



Federal Aviation  
Administration

# Rotorcraft Standards Branch AIR-680

## Monthly Accident Briefing

September 2017  
End of FY17

By: AIR-682, Safety Management Section



# FY 17 – U.S. Registered Rotorcraft Accidents

## Cumulative Counts – 118 Accidents, 17 Fatal Accidents, 29 Fatalities

Same time period, previous FY: 116 Accidents, 17 Fatal Accidents, 32 Fatalities

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Accidents:</b>	6	6	6	4	18	3	6	13	13	23	10	10	118
<b>Fatal:</b>	1	2	0	1	4	1	1	2	1	0	1	3	17
<b>Fatalities:</b>	2	3	0	2	8	1	1	2	1	0	2	7	29

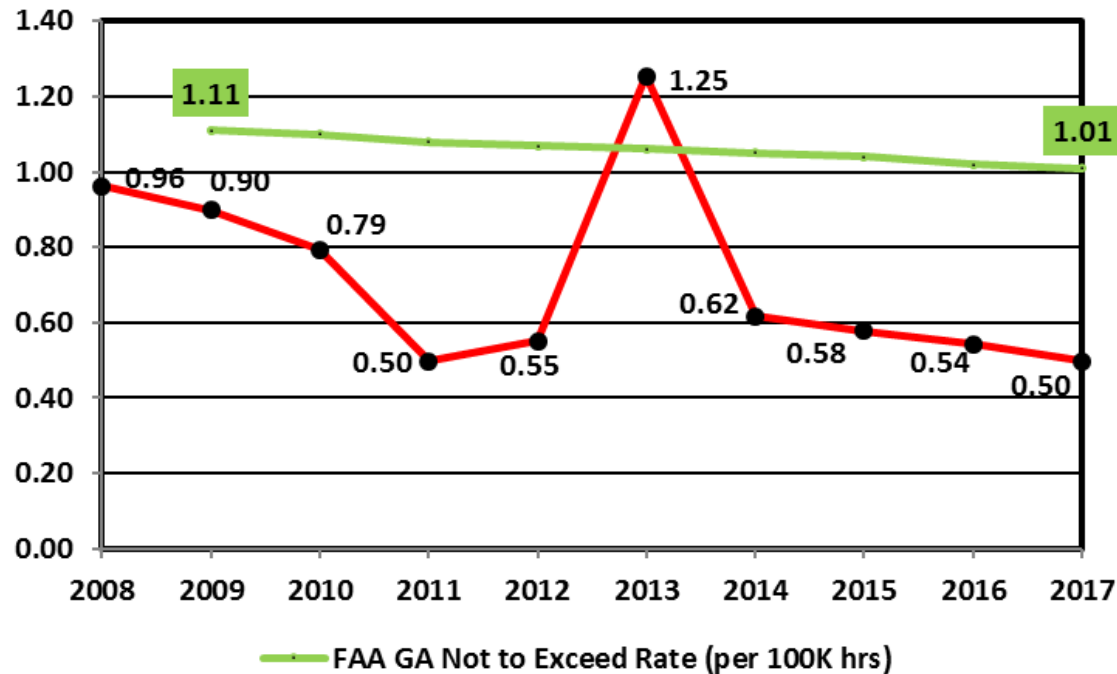
Data Source: FAA, NTSB Databases. Includes only events classified as accidents and does not include incidents. The accident numbers for each month of the Fiscal Year may vary from the previous monthly briefing based on analysis between FAA and NTSB databases for the specified month. The NTSB database may include accidents that were not reported to this office resulting in slightly different numbers.

## Accident Operations Summary (Cumulative)

**Acronyms:** HAA = Helicopter Air Ambulance, ENG = Electronic News Gathering, GA = General Aviation, GOM = Gulf of Mexico

	HAA 91/ 135	GOM 91/ 135	Part 133	Part 135 Other	Air Tour 91/135/136	Part 137	ENG 91/ 135	GA 91	N Reg Outside U.S.
<b>Accidents:</b>	4	3	4	5	10	22	1	66	3
<b>Fatal:</b>	2	2	1				1	8	3
<b>Fatalities:</b>	5	2	1				1	14	6

