USCG-PVA Quality Partnership Annual Report 2016 - 2018

This document presents information reported to the U.S. Coast Guard, which guides the discussions of the USCG-PVA Quality Partnership. The document provides an overview of the U.S. flag, Inspected Passenger Vessel fleet, as well as information concerning marine casualties and inspections involving U.S. Inspected Passenger Vessels. This report covers calendar years 2016 - 2018 and was developed from information contained in the U.S. Coast Guard Marine Information for Safety and Law Enforcement (MISLE) database. The information was extracted from the MISLE database using the Coast Guard Business Intelligence application.

Inspected Passenger Vessel Population

Vessel Status and Types

Inspected passenger vessels are regulated under Title 46, Code of Federal Regulations (CFR) Subchapters H, K, or T[1]. As indicated in the table below, there are 6,635 inspected passenger vessels recorded in MISLE. This is an increase of 256 since the last report, and we attribute this increase to the process we have implemented for better identifying vessels in this fleet. Previously, we included only those passenger vessels that held a valid Certificate of Inspection (COI) at the time of data extraction. We now include passenger vessels that held a COI at any time during the calendar year of the report. As such, the numbers of vessels with a status of "Destroyed", "Laid-Up", and "Scrapped" have increased substantially. However, despite the inclusion of these additional vessels, more than 96% of the fleet maintain an 'Active' status and have a valid COI.

One other criteria change to note, a very small population of passenger vessels (less than 1%) is currently classified in MISLE with an inaccurate inspection subchapter or Fleet of Responsibility location. These vessels were not included in this vessel population while the data anomalies are addressed.

Table 1 - Passenger Vessels by Inspection Subchapter and Status

Vessel Status	H	K	T	Totals
Active	142	426	5,813	6,381
Destroyed			12	12
Inactive	1	2	156	159
Laid Up	2	2	66	70
Scrapped			7	7
Sunk-Not Recoverable			3	3
Unknown		1	2	3
Total	**145**	**431**	**6,059**	**6,635**

[1] H: Vessels of 100 gross tons or greater that carry passengers.
K: Vessels of less than 100 gross tons that carry more than 149 passengers, or have overnight accommodations for more than 49 passengers.
T: Vessels of less than 100 gross tons that carry more than 6 passengers but less than 150 passengers, or have overnight accommodations for 49 or less passengers.

Vessel Status and Types (Continued)

Table 2 shows the breakdown of Inspected Passenger Vessels by their MISLE Vessel Type. Due to the large number of "GENERAL" entries and lack of guidance on the entry of "Vessel Type" data into MISLE, this data is of limited value or use. However, we note that the Office of Commercial Vessel Compliance (CG-CVC) has provided direction to USCG field units/inspectors to review the passenger vessels classified as "GENERAL" in MISLE and update that field, if appropriate to do so. As a result, the vessels in this category dropped by more than 200 since the last report.

The 6,635 inspected passenger vessels from 2018 are classified into the following vessel types:

Table 2 - Passenger Vessel Types

Vessel Type	H	K	T	Total
Amphibious Vessel			137	137
Attraction Vessel		1	9	10
Balloon Support Vessel			2	2
Charter Fishing Vessel		1	477	478
Crew Boat			182	182
Cruise Ship Launch/Tender			60	60
Diving Vessel (Recreational)			173	173
Excursion/Tour Vessel	6	85	1,015	1,106
Ferry	88	100	174	362
Gaming Vessel	2	3		5
General	46	201	3,065	3,312
Harbor Cruise Vessel	1	22	81	104
Ocean Cruise Vessel	1	8	1	10
Parasailing Vessel			155	155
Party/Head Boat (other than fish)		1	14	15
River Cruise Vessel	1	7	34	42
Sailing Vessel			176	176
Special Purpose Ship			22	22
Submersible			2	2
Water Taxi		2	280	282
Total	**145**	**431**	**6,059**	**6,635**

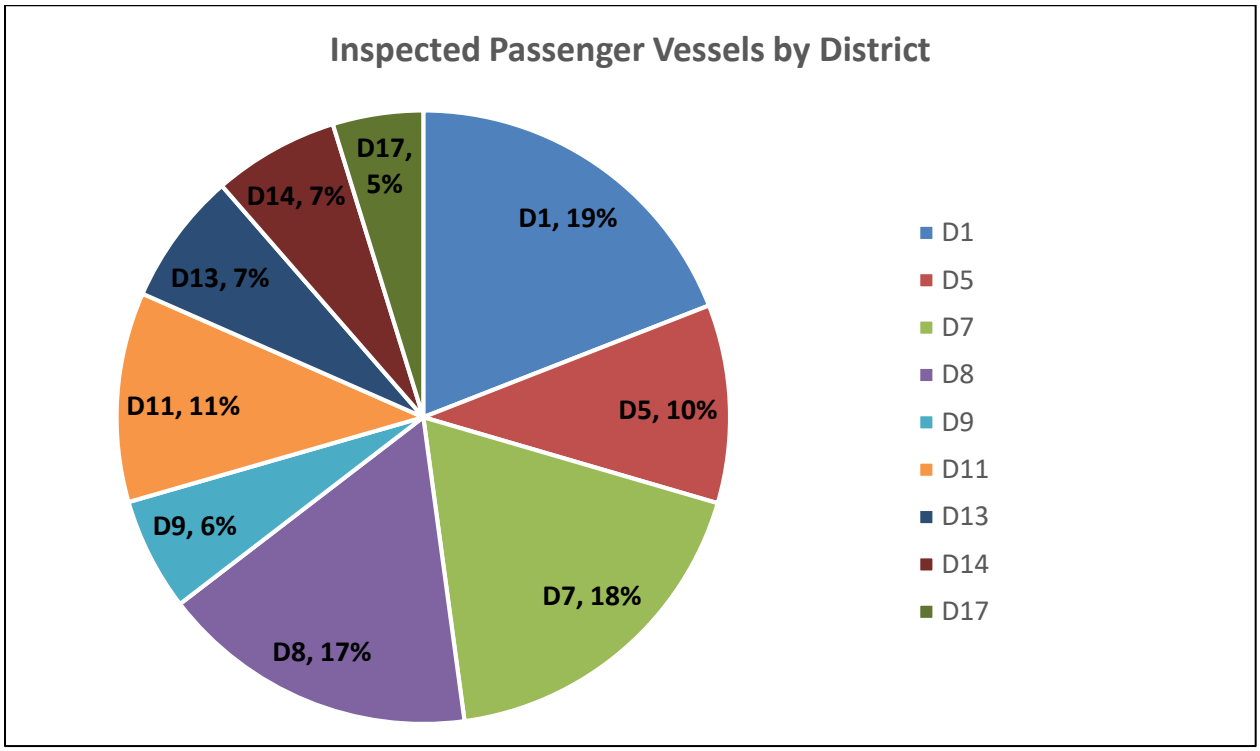
Geographic Distribution of Inspected Passenger Vessels

