2		1	1		
78	Failure of equipment	2		1	6		2	45	1	4	2	7	1	1	2		4	3		1
80	Inadequate supervision			1	10	1		29	1	8		7		7	7		4	5		
3	Inadequate life preservers							1				1			1					
50	Inadequate tools or equip- ment	9		1	4	1		11		4	5	4	1	1	4		2	3		
23	Inadequate protective equip- ment	3		1	2			15										2		
89	Improper use of tools or equipment	2			2	1		19		6	29	6	1	3	3		9	3		
7	Miscellaneous causes				1			3												3
Types of vessels involved																				
Inspected vessels:																				
276	Passenger and ferry— large	31	2	61	27		2	38		23	6	6	2	3	15	2	19	11	16	12
16	Passenger and ferry—small	2		4	3			3		2		1			1		1			
1284	Freight ships and barges	122	14	129	164	8	12	207	3	107	41	51	5	30	89	3	154	64	67	24
166	Tankships and barges	14	1	25	14	6		33	1	9	3	6		4	7		13	12	11	7
30	Public	1		4	5			7		3	1	1					3	2	3	
17	Miscellaneous	3						6		1					1		4	1	1	
Uninspected vessels:																				
52	Fishing			2	3	3		13		2	3			6	8		5	4	1	2
42	Tugs	1		3	3	3	2	11		1	2	5		5	3		2		1	
7	Foreign	1		1	1	1	1	2						1	1					
17	Miscellaneous			2	3	1		3		3	1			1	2			1		
Time of day																				
1290	Daytime	105	8	140	137	11	10	258	2	104	48	53	6	22	95	5	153	68	47	38
541	Nighttime	65	9	84	78	10	7	98	2	38	7	14	1	14	28		39	23	49	5
76	Twilight	5		6	8	1		17		9	2	3		3	4		8	4	4	2
Particulars of person injured																				
Papers of person injured:																				
174	Licensed by Coast Guard	18	2	16	25	3	2	96		10	11	19	1	2	10		19	6	2	2
1612	Documented by Coast Guard	154	15	201	183	14	11	271	4	131	40	47	6	26	106	5	176	85	96	41
118	No license or document	3		13	15	5	3	24		10	6	4		11	11		5	4	2	2
3	Other—unknown—foreign						1	2												
Status or capacity on vessel:																				
23	Passenger	2		7	9			2		2					1					
5	Longshoreman—harbor worker																			
1871	Crewmember	172	17	222	214	22	17	313	4	145	57	69	7	39	126	5	200	95	100	44
8	Other	1		1				4		1										1
Activity engaged in:																				
375	Off duty	70	15	46	65	9		11	1	24	1	1			23		24	20	63	3
775	Deck department duties	44	2	98	84	11	16	208	1	59	23	8		29	46	3	101	30	13	5
414	Engine department duties	41		35	50		1	50	1	36	33	44	7	3	23	1	54	24	6	6
259	Stewards, department duties	17		45	13			31	1	24	1	17			27	2	16	16	19	30
11	Handling cargo							8							2					
33	Fishing			2	2	1		9		2				5	4		2	5		1
13	Drills			2	2			2		2					3		3			
20	Passenger	2		6	7			2		2					1					
7	Other and unknown	1		1		1		3		1										
Location of vessel:																				
721	At dock	78	14	99	75	13	7	147	1	48	16	30	1	19	35		77	31	54	16
123	At anchor	8	2	14	14	3	1	26		3	5	5	1	1	15		12	6	5	2
1063	Underway	89	1	157	134	6	9	150	3	100	36	35	5	19	77	5	111	56	41	27
	Unknown																			

STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD ALL COMMERCIAL VESSELS*— CONTINUED

