AIR SAFETY INSTITUTE 2013-2014 GA Accident Scorecard

The AOPA Air Safety Institute (ASI) has prepared this brief statistical analysis of general aviation (GA) accidents in calendar years 2013 and 2014 as a supplement to its 24th Joseph T. Nall Report. The 24th Nall Report analyzes accidents during 2012, the most recent year for which reasonably complete data are available at the necessary level of detail.

In 2013, the number of non-commercial fixed-wing accidents decreased by an unprecedented 18% from the year before,

dropping below 1,000 for the first time. This improvement continued with a further 3% decrease to an all-time low of 923 in 2014. The number of fatal accidents fell 24% from 2012 to 2013. While this was followed by a 12% increase in 2014, these remain the only two years in the past halfcentury with fewer than 200 fatal accidents in light airplanes.

FAA estimates of GA flight time confirm that 2013's improvements did not result from decreased activity. Accident rates, both total and fatal, were the lowest in the

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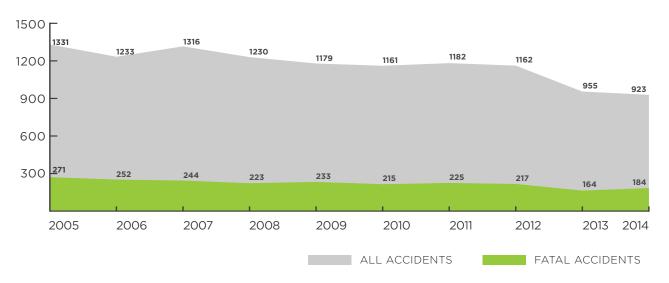
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25 years that ASI has tracked this measure. The fatal accident rate dropped below 1.00 per 100,000 flight hours for the first time. Activity estimates for 2014 are scheduled to be released in the fourth quarter of 2015.

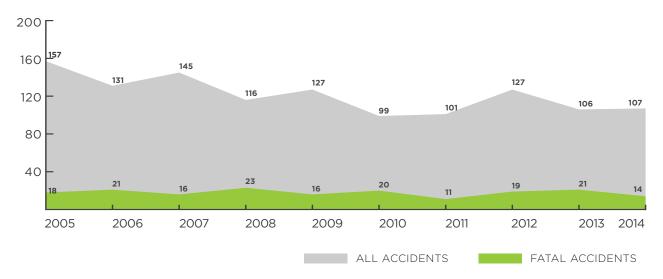
The numbers of non-commercial helicopter accidents did not reach record lows in either year, but were 18% below the average for the preceding decade. However, estimated activity in this sector was 10% less than in 2012 and 24% below its 2010 level, and an unusually high percentage of 2013's accidents were fatal. For those reasons, the fatal accident rate in 2013 was actually the highest of the decade, while the overall rate was in line with the 10-year average. 2014 saw one-third fewer fatal accidents even as the total remained almost unchanged. 2013-2014 also suffered fewer commercial fixed-wing accidents than any previous two-year period, with 2014 recording a 15% decrease from the previous year's near-record low. The combined 23 fatal accidents, while low by historical standards, did not come close to matching the total of 9 in 2009-2010. Commercial helicopter traffic did not fare as well: There were 77 accidents, 15 of them fatal. Both represent the highest two-year totals since 2003-2004. The 2013 accident rates, while not particularly low by more recent standards, still represent improvements of 67% overall and 79% in the rate of fatal accidents since 2004.