The Fleet of Responsibility to which a vessel is assigned indicates the specific Coast Guard Sector that retains general administrative responsibility for the vessel, such as conducting annual exams, issuing Certificates of Inspection, scheduling hull examinations, etc. This typically correlates to the vessel's operating area. The following table indicates the number of inspected passenger vessels assigned to each Coast Guard Sector.

Table 3 - Passenger Vessels by USCG Fleet of Responsibility

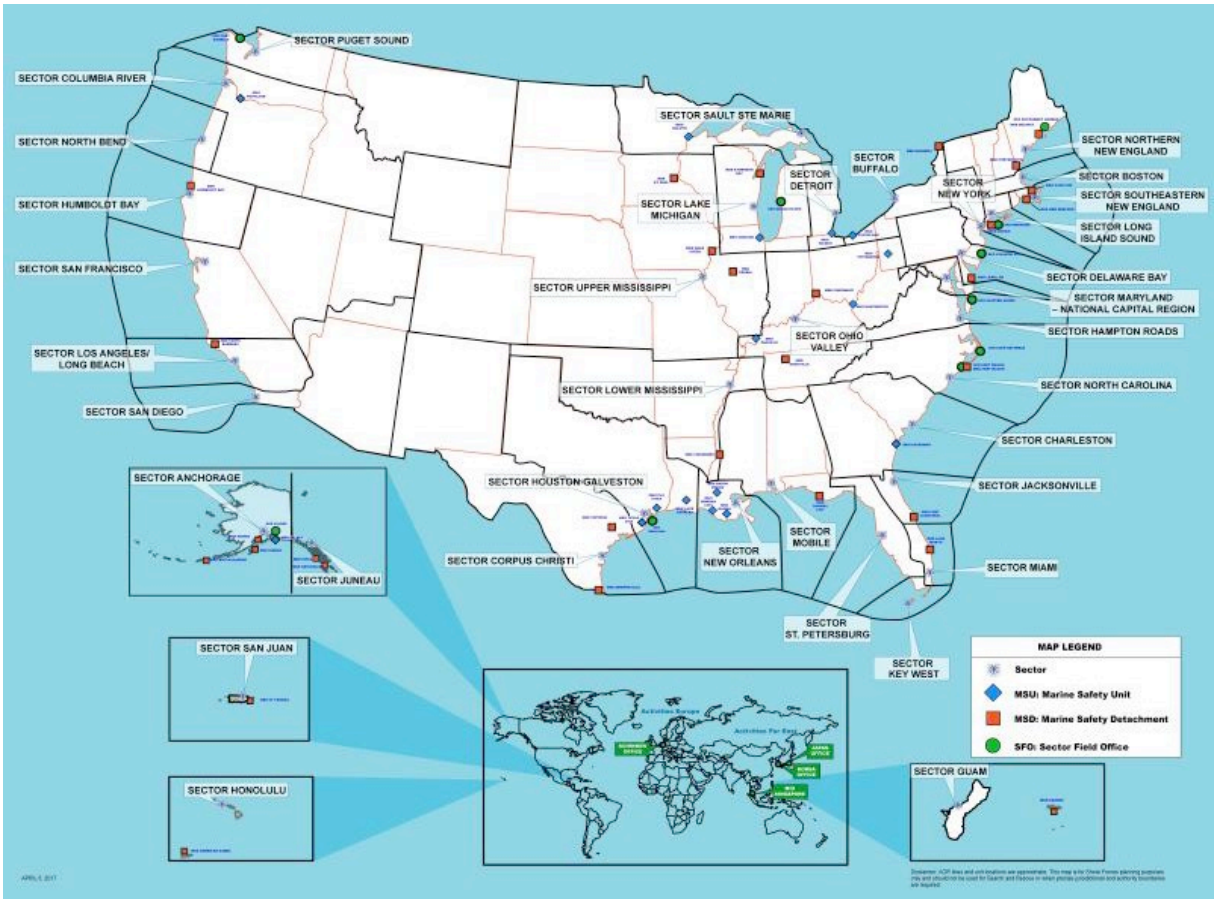
ATLANTIC AREA				
DISTRICT - Sector	**H**	**K**	**T**	**Total**
CG ACTIVITIES EUROPE			**2**	**2**
ACT Europe			2	2
CGD ONE	**42**	**161**	**1,034**	**1,237**
Boston		23	215	238
Long Island Sound	8	26	234	268
New York	14	81	201	296
Northern New England	13	13	185	211
SE New England	7	18	199	224
CGD FIVE	**28**	**22**	**645**	**695**
Delaware Bay	3	4	165	172
Hampton Roads	4	2	79	85
Maryland-NCR		14	300	314
North Carolina	21	2	101	124
CGD SEVEN	**3**	**47**	**1,195**	**1,245**
Charleston	1	8	200	209
Jacksonville	2	4	128	134
Key West		1	182	183
Miami		11	216	227
San Juan		17	160	177
St Petersburg		6	309	315
CGD EIGHT	**31**	**34**	**1,068**	**1,133**
Corpus Christi			73	73
Houston-Galveston	8	1	77	86
Lower Miss River	2	3	17	22
Mobile	1	5	310	316
New Orleans	15	2	472	489
Ohio Valley	4	9	41	54
Upper Miss River	1	14	78	93
CGD NINE	**3**	**50**	**332**	**385**
Buffalo		8	66	74
Detroit	1	5	69	75
Lake Michigan	1	23	124	148
Sault Ste Marie	1	14	73	88