1 July 1963 to 30 June 1964 Fiscal year 1964 Cause of injury		Nature of injury—Continued																		
		Slips and falls— ladders	Slips and falls— gangways	Slips and falls— on deck	Slips and falls— other	Falls from vessel into water	Falls into holds or tanks	Struck by objects: falling, dropped or moving	Exposure and asphyxiation	Struck against, crushed, blamper- ed into objects	Operating machin- ery and tools	Burns and scalds (other than elec- trical)	Electrical shock and burns	Cuts in lures, chains, or wire ropes	Pinching and crushing	Heavy weather	Overexertion, sprains and strains	Cuts, lacerations, bruises and penetrations	Alterations and misconduct	Unknown or least definite informa- tion
156	Part of body injured:																			
50	Head and neck	15		12	20	1	1	38		21	1	7	1		1			5	29	3
175	Eye and face			4	3			25		1	1	5						4	4	7
391	Arm and shoulder	16	4	29	26	1		31		19	5	7		1	2	2	12	8	4	7
262	Hand	13		28	17	2		49		30	4	9	2	27	10		16	47	6	13
323	Leg and hip	19	3	56	40	5	1	49		30	4	5		3	7	1	16	8	1	4
227	Foot	37	4	28	41	1	2	83		7	3	14		6	11		89	15	6	7
170	Back	32	2	41	35	4		10		15		3		3	1		74	1	8	
96	Body—external	21	3	17	25	4	3	24		12	1	22	3	1		1	2	6	24	1
27	Body—internal	19		12	13	2	3	12		14	1				5		4	6	6	2
15	Hernia			2	1					2							22	5	1	
13	Multiple body injuries	3	1	1	2		2	2	4		1					1			1	3
	All other injuries					2											3		1	
	Additional contributing factors to cause of injury																			
222	Human element	16	3	43	25	1	4	22		13	7	5	1	2	9	1	16	8	42	4
18	Decks—slippery or cluttered	2		9	5	1											1			
37	Weather conditions	4		11	8			4		2					4		2	1		1
12	Poor maintenance or house- keeping	1		6	1			1		1								1		1
2	Inadequate lighting						1							1						
7	Inadequate rails or guards				2	1	3				1									
1	Failure of equipment	1																		
14	Inadequate supervision	1			2		1	4				2	1		1		1	1		1
19	Inadequate tools or equip.	6			4			2			2				2		2			1
3	Inadequate protective equip.			1				1												1
19	Improper use of tools or equip.	2			2	1		5		2	1	1			1		2	2		
4	Causes not otherwise classified	1						1		1										
20	Hull structure	1		5	5			1		5					1		2			1
82	Holds, hatches, tanks	4		6	26		10	14	1	4		2			4		11			
97	Ladders, gangways, stairs	49	7	4	8	3		6		5					4		5	4		
94	Masts, booms, cargo gear			5	10			38		12	1			13	10		5			
32	Watertight closures			1	1			9		3					16		1			1
124	Living spaces	7		11	40			10	1	15		1			24		9	3		
35	Fishing equipment				3	1		12		1				6	4		4	4		
12	Navigational equipment			2	2		1	1		2					1					3
12	Lifesaving equipment	1			3			2		1					3		2			
5	Firefighting equipment			1				2		2										
1	Communications equipment							1												
4	Yard repairs				1			2									1			
75	Improper loading, stowage, and ventilation	3		8	10		1	18		7		3		2	4		11	7		1
15	Ground tackle	1		1		1		4		1				1	3		1	1		
20	Tugs and towing equipment			2	1	1		8		1	1			4	1		1			
136	Mooring equipment	2		7	5	1		77		13		1		13	4		10	3		
121	Miscellaneous deck depart- ment equipment	7		11	12	5		31		5	16	1			5		18	10		
5	Main propulsion machinery							1		1	1	1			2					
58	Boiler parts and accessories	1			1			9		4	1	34			1		5	2		
178	Auxiliary machinery	15		9	31			17		24	24	8		1	11		28	10		1
21	Electrical equipment	1			1			3		1	2	2	6				2	3		
138	Valley equipment	4		21	3			22	1	9	1	15			14		8	12		28

*Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS*

	Nature of casualty																		
1 July 1963 to 30 June 1964 Fiscal year 1964	Collisions, crossing, meeting and over- taking	Collisions, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire— cargo	Explosion and/or fire— vessel's fuel	Explosion and/or fire— lockers, pressure vessel	Explosion and/or fire— structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizing and floodings	Heavy weather damage	Cargo damage	Material failure— structure and equipment	Material failure— machinery and engineering equipment	Casualty not otherwise classified	Total	
Number of casualties	172	135	35	281	258	37	33	7	133	304	257	223	49	6	133	177	64	2,308	
Number of vessels involved	492	303	83	376	348	39	34	7	150	373	275	243	55	7	137	179	77	3,178	
Number of inspected vessels involved	165	124	29	209	139	29	8	6	42	100	202	30	42	6	117	154	22	1,484	
Number of uninspected vessels involved	327	179	54	167	209	10	26	1	106	213	73	213	13	1	20	25	55	1,694	
Primary cause																			
Personnel fault:																			
Pilots—State	12		9	4	2					2	3						1	33	
Pilots—Federal	2	3	3	1	1					1	2						1	14	
Licensed Officers—documented Seaman	46	8	16	4	12		1	2	5	35	7	3			6	14	3	162	
Unlicensed—undocumented persons	96	20	8	16	29		6		6	61	6	21			1	2	4	276	
All others	34	17	10	8	17	15			15	12	6	4		2	6	6	2	154	
Error in judgment—calculated risk	12	24	5	60	15					32	50	2			3		1	213	
Restricted maneuvering room	26	34		85	23					24	38							220	
Storms—adverse weather	6	15	2	26	31					37	18	54	51	5	27	1	1	274	
Unusual currents	5	2		29	5					6	5	7			1			60	
Sheer, suction, bank cushion	13	1		5	1					7	5							32	
Depth of water less than expected		1								68	96	1						165	
Failure of equipment	9	14		26	9	2	1	2	17	36	15	18			69	125		343	
Unseaworthy—lack of maintenance	1	1		1	2	6	25	3	80	5	2	95	3		20	28		272	
Floating debris—submerged object					105					1	2	7				2	1	112	
Inadequate tug assistance	8	11		33	13					9	7	10			1		2	94	
Fault on part of other vessel or person	220	151	30	67	83	8	1		24	37	12	17			1		19	670	
Unknown—insufficient information	2	1				8			3		1	4	1		2	1	42	65	
Additional contributing factors to cause of casualty																			
Hull and associated parts:																			
Plates and framing—steel		2		2	16				1	5	1	36	15		31		1	110	
Planks and framing—wood					16					2		56	2					76	
Tanks					1	4	2		1			2		1	3		2	16	
Holds and hatches						6			1									7	
Superstructure—bulkheads																			
decks						1	2		2			6	12	1	1		1	26	
Ladders, gangways, rails, and guards																		1	
Masts, booms, and cargo gear																			
Rudder and stern tube													1	1				15	
Watertight closures												28						30	
Quarters and living spaces									10				2			1		13	
Navigation and safety:																			
Lookout	25	8	4	1	3					4							1	56	
Docks—piers—congested area	21	62	1	126	19					24	33	1					1	288	
Channels—restricted areas	84	10	13	30	20					59	66	2					2	286	
Buoys—aid to navigation		3		2	15					19	15							54	
Excessive speed	25	4	25	6	5					1		1					4	71	
Poor visibility	10	3	32	6	8					29	22							90	
Steering gear	11	5		3	10					19	12	4	1		15	10		91	
Radar	3		9	1	1					3	3				1			21	
Fathometer—depth of water					8													11	
Engine order telegraph	1	3		4	3					3								8	
Navigation equipment—other					2													40	
Navigation lights	26	8		1	13					27	1	2			1			48	
Navigation signals	133	10	18	4	3					1	2							173	
Weather (generally)	9	21		67	34				1	43	24	37	2			2	16	256	
Currents and tides	8	19		57	7				1	16	21	13			1		13	156	
Lifesaving equipment									2			3	14		10			29	
Firefighting equipment						3	1		2									6	
Miscellaneous																			
Yard repairs				1		6			12			1		1	2	8	1	32	
Improper loading or storage						24	3			2				6				87	
Tug assisting	174	74	17	133	79					85	28	30	8	2	2	2	4	622	
Anchor equipment	1	9	4	2	1					25	4	3			36	4		100	
Towing equipment	4	10		11	13					16	5	12	1		1		2	76	
Mooring equipment		2		4	10					10	4	18	4		3		5	58	
Fishing equipment	2				3					2	1	7			5		2	22	
Deck equipment—all other																			

STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS*—Continued

Nature of casualty—Continued																		
1 July 1963 to 30 June 1964 Fiscal year 1964	Collisions; crossing, meeting and over- taking	Collisions, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fire— cargo	Explosion and/or fire— vessel's fuel	Explosion and/or fire— boilers, pressure vessel	Explosion and/or fire— structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizings and floodings	Heavy weather damage	Cargo damage	Material failure— structure and equipment	Material failure— machinery and engineering equipment	Casualty not otherwise classified	Total
Engineering:																		
Main propulsion machinery	5	8		17	43		18		8	17	6	14	2		9	76	4	231
Boiler parts and accessories						2	9	9	14		1	7	1		6			125
Machinery—all other							1		2			14	1					22
Tools and working spaces							13		34	1	1					1		52
Generators and other electrical equipment				1		3	2		33	1					3	32		75
Wiring, lights, controls				1	1	2			23		2					3		25
Steward's department:																		
Galley and steward's department equipment						1		1	22									24
Type of vessel																		
Inspected vessels:																		
Passenger and ferry—large	7	4	2	8	9		1	1	5	5	11		2		1	8		64
Passenger and ferry—small	8	3	2	2	14		3		10	11	8				6	11	4	85
Freight	27	56	11	118	56	30		5	17	60	121	5	12	4	78	53	9	687
Cargo barge	10	11	3	8	11				2	11	4	6	2	2	3			73
Tankships	24	28	2	31	24	3	4		6	28	51	3	8		19	44	6	281
Tank barge	85	14	6	38	18	6				30	4	3	1		2		2	218
Public	2	5	1		3					2	3		1		5	6		26
Miscellaneous	2	3	2	4	4				2	4		1	1		3	2	1	29
Uninspected vessels:																		
Fishing	45	27	3	6	49	1	20		66	87	7	89	3		10	18	37	471
Tugs	155	54	16	94	76	2	2	1	25	67	20	49	3		4	7		579
Foreign	43	56	23	22	19		1		4	28	36	4			2		2	244
Cargo barge	55	12	5	39	41	3			2	19	7	50	7	1	3		10	284
Miscellaneous	29	30	7	6	24		3		8	12	3	21			1		2	146
Gross tonnage																		
300 tons or less	224	108	26	108	163	4	29	1	113	166	41	178	9	1	24	36	46	1,281
Over 300 to 1,000 tons	123	38	16	70	66	4		1	6	53	24	53	5		7	10	15	695
Over 1,000 to 10,000 tons	119	104	33	147	82	25	2	5	24	107	140	10	25	5	73	69	12	976
Over 10,000 tons	26	53	8	51	37	6	3		7	45	70	3	16	1	35	65	4	681
Length																		
Less than 100 feet	195	90	22	88	136	4	28	1	105	155	30	170	5	1	15	31	45	1,127
100 to less than 300 feet	212	72	26	120	108	9	1	1	13	105	41	64	16	2	14	19	17	849
300 to less than 500 feet	52	85	26	70	51	22	1	4	22	57	118	6	10	3	66	35	9	681
500 feet and over	33	56	9	98	53	4	4	1	7	56	86	3	16	1	61	74	6	589
Age																		
Less than 10 years	178	99	25	109	91	12	6	1	30	105	66	43	12	2	19	35	19	533
10 to less than 20 years	153	96	27	125	112	16	14	2	54	110	87	73	18	4	49	77	31	1,099
20 to less than 30 years	85	63	20	68	87	7	6	3	34	80	78	56	16		51	59	16	739
30 years and over	76	55	11	74	58	4	5	1	32	78	44	70	7	1	18	18	11	586
Location of casualty																		
Inland—Atlantic	44	46	9	50	47	8	9	3	25	74	84	45	2		15	29	7	497
Inland—Gulf	49	25	6	54	46	5	5	6	33	39	45	25	1		5	5		349
Inland—Pacific	8	21	5	34	47	3	6	1	29	53	27	23	4	1	15	22	41	284
Ocean—Atlantic	10	1	3	12	12	3	2		14	8	4	21	20	3	25	49	2	193
Ocean—Gulf	4	3	2	1	15	2	5		9	14	8	19	1		5	10		98
Ocean—Pacific	9	1	1	3	21	3	3	1	6	28	1	30	13	1	24	37	2	183
Great Lakes	10	8		74	21	2	1	1	5	38	44	6	2		11	4	2	239
Western rivers	20	6	6	36	26	4	2		6	25	8	42	1		3		2	186
Ocean—other			1	1	2	1			1	4		1	1		10	9		31
Foreign waters	9	25	2	28	21	4		1	5	29	26	1	4	1	22	21	3	266
Time of day																		
Daylight	82	79	29	165	147	23	21	5	70	130	141	116	28	4	95	97	34	1,295
Nighttime	86	51	6	94	100	11	10	2	56	162	105	91	17		38	61	26	946
Twilight	4	5		22	11	3			7	14	11	10	4	2	2	19	4	139
Estimated losses—units of thousands																		
Vessel	5,009	1,710	3,410	1,651	2,475	494	2,353	148	10,802	12,086	11	6,145	479	368	1,134	3,234	1,114	53,210
Cargo	694	4	105	21	71	632	28		48	9,536		1,084	92	307	61	10	232	12,939
Property	8	81		1,636	295		15		50	26		13	10		33		60	2,396
Vessels totally lost																		
Inspected	1		1		3	1	3		9	7		10			1		2	36
Uninspected	26	6	4	3	28	1	22	1	56	53		113	2			1	36	352

*Statistics concerning recreation and pleasure boating accidents are published in CG-337.