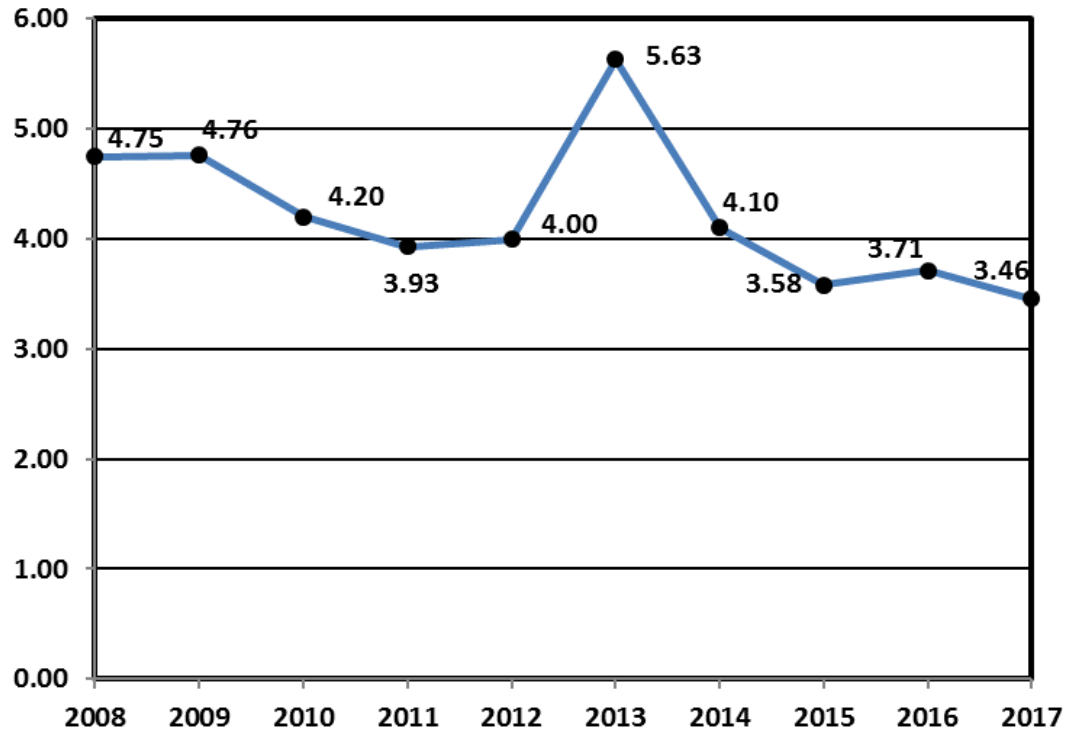
# Estimated U.S. Rotorcraft FATAL Accident Rate (per 100,000 hours) – 10 Year Lookback



## Rate calculation based on the following:

- 1) Accident totals compiled by AIR-682.
- 2) Historic rotorcraft flight hours extracted from General Aviation and Part 135 Activity Survey. The survey categorizes flight hours by calendar year. Assumption was that hours would be comparable if used for fiscal year calculations.
- 3) FY 11 rotorcraft flight hours and the projected hours for FY 17 were based on the FAA's FY2017-2037 forecast.