PACIFIC AREA				
DISTRICT - Sector	**H**	**K**	**T**	**Total**
CGD ELEVEN	**3**	**72**	**646**	**721**
LA - LB		17	287	304
San Diego	1	8	167	176
San Francisco	2	47	192	241
CGD THIRTEEN	**26**	**30**	**416**	**472**
Portland	1	4	193	198
Seattle	25	26	223	274
CGD FOURTEEN	**1**	**3**	**431**	**435**
Guam			85	85
Honolulu	1	3	346	350
CGD SEVENTEEN	**8**	**12**	**290**	**310**
Anchorage	1	7	135	143
Juneau	7	5	155	167
LANT & PAC Total	**145**	**431**	**6,059**	**6,635**



Note: The percentages of the passenger vessel fleet remain the same since the last report.

USCG Units



Reportable Marine Casualties Involving Inspected Passenger Vessels

Marine Casualties Involving Fatalities

From 2016 through 2018, the Coast Guard received reports of 110 fatalities onboard U.S. flag inspected passenger vessels[2]. The table below provides details on the cause of death or "accident type" as determined by the Coast Guard Investigating Officer.

Table 4 - Fatalities involving Passenger Vessels (2016-2018)

Accident Type	H	K	T	Total
Assault, Homicide, Suicide, or Self-Inflicted Injury	2			2
Diseases- General			7	7
Existing Medical Condition Event	5	2	38	45
Overexertion Injury- Existing medical condition			4	4
Contact Injury- Crushed between objects			1	1
Contact Injury- Fall into water	1		2	3
Contact Injury- Fall onto surface			1	1
Noncontact Injury- Asphyxiation			21	21
Noncontact Injury- Diving			16	16
Noncontact Injury- Other	1	1	1	3
Other Injury Type			2	2
Unknown Injury Type			5	5
Total	**9**	**3**	**98**	**110**

In an effort to focus the work of the partnership, the term "vessel-related" was developed by CG and PVA staff so that non-accidental incidents and events occurring off the vessel would be excluded from the data analysis (i.e. murder, suicide, medical condition, and diving-related deaths).

As **highlighted in green** in the table above, 58 of the 110 fatalities were attributed to intentional acts or non-accidental causes. These types of incidents are NOT considered "vessel-related".

A detailed review of the remaining 52 incidents involving a fatality revealed that five (5) incidents, resulting in 21 fatalities, were "vessel-related"; see Table 5 (below) and incident summaries on the following page. The definition for "vessel-related" casualties, as well as examples is provided in Appendix I.

Table 5 - Passenger Vessel Fatalities that are "Vessel-Related"

Inspection Subchapter of Involved Passenger Vessel	Fatalities "Vessel-Related"	Fatalities NOT "Vessel-Related"	Total
H		9	9
K		3	3
T	21	77	98
Total	**21**	**89**	**110**

[2] An "Inspected Passenger Vessel" is a vessel which carries passengers for hire and subject to the regulations found in 46 CFR Subchapters T, K, or H.

The following is a summary of the five "vessel-related" casualties identified in Table 3:

1. (T): On October 26, 2018, the passenger vessel PROWLER (O.N. 294465), carrying twenty-nine people following an overnight fishing trip in Mexican waters, collided with the ATTESSA IV (Cayman Islands, IMO 9179830). One passenger from the PROWLER was seriously injured and transported ashore where they later died.

2. (T): On 19 July, 2018, the amphibious passenger vessel STRETCH DUCK 07 (O.N. CG248292) suffered flooding and subsequently sank in Table Rock Lake. There were 29 passengers and 2 crew on board, of which there were 17 fatalities.