STATISTICAL SUMMARY OF DEATHS/INJURIES DUE TO A VESSEL CASUALTY*

Nature of casualty													
	Collision, crowding meeting and overtaking	Collision, while anchored, docking or undocking	Collision, fog	Collisions with piers and bridges	Collisions, all others	Explosion and/or fires cargo	Explosion and/or fires vessel's fuel	Explosion and/or fires vessel's pressure vessels	Explosion and/or fires structure, equipment, all others	Grounding with damage	Grounding without damage	Foundering, capsizing, and flooding	Heavy weather damage
Number of casualties	16	3	6	4	6	7	12	2	10	5	1	42	2
Number of inspected vessels involved	18	7	11	9	10	23	23	1	54	0	0	7	2
Number of uninspected vessels involved	18	7	11	9	10	20	9/34	1/1	32/36	4/1	0/1	80/8	0/2
Number of persons deceased/injured	10/6	2/5	12/6	6/5	5/1	7/4	9/34	1/1	32/36	4/1	0/1	80/8	0/2
Primary cause													
Personnel fault:													
Pilots—State													
Pilots—Federal													
Licensed officer—documented seaman	3	2	5	1	1	1	1	1	1			1	
Unlicensed—undocumented persons	3	2	1	1	3	3	4	1	3	2		4	
All others	9											1	
Error in judgment—calculated risk													
Restrained maneuvering room													
Storms—adverse weather													
Unusual currents													
Sheer, suction, bank cushion													
Depth of water less than expected													
Failure of equipment													
Unseaworthy—lack of maintenance													
Floating debris—submerged object													
Inadequate tug assistance													
Fault on part of other vessel or person													
Unknown—insufficient information													
Type of vessel involved													
Inspected vessels:													
Passenger and ferry—large	1			2			1	1					
Passenger and ferry—small							2						
Freight													
Cargo barge													
Tankships													
Tank barges													
Private													
Miscellaneous													
Uninspected vessels:													
Fishing	3	1	1	3	3		13	6	3			53	
Tug	5			6	1			1	2			18	
Freight	2				1							1	
Miscellaneous	7	6	5	1	4		7	4				8	
Particulars of person deceased/injured													
Papers of deceased injured:													
Licensed by Coast Guard	10/8	2/5	7/2	6/5	3/1	1/0	5/12	3/12	0/2			7/0	
Documented by Coast Guard	0/1		5/0		1/0	6/0	1/21	1/0	12/1			0/2	
No license or document						0/5			20/33	4/1		69/8	
Other—unknown—foreign												1/0	
Status or capacity on vessel:													
Passenger	1/0	2/2	2/0	0/2			1/5					5/1	
Longshoreman—harbor worker												3/0	
Crew member	5/5	0/3	9/6	5/1	2/0	8/28	0/1	1/1	19/6	3/1	0/1	65/7	0/2
Other	4/4		1/0	6/3					11/19	1/0		6/0	
Activity engaged in:													
Off duty	0/3	0/3	0/2				0/11		3/0			6/0	
Deck department duties	3/0		4/1		2/0	6/7	1/0	4/2	1/1	0/1		26/3	0/1
Engine department duties	0/2					1/2	0/1	5/2	3/1	0/1		3/1	0/1
Stowage department duties			0/3			1/0		3/0					
Handling cargo													
Fishing	1/0		3/0		2/0	0/2		0/2	2/0			36/3	
Drift													
Passenger	1/0		2/0	0/2		1/5						0/5	
Other and unknown	5/4	2/3	3/0	6/3	3/3	0/7	17/30	1/0				5/1	
Location of vessel:													
At dock		0/3			4/5	3/18	1/0	6/13				1/1	
At anchor		2/2				0/2	0/1	22/19				5/0	
Underway	10/9		12/6	6/5	6/1	3/0	6/14	4/4	4/1	0/1		67/7	0/2
Unknown													
Part of body involved													
Head and upper limbs	0/3		0/2	0/3	3/0	2/1	0/4		0/5	0/1		1/0	
Back and lower limbs	1/1	0/2	0/1	0/1	0/3	0/3	0/1		0/5			2/5	0/2
Multiple injuries (internal and external)	0/5	0/1	0/3	0/1	0/1	8/1	2/29	1/1	2/4	2/0	0/1	0/5	0/2
Death—heart							1/0					1/0	
Death—drowning	9/0	2/0	9/0	6/0	1/0	2/0						1/0	
Death—disease, other		0/2	3/0		1/0		6/0		30/20			49/1	6/0
												28/1	7/0

* Statistics concerning recreation and pleasure boating accidents are published in CG-357.

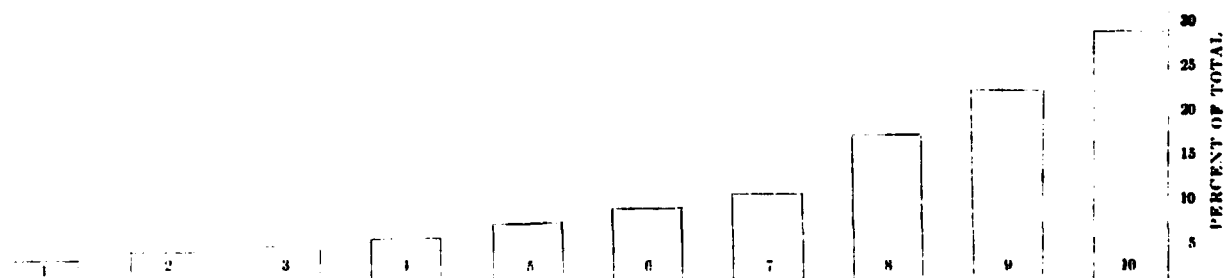
STATISTICAL SUMMARY OF PERSONNEL INJURIES ON BOARD ALL COMMERCIAL VESSELS*
(NOT INVOLVING A VESSEL CASUALTY)
1 July 1962-30 June 1963