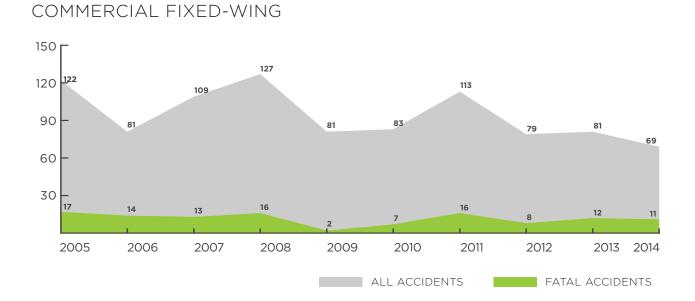
General Aviation Accidents, 2005-2014



NON-COMMERCIAL FIXED-WING

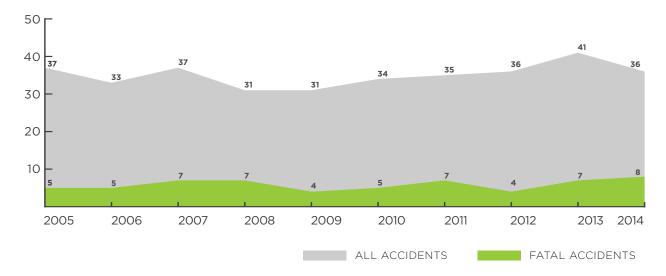
NON-COMMERCIAL HELICOPTER

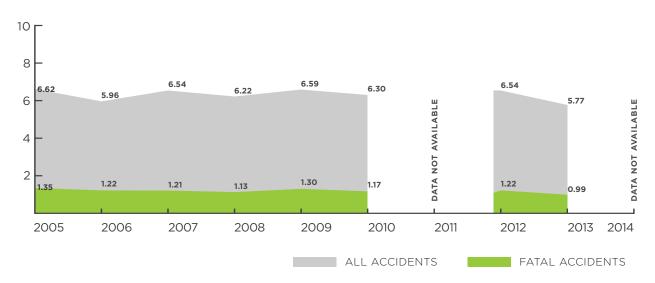




General Aviation Accidents, 2005-2014 (Continued)

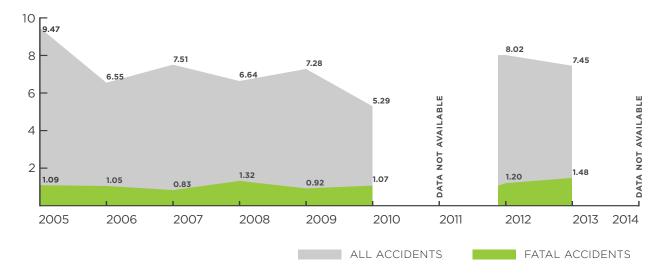
COMMERCIAL HELICOPTER



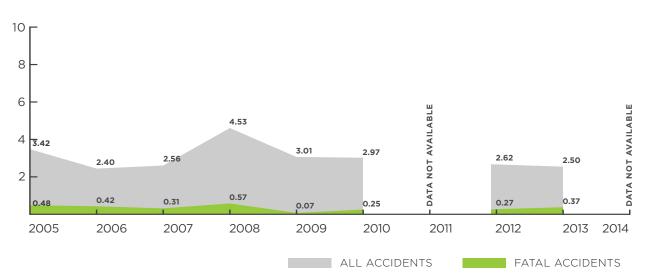


NON-COMMERCIAL FIXED-WING

NON-COMMERCIAL HELICOPTER

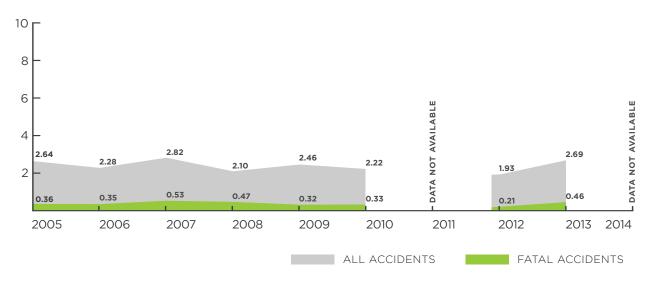






COMMERCIAL FIXED-WING

COMMERCIAL HELICOPTER



Summary of General Aviation Accidents by Year

	Non-Con	nmercial	Commercial		
2013	FIXED-WING	HELICOPTER	FIXED-WING	HELICOPTER	
Number of Accidents	955	106	81	41	
Number of Aircraft*	964	106	81	41	
Number of Fatal Accidents	164	21	12	7	
Lethality (Percent)	17.2	19.8	14.8	17.1	
Fatalities	281	43	28	8	

	Non-Commercial		Comn	nercial
2014	FIXED-WING	HELICOPTER	FIXED-WING	HELICOPTER
Number of Accidents	923	107	69	36
Number of Aircraft*	929	107	69	36
Number of Fatal Accidents	184	14	11	8
Lethality (Percent)	19.9	13.1	15.9	22.2
Fatalities	285	24	17	13

* COUNTS EACH AIRCRAFT INVOLVED IN A COLLISION SEPARATELY.