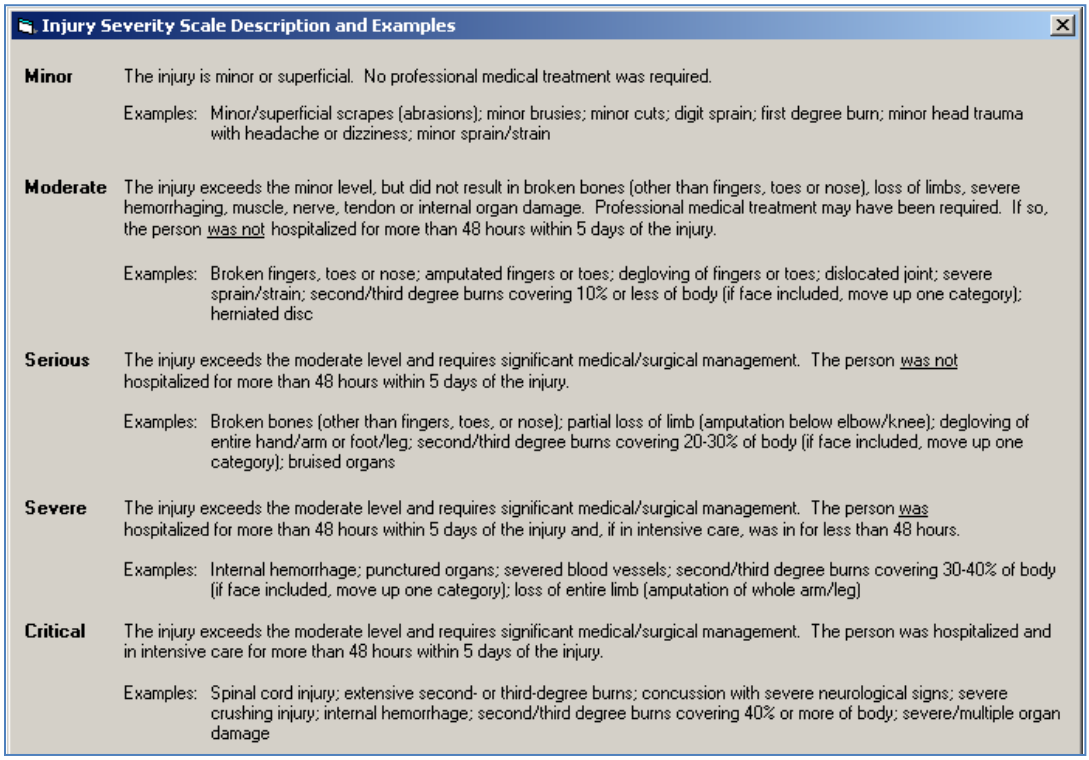
3. (T): On January 14, 2018, the vessel ISLAND LADY (O.N. 1020747) caught fire in the Pithlachascotee River. The master intentionally grounded the vessel and all passengers, employees, and crew jumped off the bow and walked to shore. One passenger suffered from the effects of inhaling smoke during fire and died the following day.

4. (T): On July 17, 2016, a passenger lost his footing while attempting to disembark the MISS RACHEL (O.N. 1037781) and fell overboard. The passenger drifted past the vessel's stern. Another passenger on the MISS RACHEL was unable to free the life ring from its mount on the vessel's handrail. The passenger sank beneath the water's surface and his body was recovered two days later.

5. (T): On April 11, 2016, an 87-year old woman tripped and fell while transiting from the main weather deck into the main cabin on board the ISLAND LADY (O.N. 1020747). As a result of the fall, the passenger suffered a broken right hip. The vessel returned to the dock and EMS transported the passenger to a hospital where she had surgery. The passenger died in the hospital three days later.

Marine Casualties Involving Serious, Severe, or Critical Injuries

As defined below, there are five injury severity categories used to classify personnel injuries.



From 2016 through 2018, there were 178 incidents which resulted in 181 Serious, Severe, or Critical injuries; 50.3% (91/181) of these injuries were the result of falls onboard the vessel.

Table 6 - Serious, Severe, or Critical Injuries Occurring Onboard Inspected Passenger Vessels

Accident Type	2016	2017	2018	Total
Contact Injury- Fall onto surface	34	27	30	91
Contact Injury- Struck by Moving Object	4	13	3	20
Noncontact Injury- Diving	2	8	8	18
Contact Injury- Collision with Fixed Object	5	3	7	15
Contact Injury- Crushed between objects		6	4	10
Contact Injury- Other	3	2	1	6
Noncontact Injury- Asphyxiation	3		2	5
Contact Injury- Fall into water		1	2	3
Contact Injury- Line handling/caught in lines	1	1	1	3
Noncontact Injury- Other		1	2	3
Other Injury Type		1	2	3
Overexertion Injury- Strain or sprain		1	1	2
Assault, Homicide, Suicide, or Self-Inflicted Injury	1			1
Unknown Injury Type			1	1
Total	**53**	**64**	**64**	**181**

As indicated in Table 7, passengers were involved in 147 of the 181 (81.2%) of the personnel casualties that resulted in serious, severe, or critical injuries. In addition, 54.4% (80/147) of the passenger injuries were the result of falls onboard the vessel. With respect to crewmembers, 30.3% (10/33) of the crewmember injuries were also the result of falls onboard the vessel.