Injuries (Total)	Type of casualty	Cause of injury																	
		Intoxication	Physical deficiency	Unsafe movement (running, jumping, etc.)	Psychological (immaturity, insanity)	Unsafe practice	Law violation	Human errors (carelessness)	Weather conditions	Poor maintenance (housekeeping)	Inadequate lighting	Inadequate rails, guards, etc.	Failure approved equipment or material	Failure unapproved equipment or material	Supervision inadequate	Life preservers insufficient	Lack of tools/equipment	Lack of protective gear	Miscellaneous causes
Number of injuries																			
												Crewmembers	1,792						
												Passengers	26						
												Longshoremen/harbor workers	12						
												Others	5						
												Total	1,835						
167	Slips and falls - Ladders	6	3	4		2	1	96	4	11		2		4			6		2
35	Slips and falls - Gangways	10		1		1		15	2			2					1		2
254	Slips and falls - On deck	16	6	12		3		119	26	50	1	1		2			5		10
67	Slips and falls, other - Same level	2	1	12		7		37	2	9	1						2		3
3	Falls from vessel - Into water		1					2											
9	Falls from vessel - Other		1	2		3		2											
14	Falls into hold, tank		1			3		9				1							
126	Falls - Other - Different level	5	4	1		31		53	4	3		6		6	7		5		1
143	Struck by - Falling object			1		17		75	1	2		1		16	11	3	11	2	3
76	Struck by - Flying object (mooring lines - Cargo gear)					12		21	4					21	12		4		2
32	Struck by - Moving object (other than vessel)					5		19						2	3		2		1
2	Struck by - Boat or vessel																		2
	Exposure																		
2	Asphyxiation					12													
152	Struck against	5		2				90	22	2				2			6	2	5
3	Cargo handling														1				
50	Operating machinery - Tools			1		12		22							1		9		
45	Burns					4		30							3	4	2		
39	Scalds					12		23	2					1	6	2	3	2	
6	Electric shock and burns					3		2									1		
56	Caught in lines and chains					9		30	1	1		1		3	2		5	1	3
126	Pinching - Crushing	1	2			12		89	12	1				1	4		4		
1	Heavy weather							1											
87	Over exertion		2	84				1											
119	Sprains and strains	2	1	66		12		25	5	4			1	1			2		
101	Cuts, punctures, etc.	1		1		7		70	3	4		1		2	2		10		
5	Galley accidents					1		3	1										
90	Fights	5			1			84											
25	Not otherwise classified					2		7									6	7	3
1835	Totals	53	21	173	1	192	1	933	90	87	2	15	2	72	85	3	84	14	37

*Statistics concerning recreation and pleasure boating accidents are published in CG-357.

1. Injuries not otherwise classified (26)
2. Operating machinery, tools, cargo gear (53)
3. Fights and misconduct (90)
4. Burns, scalds, electric shock, asphyxiation (92)
5. Cuts, punctures, galley accidents (106)
6. Falls into water, cargo holds and different levels (132)
7. Caught in lines, crushed, pinched (182)
8. Overexertion, sprains, strains (206)
9. Struck by or against objects (405)
10. Slips and falls on ladders, gangways and on deck (323)

Total injuries	
Crewmembers	1,792
Passengers	26
Longshoremen and harbor workers	12
Others	5
Total	1,835