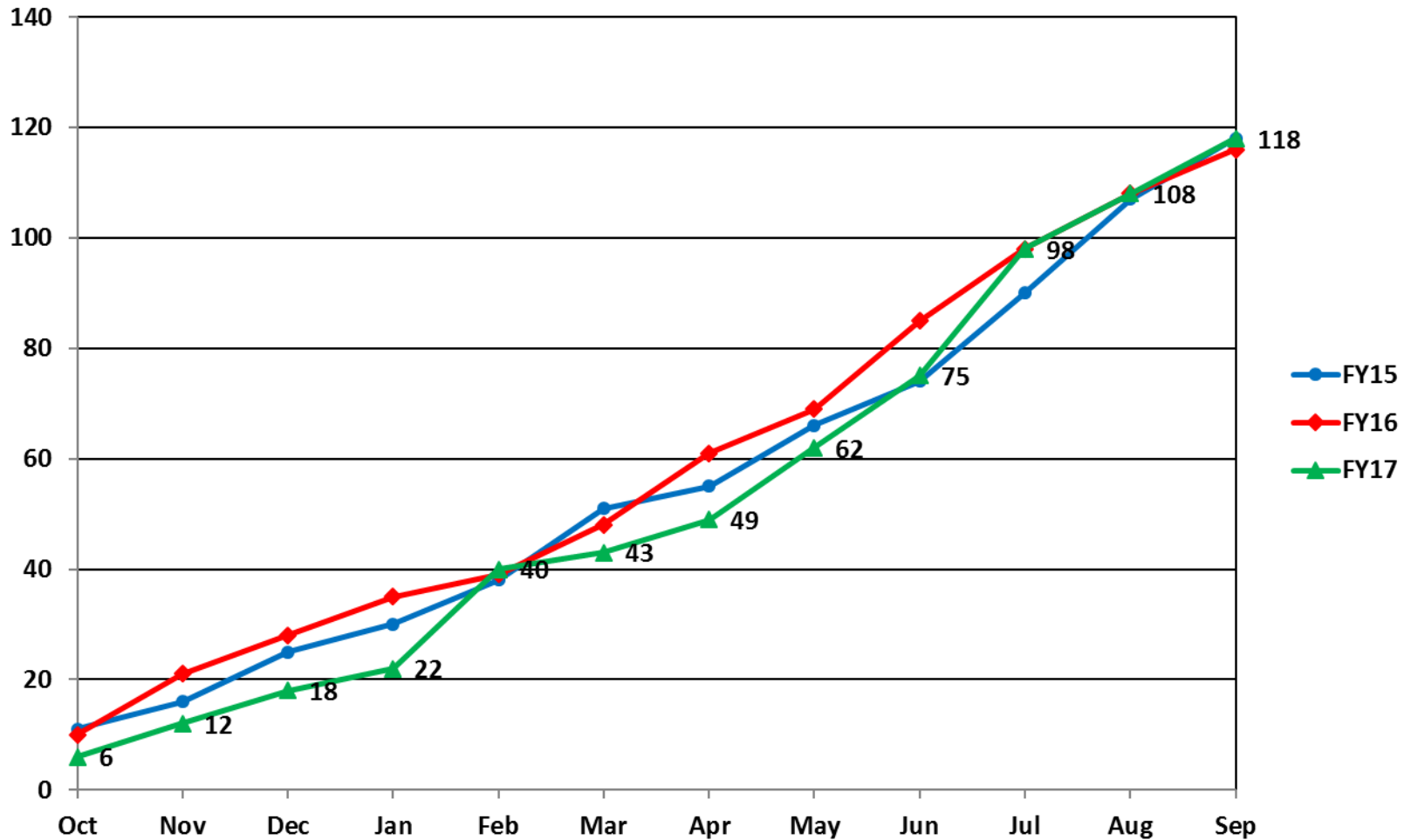
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