Table 7 - Party Relationship & Accident Type for Persons Injured on Inspected Passenger Vessels

Accident Type by Party-Subject Type	2016	2017	2018	Total
Contractor Employee	**1**			**1**
Contact Injury- Fall onto surface	1			1
Crewmember (includes Master, Employee, Operator, Owner)	**6**	**16**	**11**	**33**
Contact Injury- Fall onto surface	3	5	2	10
Contact Injury- Struck by Moving Object	1	5	1	7
Contact Injury- Crushed between objects		3	2	5
Contact Injury- Collision with Fixed Object	1		1	2
Contact Injury- Line handling/caught in lines		1	1	2
Other Injury Type		1	1	2
Contact Injury- Fall into water			1	1
Contact Injury- Other	1			1
Noncontact Injury- Diving			1	1
Noncontact Injury- Other		1		1
Overexertion Injury- Strain or sprain			1	1
External Victim (Pilots, Visitors)	**0**	**0**	**0**	**0**
None				
Passenger	**46**	**48**	**53**	**147**
Contact Injury- Fall onto surface	30	22	28	80
Noncontact Injury- Diving	2	8	7	17
Contact Injury- Collision with Fixed Object	4	3	6	13
Contact Injury- Struck by Moving Object	3	8	2	13
Contact Injury- Crushed between objects		3	2	5
Contact Injury- Other	2	2	1	5
Noncontact Injury- Asphyxiation	3		2	5
Contact Injury- Fall into water		1	1	2
Noncontact Injury- Other			2	2
Assault, Homicide, Suicide, or Self-Inflicted Injury	1			1
Contact Injury- Line handling/caught in lines	1			1
Other Injury Type			1	1
Pre-Existing Medical Condition		1		1
Unknown Injury Type			1	1
Total	**53**	**64**	**64**	**181**

Marine Casualties and Events

As indicated in Table 8, inspected passenger vessels were involved in 1,815 reportable marine casualties from 2016 through 2018. Of those, 30.7% (557 of 1,815) of these casualties were classified as "Serious Marine Incidents"[3] (SMI).

Please note that the numbers of casualties in Tables 8, 9, and 10 have substantially increased in this report. This is due to a process change in the way we extract and analyze the applicable data. Our data system, MISLE, categorized the initiating events in a way that necessitated the removal of some incidents, involving "Personnel Casualty" event types, from previous reports. However, a change in the system now allows the Coast Guard to better categorize these events and assess when "Personnel Casualty" events took place. As such, these additional incidents are now being counted in the aforementioned tables. Data for years 2016 and 2017 has been updated to reflect new data extraction process.

Table 8 - Reportable Marine Casualties Involving Inspected Passenger Vessels

Inspection Subchapter	2016	2017	2018	Total
H Boats	**121**	**104**	**131**	**356**
Non-SMI	69	60	84	213
SMI	52	44	47	143
K Boats	**81**	**72**	**60**	**213**
Non-SMI	61	51	47	159
SMI	20	21	13	54
T Boats	**421**	**427**	**398**	**1,246**
Non-SMI	303	301	282	886
SMI	118	126	116	360
Total	**623**	**603**	**589**	**1,815**

[3] Serious Marine Incident is defined in 46 CFR 4.03-2

Most marine casualties are described as a series of events: a mechanical failure, followed by a loss of propulsion, grounding, and ending with a discharge of oil. In this example, the mechanical failure is the initiaing event. The two most common ***initiating events*** recorded for passenger vessel marine casualties were "Material Failure/Malfunction" (36.1%) and "Personnel Casualty - Injury" (21.7%).

Table 9 - Initiating Events for Marine Casualties Involving Inspected Passenger Vessels

Initial Event	2016				2017				2018				Grand Total
	H	K	T	Total	H	K	T	Total	H	K	T	Total	
Material Failure/Malfunction	36	34	161	**231**	28	28	161	**217**	45	25	138	**208**	**656**
Personnel Casualty - Injury	53	16	74	**143**	46	16	62	**124**	50	12	65	**127**	**394**
Loss/Reduction of Propulsion/Steering	7	4	41	**52**	6	6	38	**50**	6	5	36	**47**	**149**
Grounding	2	6	28	**36**	4		36	**40**	4	2	29	**35**	**111**
Allision	5	5	13	**23**	4	8	19	**31**	2	8	25	**35**	**89**
Personnel Casualty - Death	1		25	**26**	3	2	29	**34**	2		19	**21**	**81**
UNSPECIFIED	3	1	6	**10**	3		5	**8**	12	4	31	**47**	**65**
Vessel Maneuver	3	3	9	**15**	3	3	17	**23**	2		5	**7**	**45**
Loss of Electrical Power	4	5	12	**21**	2	1	3	**6**	3	3	2	**8**	**35**
Collision		1	17	**18**	1	1	8	**10**			5	**5**	**33**
Discharge/Release - Pollution	1	1	5	**7**	2	2	4	**8**	2		7	**9**	**24**
Wave(s) Strikes/Impacts			5	**5**		1	13	**14**			5	**5**	**24**
Fouling		1	7	**8**			7	**7**			7	**7**	**22**
Flooding - Initial			3	**3**		1	2	**3**	2		7	**9**	**15**
Fire - Initial	1	1	4	**6**			4	**4**			3	**3**	**13**
Personnel Entering Water (not Falling)	2		1	**3**	1		4	**5**	1		2	**3**	**11**
Vessel Yawl/Pitch/Roll/Heel		2	1	**3**	1	2	4	**7**			1	**1**	**11**
Set Adrift			3	**3**			1	**1**			5	**5**	**9**
Personnel Fall into Water		1	1	**2**			3	**3**		1	2	**3**	**8**
Cargo/Fuel Transfer/Shift	1		1	**2**			3	**3**				**0**	**5**
Flooding - Progressive			1	**1**			1	**1**			2	**2**	**4**
Personnel Casualty - Exposure	2		1	**3**				**0**				**0**	**3**
Sinking			1	**1**			1	**1**			1	**1**	**3**
Explosion			1	**1**				**0**			1	**1**	**2**
Personnel Ejected from Vessel				**0**			2	**2**				**0**	**2**
Fire - Reflash				**0**		1		**1**				**0**	**1**
Total	**121**	**81**	**421**	**623**	**104**	**72**	**427**	**603**	**131**	**60**	**398**	**589**	**1,815**

Table 10 shows the initiating events associated with the 557 Serious Marine Incidents (SMIs) involving Inspected Passenger Vessels from 2016 to 2018. The most common ***initiating event*** recorded for passenger vessel SMIs were "Personnel Casualty" (71.3%).