STATISTICAL SUMMARY OF CASUALTIES TO COMMERCIAL VESSELS*

1 July 1962-30 June 1963

	Ground- ing	Found- ing, capsiz- ing, sinking	Coll- isions with vessels	Coll- isions with other than vessels	Fires and explo- sion	Heavy weather damage	Material failure	Cargo damage; no damage to vessel	Undeter- mined or insuffi- cient infor- mation	Casualty not other- wise clas- sified	Total
Number of casualties.....	511	247	370	476	182	50	282	10	5	21	2,134
Number of vessels involved.....	552	270	790	571	197	51	282	11	3	28	2,735
Number of inspected vessels involved.....	316	35	331	326	102	44	220	10	2	17	1,388
Number of uninspected vessels involved.....	236	235	459	245	185	7	62	1	1	11	1,347
Types of vessels involved											
Passenger:											
Vessels over 65' Inspected.....	14	2	20	17	5	2	15			3	78
Vessels not over 65' Inspected.....	16	20	17	14	13		5	1		1	87
Freight:											
Vessels—Inspected.....	154	4	117	100	28	22	125	6		8	630
Barges—Inspected and uninspected.....	42	65	88	80	4	3	4	3		3	280
Tank:											
Ships.....	84	2	55	62	9	12	49			5	278
Barges.....	33	4	100	54	14	2	2		2		211
Public:											
Towing.....	4	3	20	8		3	17				55
Inspected.....	2	2	9	3			4				30
Uninspected.....	48	52	138	80	29	1	11	1		4	364
Fishing:											
Motorboats (commercial) not over 65' in length uninspected.....	89	91	82	33	67	4	21		1	2	390
Foreign:											
Miscellaneous.....	58	1	123	37	8	1	1			2	231
Uninspected.....	8	21	21	16	18	1	8				93
Vessels totally lost:											
Inspected.....	10	12		5	7		2				34
Uninspected.....	50	120	23	15	90	2	2		1		279
Lives lost in vessel casualties											
Passengers:											
Inspected.....											
Uninspected.....		2									2
Crew members:											
Inspected.....		39	1		2						42
Uninspected.....	3	71	54		14	1	4		1		148
Longshoremen/Shore workers:											
Inspected.....					12						12
Uninspected.....							4				4
Others:											
Inspected.....							1				1
Uninspected.....	2	4	7		4						17
Lives lost by types of vessel involved											
Inspected vessels.....		39	1		14		1				55
Fishing vessels—Uninspected.....	4	42	1		15	1	1		1		65
Tugs—Uninspected.....	1	18	17		1		1				36
Foreign-flag vessels.....			41								41
Other uninspected vessels.....		17	2		2		0				27
Total deaths.....	5	116	62		32	1	9		1		226
Injured and incapacitated over 72 hours:											
Passengers—Inspected vessels.....		1		1							2
Passengers—Uninspected vessels.....					6						6
Crew—Inspected vessels.....	4		3		1		2			3	13
Crew—Uninspected vessels.....	1	4	16	1	25	2	1			1	51
Longshoremen/Harbor workers—Inspected vessels.....					1		3				4
Longshoremen/Harbor workers—Uninspec- ted vessels.....					5						5
Others—Inspected.....			1		2						3
Others—Uninspected.....	1			2	2						5
Primary cause											
Personnel fault:											
Pilots—State, Federal, foreign.....	26	1	73	15						2	117
Licensed officer.....	62	3	59	16			20			2	173
Documented seaman.....	1		6	2	10		2			1	16
Unlicensed, undocumented, all others.....	26	24	134	48	26		15	1		3	267
Error in judgment—Calculated risk.....	79	2	63	99						2	243
Weather.....	69	56	37	103	2	50	34	6		5	382
Currents.....	7	9	15	40			1				72
Sheer, suction, bank cushion.....	6		9	6							21
Depth of water less than expected.....	123	1	1	3			1				129
Failure of equipment.....	47	37	85	24	61		159	2		1	398
Unseaworthy—Lack of maintenance.....	3	86	5	1	54		22	1			173
Unknown—Insufficient information.....	4	3			14		3		3		27
Fault on part of other vessel or person.....	33	27	353	118	16		5	1		11	562
Floating debris—Submerged object.....	6	11		84							115
Total vessels involved.....	552	270	790	571	197	51	282	11	3	28	2,735

* Statistics concerning recreation and pleasure boating accidents are published in CG-357.

STATISTICAL SUMMARY OF DEATHS ON BOARD UNINSPECTED COMMERCIAL VESSELS* (NOT INVOLVING A VESSEL CASUALTY)

1 July 1962-30 June 1963

Deaths (Total)	Type of casualty	Cause of death																	
		Intoxication	Physical deficiency	Unsafe movement (running, jumping, etc.)	Psychological (immaturity, insanity)	Unsafe practice	Law violation	Human errors (carelessness)	Weather conditions	Poor maintenance (house-keeping)	Inadequate lighting	Inadequate rails, guards, etc.	Failure approved equipment or material	Failure unapproved equipment or material	Supervision inadequate	Life preservers insufficient	Lack of tools/equipment	Lack of protective gear	Miscellaneous causes
30	Natural Cause.....																		
1	Homicide.....																		
5	Suicide.....																		
2	Disappearance.....																		
1	Slips and falls—Ladders.....	1																	
3	Slips and falls—Stairways.....					1					2								
	Slips and falls—on deck.....																		
	Slips and falls—Other—same level.....																		
73	Falls from vessel—into water.....	15	4	1	6			32	11	1					1			1	
2	Falls from vessel—Other.....																		
4	Falls into hold, tank.....							1											2
1	Falls—Other—Different Level.....																		
5	Struck by—Falling Object.....				1			1						2				1	
1	Struck by—Flying Object (Mooring lines—Cargo gear).....													1					
1	Struck by—Moving Object (Other than Vessel).....																		
	Struck by—Boat or vessel.....																		
	Exposure.....																		
4	Asphyxiation.....							1						2				1	
1	Struck against.....														1				
1	Cargo handling.....													1					
2	Operating machinery—Tools.....							1										1	
	Burns.....																		
	Scalds.....																		
1	Electric shock.....					1													
2	Caught in lines.....							2											
	Pinching—crus-hinge.....																		
	Heavy weather.....																		
	Over exertion.....																		
	Sprains and Strains.....																		
	Cuts, punctures, etc.....																		
	Galley accidents.....																		
	Fights.....																		
	Unknown causes not otherwise classified.....																		
139	TOTALS.....	16	4	1	7	2		41	11	1		2		6	2			6	
									</										

Number of deaths	
Crewmembers.....	112
Passengers.....	9
Longshoremen/Harbor workers.....	12
Others.....	6
Total.....	139

*Statistics concerning recreation and pleasure boating accidents are published in CG-357.