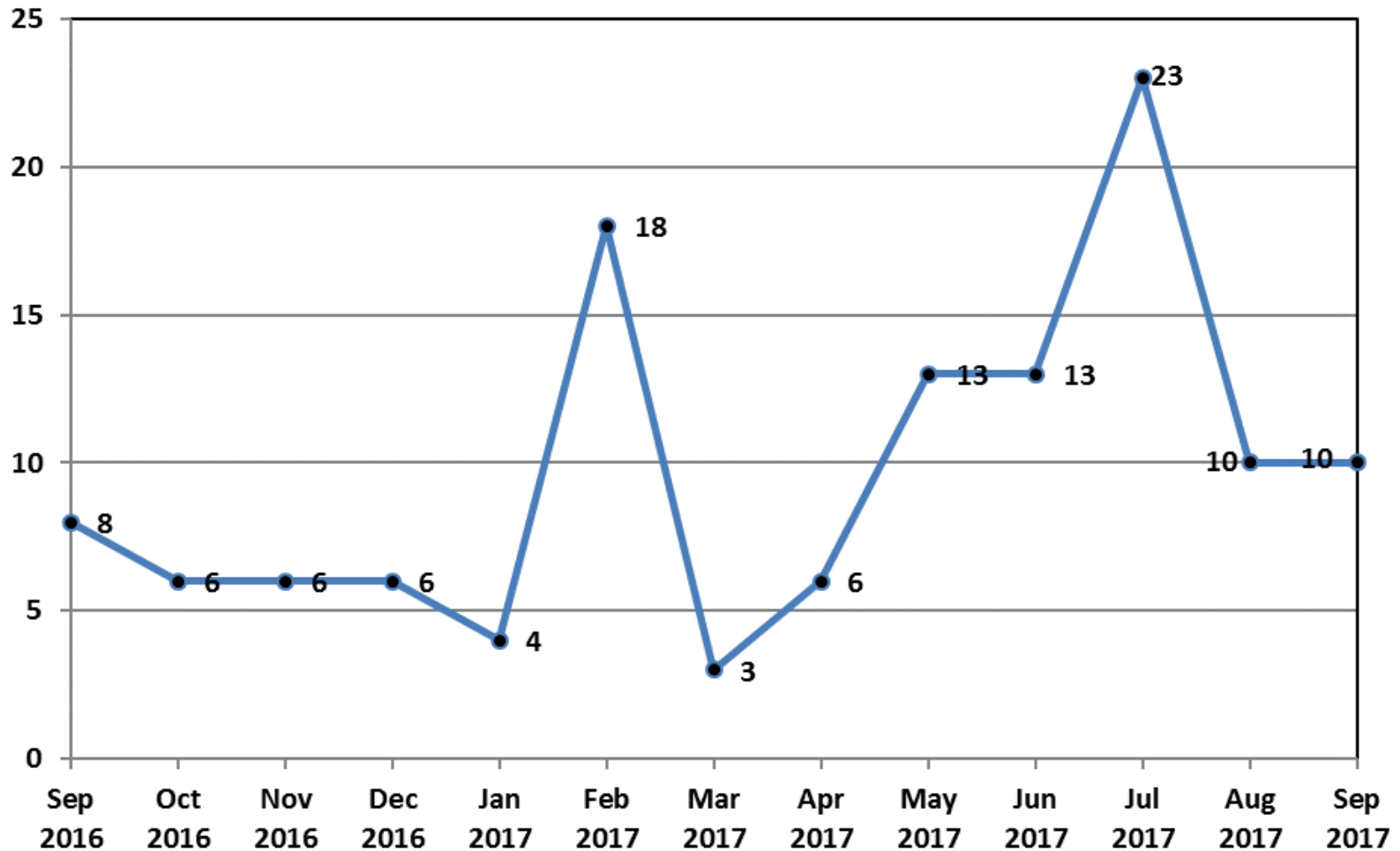
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