Table 10 - Initiating Events for Serious Marine Incidents Involving Inspected Passenger Vessels

Initial Event Type	2016				2017				2018				Grand Total
	H	K	T	Total	H	K	T	Total	H	K	T	Total	
Personnel Casualty - Injury	45	11	61	**117**	35	15	55	**105**	36	10	57	**103**	**325**
Personnel Casualty - Death	1		23	**24**	3	1	25	**29**	1		16	**17**	**70**
Material Failure/Malfunction	1	2	11	**14**		1	14	**15**	3		7	**10**	**39**
Set Adrift				**0**				**0**	4	2	18	**24**	**24**
Collision			7	**7**	1		3	**4**			1	**1**	**12**
Grounding		3	4	**7**			2	**2**	1		2	**3**	**12**
Vessel Yawl/Pitch/Roll/Heel		1	1	**2**	1	1	4	**6**			4	**4**	**12**
Allision	3	1	1	**5**		1	2	**3**	1		2	**3**	**11**
Vessel Maneuver				**0**	2	2	6	**10**			1	**1**	**11**
Wave(s) Strikes/Impacts			4	**4**			5	**5**				**0**	**9**
Personnel Entering Water (not Falling)			1	**1**	1		3	**4**		1	2	**3**	**8**
UNSPECIFIED			4	**4**	1		2	**3**			1	**1**	**8**
Personnel Ejected from Vessel				**0**			2	**2**	1		1	**2**	**4**
Personnel Fall into Water		1		**1**			2	**2**			1	**1**	**4**
Fire - Initial		1	1	**2**				**0**				**0**	**2**
Personnel Casualty - Exposure	2			**2**				**0**				**0**	**2**
Discharge/Release - Pollution				**0**				**0**			1	**1**	**1**
Explosion				**0**				**0**			1	**1**	**1**
Flooding - Initial				**0**				**0**			1	**1**	**1**
Loss/Reduction of Propulsion/Steering				**0**			1	**1**				**0**	**1**
Totals	**52**	**20**	**118**	**190**	**44**	**21**	**126**	**191**	**47**	**13**	**116**	**176**	**557**

Vessel Inspections, Deficiencies, and Appeals

Vessel Inspections and Deficiencies

The majority of the passenger vessel inspections and deficiencies issued involved T-boats due to the size of that fleet. In 2018, there was an increase in nearly all categories of the table below. We attribute this increase to the way in which we are now identifying the passenger vessel fleet. Due to the larger number of vessels in the fleet, there are commensurate larger numbers of inspections and deficiencies issued.

Table 11 - Deficiencies Issued to Inspected Passenger Vessels

CY	Inspection Activities	Inspection Activities with a Deficiency Issued	% of Inspection Activities with a Deficiency Issued	Deficiencies Issued
H-Boats				
2016	972	340	35.0%	920
2017	851	306	36.0%	942
2018	922	406	44.0%	1,272
K-Boats				
2016	1,232	394	32.0%	1,598
2017	985	465	47.2%	1,621
2018	1,188	622	52.4%	2,014
T-Boats				
2016	10,674	3,896	36.5%	15,086
2017	9,791	4,003	40.9%	14,949
2018	10,242	4,243	41.4%	15,343

As outlined in Tables 12, 13, and 14, vessel inspection deficiencies are categorized by the associated vessel system, subsystem, and component. This data is most meaningful when analyzed at the system and subsystem or subsystem and component levels. One category alone does not provide the specificity to draw insightful conclusions.

Please note that due to a transition to new deficiency codes in MISLE, there are a larger number of deficiencies labels in each category. This will normalize after the legacy coding categories are removed from the report in 2020.

Table 12 - Vessel Deficiencies Issued to Inspected Passenger Vessels by System

Deficiency by Vessel System	2016	2017	2018	Total
Engineering	2,925	2,748	1,364	7,037
Lifesaving	2,508	2,654	1,214	6,376
Fire Fighting	1,691	1,844	947	4,482
Construction/Loadline	1,690	1,487	1,151	4,328
Electrical	1,649	1,509	820	3,978
Documentation	1,635	1,572	688	3,895
Operations/Management	1,442	1,468	709	3,619
Communications	1,135	1,205	605	2,945
Accommodation/Occupational Safety	1,029	941	461	2,431
Navigation	877	964	417	2,258
02 - Structural Conditions		63	1,703	1,766
13 - Propulsion and Auxiliary Machinery		23	1,557	1,580
11 - Life Saving Appliances		6	1,303	1,309
Stability	449	392	225	1,066
07 - Fire Safety		5	1,017	1,022
10 - Safety of Navigation		10	844	854
09 - Working and Living Conditions		13	747	760
01 - Certificates & Documentation		3	617	620
99 - Other		19	508	527
03 - Water/Weathertight Conditions		4	513	517
Personnel	165	189	80	434
05 - Radio Communications		1	358	359
Sail Rigging	124	131	55	310
Deck/Cargo	141	121	46	308
Pollution Prevention/Response	113	131	57	301
04 - Emergency Systems		3	290	293
08 - Alarms		4	147	151
14 - Pollution Prevention		1	81	82
15 - Safety Management Systems (ISM)		1	41	42
16 - International Ship & Port Facility Security (ISPS)			37	37
18 - Maritime Labour Convention (ILO 147)			25	25
Unknown	18			18
Security	7			7
Fisheries	6			6
06 - Cargo Operations Including Equipment			2	2
Total	**17,604**	**17,512**	**18,629**	**53,745**