2013 Accident Conditions: Non-Commercial Fixed-Wing

AIRCRAFT CLASS

CONFIGURATION	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Single-Engine Fixed-Gear (SEF)	696 72.2%	85 50.9%	114 40.6%
SEF Tailwheel	288	29	39
Single-Engine Retractable Gear	184 19.1%	45 26.9%	83 29.5%
Single-Engine Turbine	19	5	7
Multi-Engine	84 8.7%	37 22.2%	84 29.9%
Multi-Engine Turbine	17	13	31

TYPE OF OPERATION

PURPOSE OF FLIGHT	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Personal	720 74.7%	128 76.6%	216 76.9%
Instructional	149 15.5%	17 10.2%	25 8.9%
Public Use	1 0.1%	0	
Positioning	11 1.1%	3 1.8%	3 1.1%
Aerial Observation	9 0.9%	1 0.6%	2 0.7%
Business	27 2.8%	9 5.4%	16 5.7%
Other Work Use	28 2.9%	5 3.0%	12 4.3%
Other or Unknown	19 2.0%	4 2.4%	7 2.5%

NOTE: PERCENTAGES ARE PERCENT OF ALL ACCIDENTS, ALL FATAL ACCIDENTS, OR INDIVIDUAL FATALITIES, RESPECTIVELY.

Non-Commercial Fixed-Wing, 2013 (Continued)

PILOT QUALIFICATIONS

CERTIFICATE LEVEL	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
ATP	145 15.0%	26 15.6%	40 14.2%
Commercial	266 27.6%	50 29.9%	88 31.3%
Private	440 45.6%	82 49.1%	141 50.2%
Sport	23 2.4%	2 1.2%	3 1.1%
Student	72 7.5%	4 2.4%	6 2.1%
None	16 1.7%	2 1.2%	2 0.7%
Other or Unknown	2 0.2%	1 0.6%	1 0.4%
Second Pilot on Board	116 12.0%	29 17.4%	56 19.9%
CFI on Board*	228 23.7%	44 26.3%	76 27.0%
IFR Pilot on Board*	526 54.6%	106 63.5%	190 67.6%

* INCLUDES SINGLE-PILOT FLIGHTS

LIGHT AND WEATHER CONDITIONS

CONDITIONS	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Day VMC	842 88.2%	115 70.1%	185 65.8%
Night VMC*	64 6.7%	15 9.1%	25 8.9%
Day IMC	26 2.7%	23 14.0%	51 18.1%
Night IMC*	22 2.3%	11 6.7%	20 7.1%
Not Yet Reported	1 0.1%	0	

* INCLUDES DUSK

2014 Accident Conditions: Non-Commercial Fixed-Wing

AIRCRAFT CLASS

CONFIGURATION	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Single-Engine Fixed-Gear (SEF)	682 73.4%	113 60.4%	162 56.8%
SEF Tailwheel	300	48	58
Single-Engine Retractable Gear	183 19.7%	59 31.6%	96 33.7%
Single-Engine Turbine	15	6	14
Multi-Engine	64 6.9%	15 8.0%	27 9.5%
Multi-Engine Turbine	15	5	12

TYPE OF OPERATION

PURPOSE OF FLIGHT	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Personal	704 75.8%	155 82.9%	237 83.2%
Instructional	123 13.2%	16 8.6%	28 9.8%
Public Use	8 0.9%	1 0.5%	1 0.4%
Positioning	15 1.6%	4 2.1%	4 1.4%
Aerial Observation	5 0.5%	2 1.1%	2 0.7%
Business	24 2.6%	3 1.6%	6 2.1%
Other Work Use	25 2.7%	3 1.6%	4 1.4%
Other or Unknown	25 2.7%	3 1.6%	3 1.1%