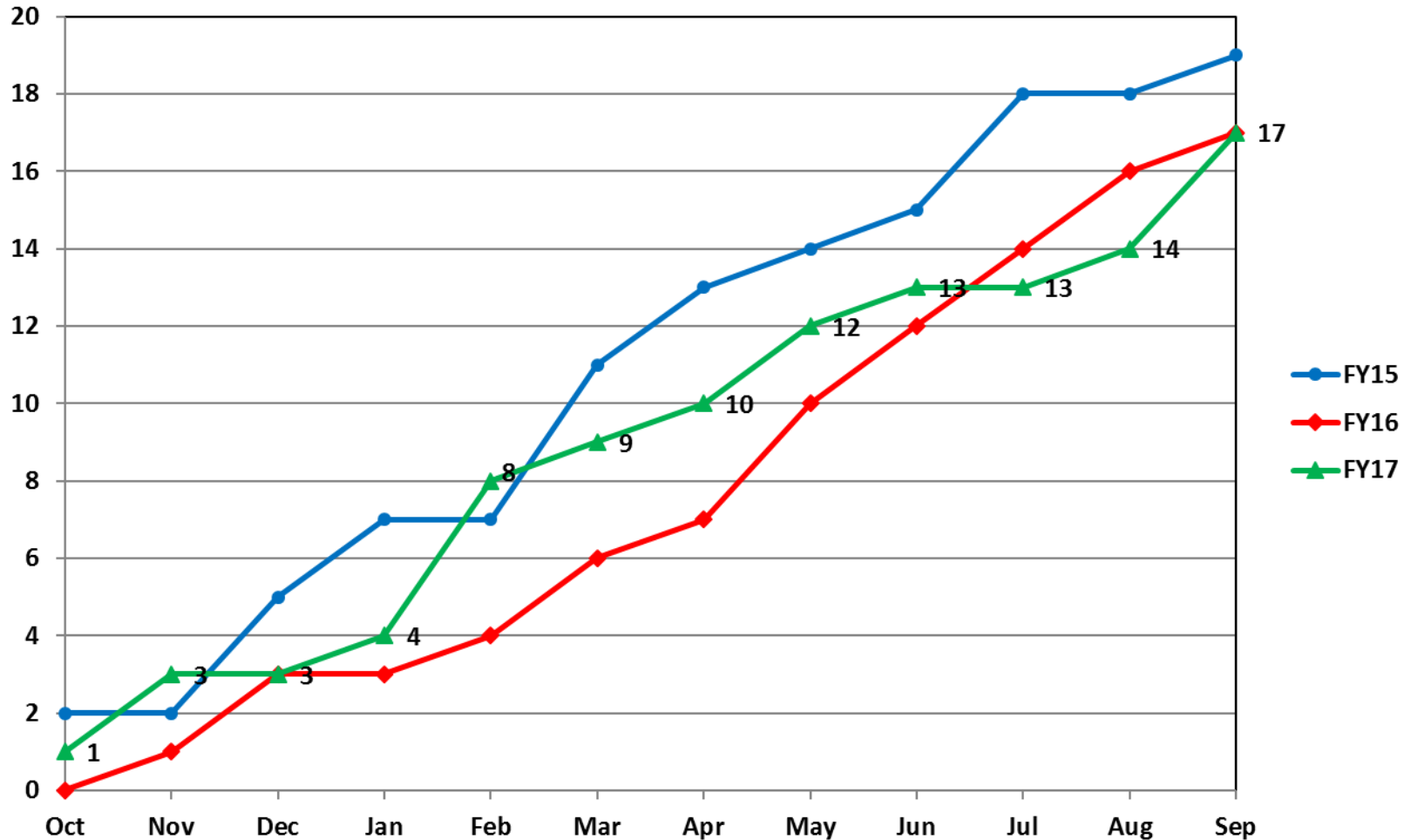
# U.S. Registered Rotorcraft Cumulative Accident Count: FY15 - 17