Table 13 - Vessel Deficiencies Issued to Inspected Passenger Vessels by System and Subsystem

Vessel Deficiencies by System/Subsystem	2016	2017	2018	TOTAL
Engineering	**2,882**	**2,748**	**1,364**	**6,996**
Bilge Water Management System	631	677	313	1,621
Fuel Oil Service System	382	378	175	935
Steering Gear System	313	296	151	760
Diesel Engine (propulsion-reduction gear)	324	247	127	698
Fuel Oil Storage/Transfer System	188	169	82	439
Shafting/Propeller Arrangements	185	174	104	463
Sea-water System (primary cooling)	151	145	78	374
Diesel Engine (propulsion-direct drive)	116	113	49	278
Freshwater System (jacketwater cooling)	63	52	29	144
Other	529	497	256	1,280

Vessel Deficiencies by System/Subsystem	2016	2017	2018	TOTAL
Lifesaving	**2,498**	**2,654**	**1,214**	**6,366**
Lifebuoys	740	834	394	1,968
Lifefloat	517	537	235	1,289
Lifejacket/PFD (Type I)	385	418	184	987
Lifejacket/PFD (General)	329	356	153	838
Hand Flares	166	172	95	433
Buoyant Apparatus	61	50	20	131
Inflatable Buoyant Apparatus	62	75	35	172
Visual Distress Signals (General)	53	59	30	142
Inflatable Liferafts	43	32	13	88
Other	142	121	55	318

Vessel Deficiencies by System/Subsystem	2016	2017	2018	TOTAL
Fire Fighting	**1,670**	**1,844**	**947**	**4,461**
Fixed CO2 Fire Extinguishing System	201	185	93	479
Portable Dry Chemical Fire Extinguisher	187	209	115	511
Portable CO2 Fire Extinguisher	142	160	54	356
Fixed Gas Fire Extinguishing System	121	169	110	400
Fire Bucket	143	140	85	368
Ventilation Systems	113	139	60	312
Fire Pumps	93	115	77	285
Remote Fuel Shutoff	92	102	40	234
Fixed Fire Detection System	94	93	44	231
Other	484	532	269	1,285

Table 13 - Vessel Deficiencies Issued to Inspected Passenger Vessels by System and Subsystem (cont'd)

Vessel Deficiencies by System/Subsystem	2016	2017	2018	TOTAL
Construction/Loadline	**1,554**	**1,487**	**1,151**	**4,192**
Hull	895	855	727	2,477
Structures	459	452	276	1,187
Penetrations	137	135	101	373
Markings	63	45	47	155
Vessel Deficiencies by System/Subsystem	**2016**	**2017**	**2018**	**TOTAL**
Electrical	**1,563**	**1,509**	**820**	**3,892**
Electrical Distribution System (service)	778	754	407	1,939
Electric Supply System (service)	271	303	182	756
Electric Generation Source (service)	203	169	81	453
Lighting (service)	158	141	63	362
Lighting (emergency)	111	104	65	280
Electric Generation Source (emergency)	19	20	11	50
Electrical Distribution System (emergency)	21	15	11	47
Mast	2	3		5
Vessel Deficiencies by System/Subsystem	**2016**	**2017**	**2018**	**TOTAL**
Documentation	**1,557**	**1,572**	**688**	**3,817**
Certificates/Documents	918	869	393	2,180
Markings/Placards	196	235	103	534
Logs/Records	190	199	85	474
Manuals/Policy Documentation	118	112	33	263
Safety/Response Plans/Programs	51	57	30	138
Security Plan/Alternate Security Program	35	42	22	99
Manifests/Lists	33	40	16	89
Safety Management System	15	18	6	39
Certificates/Documents/Licenses	1			1
Vessel Deficiencies by System/Subsystem	**2016**	**2017**	**2018**	**TOTAL**
Operations/Management	**1,385**	**1,468**	**709**	**3,562**
Drug and Alcohol Testing	546	549	247	1,342
Drills/Instruction	346	347	171	864
Navigation Safety	111	82	47	240
Bilge/Bilge System Management	87	104	44	235
Vessel Activity	53	95	58	206
Vessel Safety Management	51	75	33	159
Equipment Service/Testing	46	68	29	143
Security	32	45	28	105
Lifesaving	42	40	22	104
Other	71	63	30	164

Table 13 - Vessel Deficiencies Issued to Inspected Passenger Vessels by System and Subsystem (cont'd)