Non-Commercial Fixed-Wing, 2014 (Continued)

PILOT QUALIFICATIONS			
CERTIFICATE LEVEL	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
ATP	139 15.0%	28 15.0%	44 15.4%
Commercial	257 27.7%	53 28.3%	75 26.3%
Private	422 45.4%	92 49.2%	150 52.6%
Sport	13 1.4%	3 1.6%	4 1.4%
Recreational	1 0.1%	0	
Student	52 5.6%	1 0.5%	1 0.4%
None	13 1.4%	3 1.6%	3 1.1%
Other or Unknown	32 3.4%	7 3.7%	8 2.8%
Second Pilot on Board	99 10.7%	26 13.9%	49 17.2%
CFI on Board*	186 20.0%	30 16.0%	48 16.8%
IFR Pilot on Board*	488 52.5%	100 53.5%	158 55.4%

* INCLUDES SINGLE-PILOT FLIGHTS

LIGHT AND WEATHER CONDITIONS

CONDITIONS	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Day VMC	795 86.1%	131 71.2%	198 69.5%
Night VMC*	68 7.4%	19 10.3%	34 11.9%
Day IMC	24 2.6%	15 8.2%	24 8.4%
Night IMC*	17 1.8%	13 7.1%	22 7.7%
Not Yet Reported	19 2.1%	6 3.3%	7 2.5%

* INCLUDES DUSK

2013 Accident Conditions: Non-Commercial Helicopter

AIRCRAFT CLASS			
CONFIGURATION	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Single-Engine Piston	54 50.9%	6 28.6%	10 23.3%
Single-Engine Turbine	51 48.1%	14 66.7%	30 69.8%
Multi-Engine Turbine	1 0.9%	1 4.8%	3 7.0%

TYPE OF OPERATION

PURPOSE OF FLIGHT	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Personal	27 25.5%	5 23.8%	12 27.9%
Instructional	28 26.4%	0	
Public Use	11 10.4%	3 14.3%	5 11.6%
Positioning	8 7.5%	5 23.8%	12 27.9%
Aerial Observation	12 11.3%	2 9.5%	2 4.7%
Business	6 5.7%	1 4.8%	1 2.3%
Other Work Use	8 7.5%	4 19.0%	9 20.9%
Other or Unknown	6 5.7%	1 4.8%	2 4.7%

Non-Commercial Helicopter, 2013 (Continued)

PILOT QUALIFICATIONS

CERTIFICATE LEVEL	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
ATP	19 17.9%	6 28.6%	14 32.6%
Commercial	72 67.9%	12 57.1%	25 58.1%
Private	11 10.4%	3 14.3%	4 9.3%
Student	3 2.8%	0	
None	1 0.9%	0	
Second Pilot on Board	28 26.4%	1 4.8%	1 2.3%
CFI on Board*	62 58.5%	11 52.4%	26 60.5%
IFR Pilot on Board*	79 74.5%	17 81.0%	34 79.1%

* INCLUDES SINGLE-PILOT FLIGHTS

LIGHT AND WEATHER CONDITIONS

CONDITIONS	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Day VMC	88 83.0% 12 57.1%		19 44.2%
Night VMC*	11 10.4%	5 23.8%	10 23.3%
Day IMC	2 1.9%	0	
Night IMC*	4 3.8%	3 14.3%	11 25.6%
Not Yet Reported	1 0.9%	1 4.8%	3 7.0%

* INCLUDES DUSK

2014 Accident Conditions: Non-Commercial Helicopter

AIRCRAFT CLASS			
CONFIGURATION	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Single-Engine Piston	56 52.3%	6 42.9%	11 45.8%
Single-Engine Turbine	45 42.1%	7 50.0%	10 41.7%
Multi-Engine Turbine	6 5.6%	1 7.1%	3 12.5%