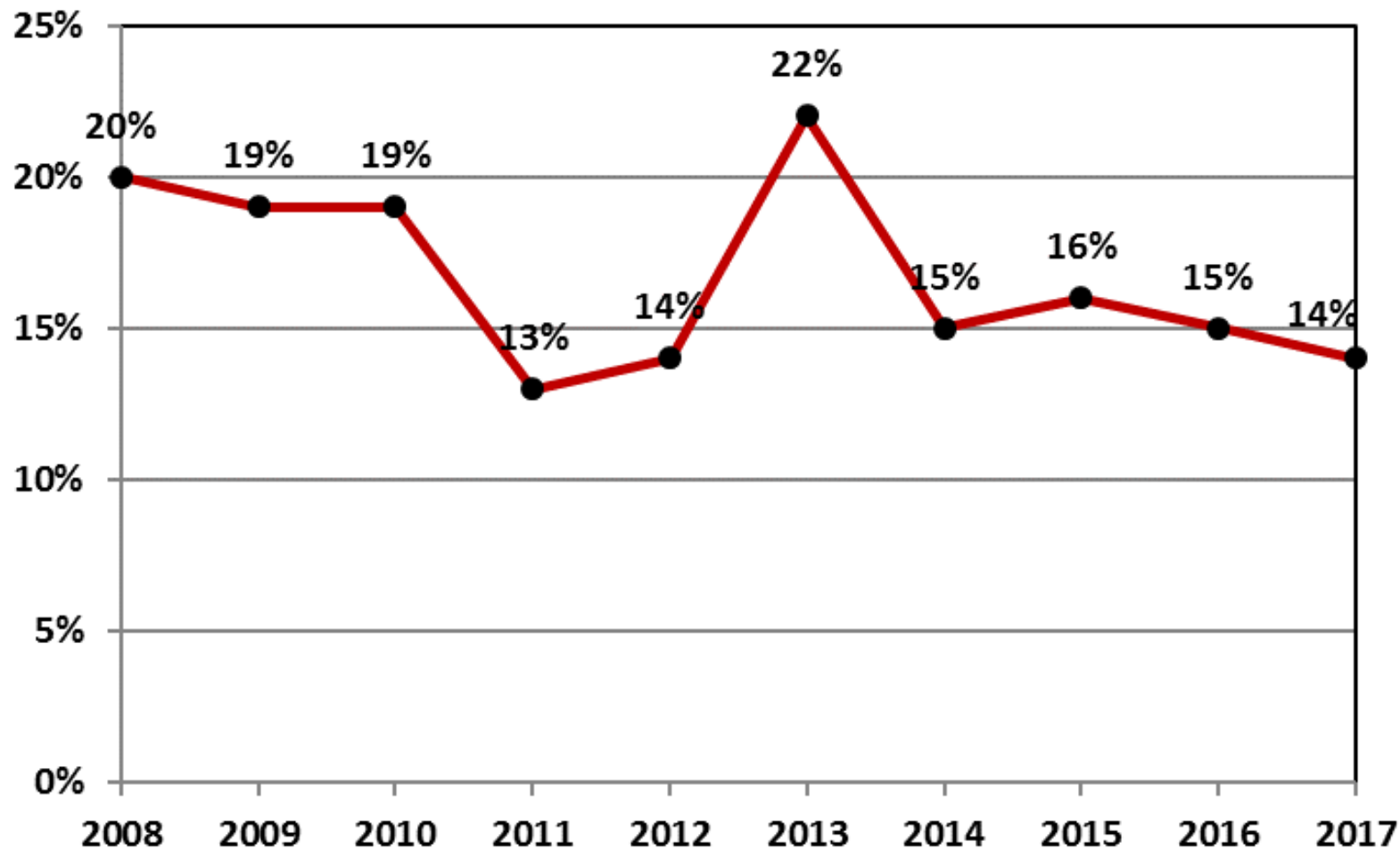
# U.S. Registered Rotorcraft 13 Month Rolling Accident Count