Vessel Deficiencies by System/Subsystem	2016	2017	2018	TOTAL
Communications	**1,084**	**1,205**	**605**	**2,894**
Radio Communications	563	560	248	1,371
Alarms/Indicators	343	407	151	901
Automatic Identification System (AIS)	56	135	148	339
Audible Communications	49	42	24	115
Public Address System	52	37	20	109
Visual Communication	10	11	10	31
Internal Communications System	11	9	4	24
Security		3		3
Long Range Identification and Tracking (LRIT)		1		1

Vessel Deficiencies by System/Subsystem	2016	2017	2018	TOTAL
Accommodation/Occupational Safety	**1,016**	**941**	**461**	**2,418**
Occupational Safety	478	450	224	1,152
Medical/First Aid	369	364	174	907
Other Accommodation Spaces	36	41	23	100
Ventilation	51	24	16	91
Potable Water System	17	17	6	40
Washroom/Toilet	19	12	6	37
Sleeping Accommodations	13	8	1	22
Heating	7	11	3	21
Cooking Systems	7	4	2	13
Other	19	10	6	35

Vessel Deficiencies by System/Subsystem	2016	2017	2018	TOTAL
Navigation	**810**	**964**	**417**	**2,191**
Piloting/Steering	520	628	244	1,392
Collision/Grounding Avoidance	275	323	168	766
Electronic Positioning	9	8	4	21
Emergency Steering	5	4	1	10
Voyage Data Recorder		1		1
Hydrodynamic Effects	1			1

Table 14 provides a drill through of the deficiencies by component only. This data shows specific equipment that has been cited by inspectors and may be meaningful for operators.

Table 14 - Vessel Deficiencies Issued to Inspected Passenger Vessels by Component

Deficiencies by Involved Component (Top 20 Components)	2016	2017	2018	Total
General	530	463	259	1,252
Piping	394	353	198	945
Wiring	418	337	182	937
Medicine Chest	384	364	174	922
EPIRB	293	321	147	761
Condition	280	335	146	761
Hull Plating	292	262	200	754
Quantity	285	298	153	736
Serviceable	217	329	166	712
Navigation Lights	276	275	146	697
Self-igniting Lights	251	253	142	646
Valve	240	239	135	614
Certificate of Inspection	263	219	119	601
Marine Charts	239	259	80	578
VHF Radiotelephone	283	280		563
Pump	201	246	115	562
Storage	213	233	104	550
13199 - Other (machinery)		13	534	547
99101 - Other (Safety in general)		34	503	537
FCC Safety Radiotelephony Certificate	209	225	90	524

Tier 1, 2, and 3 Inspections

In accordance with CG-CVC Policy Letter 16-05 CH-1, OCMIs may exercise operational flexibility when inspecting Small Passenger Vessels. The following table shows the units that have exercised this discretion along with the inspection tiers. This data was pulled from MISLE in April 2019.

Table 15 - RBDM for Small Passenger Vessels in 2018

Unit	Tier 1	Tier 2	Tier 3	Total Inspections	Fleet Size	Percentage of Fleet
SECTOR GUAM	3	1		4	85	4.7%
SECTOR LAKE MICHIGAN		12	15	27	148	18.2%
SECTOR MARYLAND-NCR	4	52	150	206	314	65.6%
SECTOR MOBILE		1		1	316	0.3%
SECTOR SAN DIEGO		13	1	14	176	8.0%

CG-CVC Appeals involving Inspected Passenger Vessels

The following table shows Appeals adjudicated by Commandant (CG-CVC-1).

Table 16 - Appeals to Commandant

CY	Received	Granted	Denied	Other
2016	5	1	4	0
2017	0	0	0	0
2018	3	0	3	0

Appendix I

Definition of "Vessel-Related" Marine Casualties

To focus the efforts of the USCG-PVA Quality Partnership, the following guidance is provided to determine which incidents are classified as either 'vessel-related' or 'not vessel-related'. This distinction is made to assist in identifying the incidents that are within the control of the operator.

NOT VESSEL-RELATED

- Death due to Intentional Acts, especially those of a criminal nature (i.e. suicide or homicide).
- Death resulting from the intentional act of another person (i.e. pushing someone overboard, regardless of intent).
- Death resulting from an intentional jump overboard.
- Death due to Pre-Existing Medical Condition(s) or Disease.
- Death that occurs onboard a vessel and is attributed to an overdose of medication or use of a drug, regardless of when the drugs were taken. The only exception is when the death is due to medicine distributed by medical staff attached to a vessel.
- Death that results from choking while eating onboard a vessel.
- Death that did not occur onboard a vessel or deaths that did not result from activities on the vessel. Examples include:
    - While swimming, snorkeling, or diving, a passenger or crewmember dies in the water.
    - While swimming, snorkeling, or diving, a passenger or crewmember goes into distress and is recovered from the water, then subsequently dies onboard the vessel.
    - A missing diver/snorkeler.
    - Passengers or crewmembers that disembark the vessel to use a personal watercraft (PWC), Jet Ski, kayak, stand-up paddleboard (SUP) or something similar, which are not tethered to the vessel and sustain injuries resulting in death.
- Shark bites, stingray strikes, etc.

VESSEL-RELATED

Everything else is considered "Vessel-Related", specifically including:

- All parasail accidents.
- All accidents occurring on any apparatus tethered to the passenger vessel (i.e. jetlev, banana boat, water skiing, etc.).
- All accidental falls onboard a vessel, regardless of the circumstance(s).
- If a person enters the water due to a vessel collision, capsizing, sinking, grounding, allision, etc., then dies as a result.
- If a person is in the water and is run over by a vessel - even if the person was not a passenger or crewmember aboard the vessel.