TYPE OF OPERATION

PURPOSE OF FLIGHT	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Personal	36 33.6%	6 42.9%	9 37.5%
Instructional	28 26.2%	2 14.3%	4 16.7%
Public Use	10 9.3%	0	
Positioning	11 10.3%	4 28.6%	8 33.3%
Aerial Observation	8 7.5%	1 7.1%	2 8.3%
Business	5 4.7%	0	
Other Work Use	4 3.7%	0	
Other or Unknown	5 4.7%	1 7.1%	1 4.2%

Non-Commercial Helicopter, 2014 (Continued)

PILOT QUALIFICATIONS

CERTIFICATE LEVEL	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
ATP	17 15.9%	0	
Commercial	68 63.6%	11 78.6%	20 83.3%
Private	16 15.0%	2 14.3%	3 12.5%
Student	3 2.8%	1 7.1%	1 4.2%
Other or Unknown	3 2.8%	0	
Second Pilot on Board	28 26.2%	3 21.4%	6 25.0%
CFI on Board*	54 50.5%	7 50.0%	13 54.2%
IFR Pilot on Board*	74 69.2%	8 57.1%	14 58.3%

* INCLUDES SINGLE-PILOT FLIGHTS

LIGHT AND WEATHER CONDITIONS

CONDITIONS	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Day VMC	96 89.7%	11 78.6%	17 70.8%
Night VMC*	7 6.5%	2 14.3%	5 20.8%
Day IMC	2 1.9%	0	
Not Yet Reported	2 1.9%	1 7.1%	2 8.3%

* INCLUDES DUSK

2013 Accident Conditions: Commercial Fixed-Wing

TYPE OF OPERATION

PURPOSE OF FLIGHT	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Aerial Application (Part 137)	47 58.0%	4 33.3%	4 14.3%
Charter or Cargo (Part 135)	34 42.0%	8 66.7%	24 85.7%

AERIAL APPLICATION (PART 137)

AIRCRAFT CLASS	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Single-Engine Fixed-Gear	47 100.0%	4 100.0%	4 100.0%
Single-Engine, Tailwheel	46	3	3
Single-Engine Turbine	23	2	2
CONDITIONS			
Day VMC	46 97.9%	4 100.0%	4 100.0%
Night VMC*	1 2.1%	0	
			* INCLUDES DUSK
PILOT QUALIFICATIONS			
ATP	3 6.4%	0	
Commercial	44 93.6%	4 100.0%	4 100.0%
CFI on Board*	7 14.9%	1 25.0%	1 25.0%
IFR Pilot on Board*	24 51.1%	1 25.0%	1 25.0%

Commercial Fixed-Wing, 2013 (Continued)

CHARTER AND CARGO (PART 135)							
	AIRCRAFT CLASS	ACC	IDENTS	FATAL .	ACCIDENTS	S FAT	ALITIES
	Single-Engine Fixed-Gear	25	73.5%	7	87.5%	23	95.8%
	Single-Engine, Tailwheel	8		2		11	
	Single-Engine Retractable	5	14.7%	0			
	Single-Engine Turbine	3		2		11	
	Multi-Engine	4	11.8%	1	12.5%	1	4.2%
	Multi-Engine Tubine	3		2		5	
	CONDITIONS						
	Day VMC	23	67.6%	5	62.5%	16	66.7%
	Night VMC*	8	23.5%	2	25.0%	4	16.7%
	Day IMC	2	5.9%	0			
	Night IMC*	1	2.9%	1	12.5%	4	16.7%
						* INCLU	DES DUSK
	PILOT QUALIFICATIONS						
	ATP	14	41.2%	3	37.5%	5	20.8%
	Commercial	20	58.8%	5	62.5%	19	79.2%
	Second Pilot on Board	2	5.9%	0			
	CFI on Board*	13	38.2%	3	37.5%	5	20.8%
	IFR Pilot on Board*	34	100.0%	8	100.0%	24	100.0%