# U.S. Registered Rotorcraft Cumulative Fatal Accident Count: FY15 - 17

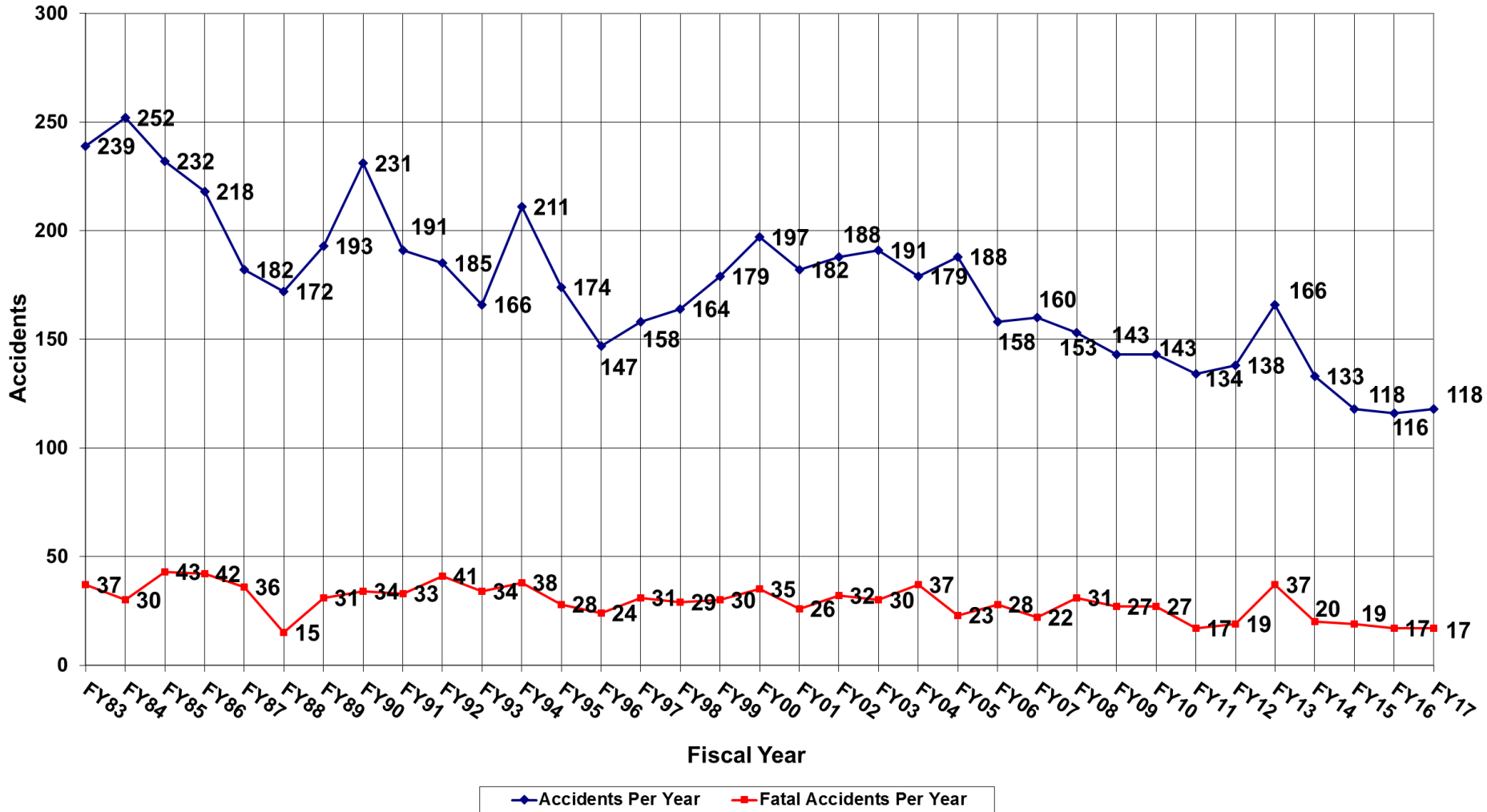


# % of U.S. Rotorcraft Accidents with a Fatality (FY17, Oct-Sep)

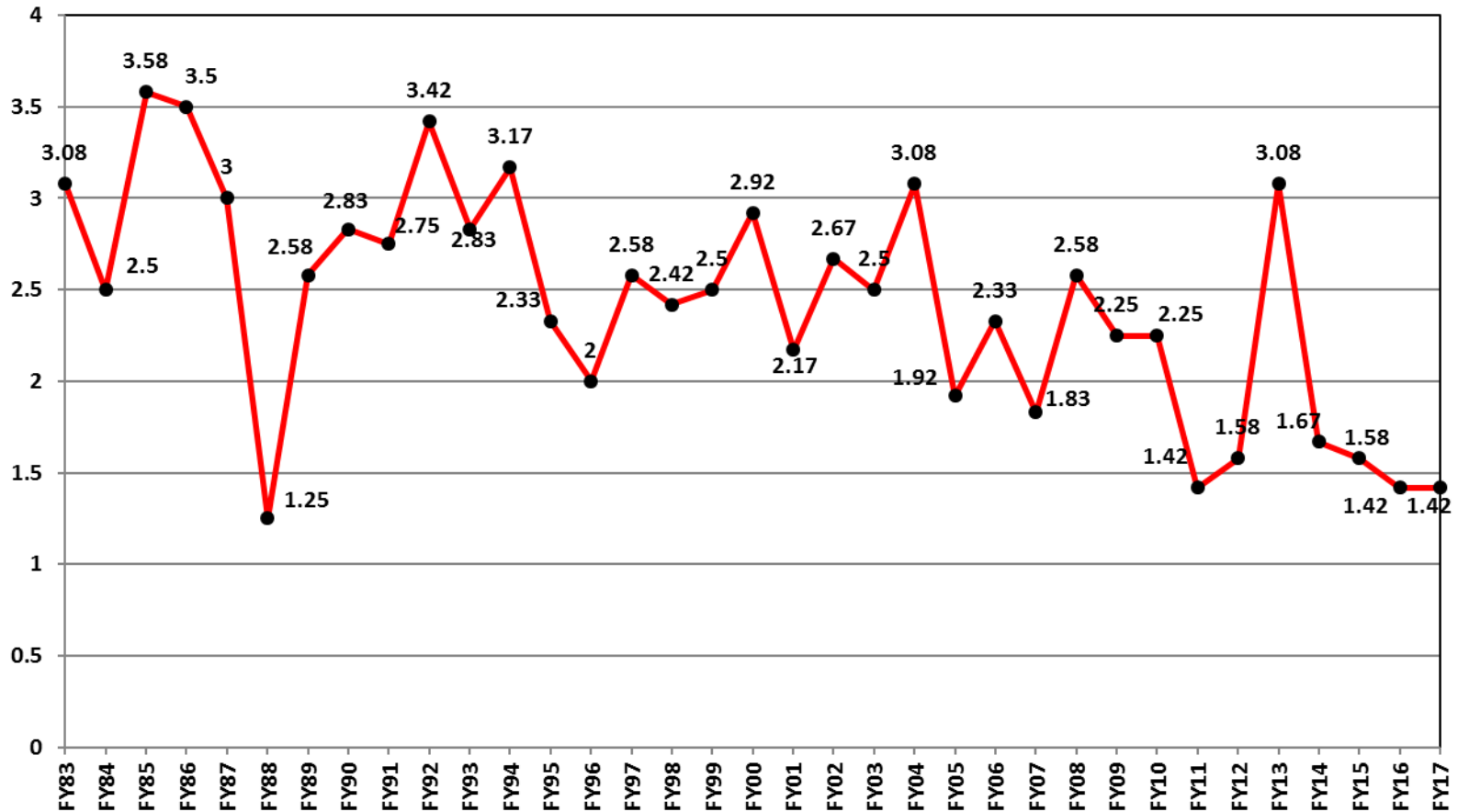




# U.S. Registered Rotorcraft Accidents FY83 - FY17



# U.S. Registered Rotorcraft Average Fatal Accidents Per Month, FY83-FY17



# FY 17 – U.S. Registered Fatal Rotorcraft Accidents

- 9-16-17 –Bell 206L3, N213TV, Ancho, NM, Part 91, 1 Fatal  
–Business flight; returning to Albuquerque from covering news story in Carlsbad  
–Crashed in open ranch land; post crash fire [NTSB: CEN17FA355](#)
- 9-8-17 –Sikorsky 269C-1, N204HF, Medford, NJ, Part 91, 2 Fatal  
–Orientation flight for passenger who was scheduled to perform concert that night  
–Pilot reported no change in engine rpm when he moved twist grip throttle  
–Attempted autorotation; crashed prior runway [NTSB: ERA17FA317](#)
- 9-8-17 –Airbus Helicopters BK-117C-2, N146DU, Hertford, NC, Part 135, 4 Fatal  
–Air ambulance patient transport flight enroute Duke University North Heliport  
–Witnesses observed smoke trailing helicopter during flight  
–Wreckage area had no ground scars; post-crash fire [NTSB: ERA17FA316](#)

# FY 17 – U.S. Registered Fatal Rotorcraft Accidents

- 8-12-17 – Bell 407, N31VA, Charlottesville, VA, Public Aircraft, 2 Fatal