DEATHS

In the summary of DEATHS on board inspected and uninspected commercial vessels it can be seen by the attendant tabulation that a total of 226 persons lost their lives as a result of casualties to vessels. The disappearance of the molten sulphur carrier, the *Marine Sulphur Queen*, accounted for the greatest single loss, with a total of thirty-nine persons missing and presumed drowned. There were five casualties involving explosions and fires on board tank ves-

sels or tank barges killing twelve shore workers and one crew member. One person was killed when a towing shackle on board a freighter suffered a material failure while being used with a nylon hawser.

Collisions involving American and Foreign vessels took a total of forty-one lives on board the foreign vessels. The most significant casualty being the collision involving the Norwegian tank vessel *Boheme* and the uninspected tug *Bonnie D* pushing four tank barges in the Mississippi River north of New Orleans. As a result of this casualty twenty crew members on

the tank vessel perished. Two other collisions involving American cargo vessels and Foreign fishing vessels in international waters took a total of sixteen lives, on the foreign vessels, eight in each collision.

Deaths as a result of casualties to fishing vessels resulted in the loss of sixty-five lives. The most significant casualty in this class of vessel was the foundering of the F/V *Midnight Sun* which accounted for eleven lives lost. Foundering, capsizing and sinkings accounted for the largest loss of life on board fishing vessels where forty-two persons perished. Fifteen persons

STATISTICAL SUMMARY OF DEATHS ON BOARD INSPECTED COMMERCIAL VESSELS* (NOT INVOLVING A VESSEL CASUALTY)

1 July 1962-30 June 1963

Deaths (total)	Type of casualty	Cause of death																	
		Intoxication	Physical deficiency	Unsafe movement (running, jumping, etc.)	Psychological (immaturity, insanity)	Unsafe practice	Law violation	Human errors (carelessness)	Weather conditions	Poor maintenance (housekeeping)	Inadequate lighting	Inadequate rails, guards, etc.	Failure approved equipment or material	Failure unapproved equipment or material	Supervision inadequate	Life preservers insufficient	Lack of tools/equipment	Lack of protective gear	Miscellaneous causes
181	Natural cause.....																		
1	Homicide.....																		
16	Suicide.....																		
8	Disappearance.....																		
2	Slips and falls—Ladders.....							2											
2	Slips and falls—Gangways.....	1						1											
2	Slips and falls—On deck.....	1						1											
26	Slips and falls—Other—same level.....																		
1	Falls from vessel—Into water.....	9		1	1	3		9	2					1					
1	Falls from vessel—Other.....							1											
12	Falls into hold, tank.....							11											
1	Falls—Other—different level.....							1											
4	Struck by—Falling object.....							1											
1	Struck by—Flying object (mooring lines, cargo gear).....					3		1											
1	Struck by—Moving object (other than vessel).....							1											
	Struck by—Boat or vessel.....					1													
	Exposure.....																		
5	Asphyxiation.....	1	1			2								1					
1	Struck against.....								1										
	Cargo handling.....																		
1	Operating machinery—Tools.....														1				
	Burns.....																		
	Scalds.....																		
	Electric shock.....																		
	Caught in lines.....																		
	Pinching—Crushing.....																		
	Heavy weather.....																		
	Over exertion.....																		
	Sprains and strains.....																		
	Cuts, punctures, etc.....																		
	Galley accidents.....																		
1	Fights.....	1																	
1	Unknown causes—Not otherwise classified.....	1																	
267	Totals.....	14	1	1	1	10		28	3					2	1				

*Statistics concerning recreation and pleasure boating accidents are published in CG-367.

were killed as the result of fire and explosions while another eight persons died as the result of other casualties such as groundings and collisions.

In addition to the twenty lives lost in the *Boheme-Bonnie D* tragedy already mentioned, uninspected tugs and towboats were involved in casualties resulting in the death of an additional thirty-eight persons. The foundering of the *Gwendoline Steers* on Long Island Sound claiming the lives of nine crew members was another significant casualty involving an uninspected tug. Four more foundering accidents accounted for the death of eight

persons while a capsizing of a tug while towing resulted in the loss of one more life. Eight collisions involving pleasure vessels and tugs with tugs claimed another thirteen lives.

Deaths on board inspected and uninspected commercial vessels that did not involve a casualty to a vessel totaled 408 lives. The category, natural causes, accounted for the greatest number of deaths and totaled 211. Personal accidents, such as slips and falls, falls into water, falls into cargo holds, and asphyxiation accounted for 162 deaths.

Deaths not involving casualty to vessel.....	408
Natural causes.....	211
Homicide.....	2
Suicide.....	21
Disappearances.....	10
Personal accidents.....	162
Deaths involving casualty to vessel.....	226
Groundings.....	5
Foundering, capsizings and sinkings.....	116
Collisions.....	62
Fires and explosions.....	32
Other.....	11
Total deaths.....	632