2014 Accident Conditions: Commercial Fixed-Wing

TYPE OF OPERATION						
PURPOSE OF FLIGHT	ACCI	DENTS	FATAL	ACCIDENTS	FAT	ALITIES
Aerial Application (Part 137)	44	63.8%		7 63.6%	7	41.2%
Charter or Cargo (Part 135)	25	36.2%		4 36.4%	10	58.8%
	\					
AERIAL APPLICATION (PART	137)					
AIRCRAFT CLASS	ACCI	DENTS	FATAL	ACCIDENTS	FAT	ALITIES
Single-Engine Fixed-Gear	44 1	100.0%	7	100.0%	7	100.0%
Single-Engine, Tailwheel	44		7		7	
Single-Engine Turbine	28		6		6	
CONDITIONS						
Day VMC	42	95.5%	6	85.7%	6	85.7%
Not Yet Reported	2	4.5%	1	14.3%	1	14.3%
PILOT QUALIFICATIONS						
ATP	2	4.5%	1	14.3%	1	14.3%
Commercial	41	93.2%	6	85.7%	6	85.7%
Not Reported Yet	1	2.3%	0			
CFI on Board*	4	9.1%	0			
IFR Pilot on Board*	13	29.5%	4	57.1%	4	57.1%

* INCLUDES SINGLE-PILOT FLIGHTS

Commercial Fixed-Wing, 2014 (Continued)

CHARTER AND CARGO (PAR	RT 135)					
AIRCRAFT CLASS	ACC	IDENTS	FATAL /	ACCIDENTS	S FAT	ALITIES
Single-Engine Fixed-Gear	15	60.0%	0			
Single-Engine, Tailwheel	6		0			
Single-Engine Retractable	2	8.0%	1	25.0%	2	20.0%
Single-Engine Turbine	1		0			
Multi-Engine	8	32.0%	3	75.0%	8	80.0%
Multi-Engine Tubine	5		0			
CONDITIONS						
Day VMC	19	76.0%	1	25.0%	4	40.0%
Night VMC*	4	16.0%	2	50.0%	4	40.0%
Day IMC	1	4.0%	0			
Night IMC*	1	4.0%	1	25.0%	2	20.0%
					* INCLU	DES DUSK
PILOT QUALIFICATIONS						
ATP	10	40.0%	1	25.0%	4	40.0%
Commercial	14	56.0%	3	75.0%	6	60.0%
Not Yet Reported	1	4.0%	0			
Second Pilot on Board	1	4.0%	0			
CFI on Board*	14	56.0%	3	75.0%	7	70.0%
IFR Pilot on Board*	24	96.0%	4	100.0%	10	100.0%

2013 Accident Conditions: Commercial Helicopter

TYPE OF OPERATION

IFR Pilot on Board*

PURPOSE OF FLIGHT	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Aerial Application (Part 137)	18 43.9%	1 14.3%	1 12.5%
Charter or Cargo (Part 135)	13 31.7%	2 28.6%	2 25.0%
External Load (Part 133)	10 24.4%	4 57.1%	5 62.5%

AERIAL APPLICATION (PART 137)

AIRCRAFT CLASS	ACC	IDENTS	FATAL ACCIDENTS	FATALITIES
Single-Engine Piston	10	55.6%	0	
Single-Engine Turbine	8	44.4%	1 100.0%	1 100.0%
CONDITIONS				
Day VMC	17	94.4%	1 100.0%	1 100.0%
Night VMC*	1	5.6%	0	
				* INCLUDES DUSK
PILOT QUALIFICATIONS				
ATP	2	11.1%	0	
Commercial	16	88.9%	1 100.0%	1 100.0%
CFI on Board*	8	44.4%	0	

12 66.7%

* INCLUDES SINGLE-PILOT FLIGHTS

1 100.0% **1** 100.0%

Commercial Helicopter, 2013 (Continued)

CHARTER AND CARGO (PAR	T 135)	1		
AIRCRAFT CLASS	ACC	IDENTS	FATAL ACCIDENTS	FATALITIES
Single-Engine Piston	1	7.7%	0	
Single-Engine Turbine	10	76.9%	2 100.0%	2 100.0%
Multi-Engine Tubine	2	15.4%	0	
CONDITIONS				
Day VMC	11	84.6%	2 100.0%	2 100.0%
Night VMC*	1	7.7%	0	
Day IMC	1	7.7%	0	
				* INCLUDES DUSK
PILOT QUALIFICATIONS				
ATP	2	15.4%	0	
Commercial	11	84.6%	2 100.0%	2 100.0%
CFI on Board*	5	38.5%	0	
IFR Pilot on Board*	9	69.2%	0	

Commercial Helicopter, 2013 (Continued)

EXTERNAL LOAD (PART 133)			
AIRCRAFT CLASS	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Single-Engine Turbine	10 100.0%	4 100.0%	5 100.0%
CONDITIONS			
Day VMC	10 100.0%	4 100.0%	5 100.0%
PILOT QUALIFICATIONS			
Commercial	10 100.0%	4 100.0%	5 100.0%
CFI on Board*	4 40.0%	3 75.0%	4 80.0%
IFR Pilot on Board*	8 80.0%	4 100.0%	5 100.0%

2014 Accident Conditions: Commercial Helicopter

TYPE OF OPERATION			
PURPOSE OF FLIGHT	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Aerial Application (Part 137)	17 47.2%	4 50.0%	4 30.8%
Charter or Cargo (Part 135)	12 33.3%	3 37.5%	8 61.5%
External Load (Part 133)	7 19.4%	1 12.5%	1 7.7%

AERIAL APPLICATION (PART 137)

AIRCRAFT CLASS	ACCIDENTS	FATAL ACCIDENTS	FATALITIES
Single-Engine Piston	10 58.8%	4 100.0%	4 100.0%
Single-Engine Turbine	7 41.2%	0	

CONDITIONS

Day VMC	17 100.0%	4 100.0%	4 100.0%

* INCLUDES DUSK

PILOT QUALIFICATIONS

ATP	4 23.5%	0	
Commercial	13 76.5%	4 100.0%	4 100.0%
CFI on Board*	8 47.1%	2 50.0%	2 50.0%
IFR Pilot on Board*	12 70.6%	3 75.0%	3 75.0%

Commercial Helicopter, 2014 (Continued)

CHARTER AND CARGO (PAR	T 135)			
AIRCRAFT CLASS	ACC	IDENTS	FATAL ACCIDENTS	FATALITIES
Single-Engine Piston	1	8.3%	0	
Single-Engine Turbine	10	83.3%	3 100.0%	8 100.0%
Multi-Engine Tubine	1	8.3%	0	
CONDITIONS				
Day VMC	10	83.3%	2 66.7%	5 62.5%
Night VMC*	2	16.7%	1 33.3%	3 37.5%
				* INCLUDES DUSK
PILOT QUALIFICATIONS				
ATP	1	8.3%	0	
Commercial	8	66.7%	3 100.0%	8 100.0%
Not Yet Reported	3	25.0%	0	
CFI on Board*	2	16.7%	0	
IFR Pilot on Board*	7	58.3%	2 66.7%	6 75.0%

Commercial Helicopter, 2014 (Continued)

EXTERNAL LOAD (PART 133)				
AIRCRAFT CLASS	ACC	IDENTS	FATAL ACCIDENTS	FATALITIES
Single-Engine Piston	1	14.3%	1 100.0%	1 100.0%
Single-Engine Turbine	5	71.4%	0	
Multi-Engine Turbine	1	14.3%	0	
CONDITIONS				
Day VMC	6	85.7%	1 100.0%	1 100.0%
Not Yet Reported	1	14.3%	0	
PILOT QUALIFICATIONS				
ATP	1	14.3%	0	
Commercial	5	71.4%	1 100.0%	1 100.0%
Not Yet Reported	1	14.3%	0	
Second Pilot on Board	1	14.3%	0	
CFI on Board*	4	57.1%	0	
IFR Pilot on Board*	4	57.1%	0	