  - Monitoring public demonstrations; re-tasked to over-watch of motorcade
  - Crashed shortly after re-tasking; post-crash fire [NTSB: ERA17FA274](#)
  
- 6-4-17 – Robinson R-44, N7091F, Dimmitt, TX, Part 91, 1 Fatal
  - Business flight; observation of fields, facilities, and other assets
  - Search initiated when pilot did not return from flight
  - Crashed under unknown circumstances; no witnesses [NTSB: CEN17FA209](#)
  
- 5-25-17 – Airbus Helicopters EC135P2, N62UP, Wilmington, DE, Part 91, 1 Fatal
  - Helicopter Air Ambulance; IFR training flight in IMC at New Castle airport
  - Declared missed approach to Rwy 1; climbed on course to 2,525 feet MSL
  - Began right turn; rapid descent to crash; post-crash fire [NTSB: ERA17FA190](#)
  
- 4-21-17 – Scott’s Bell 47G, N865Z, Timmonsville, SC, Part 91, 1 Fatal
  - Personal flight, planned “golf ball drop” at fundraising event
  - Crashed 13 miles from event site; post-crash fire [NTSB: ERA17FA164](#)

# FY 17 – U.S. Registered Fatal Rotorcraft Accidents

- 3-14-17 – MDHI 369FF, N530KD, Chalmers, IN, Part 133, 1 Fatal
  - Power line construction flight
  - Crashed while threading sock line through tower [NTSB: CEN17FA127](#)
  
- 2-27-17 – Bell 407, N1371, Chauvin, LA, Part 91, 1 Fatal
  - Had completed offshore passenger drop off (Part 135 flight) to oil platform
  - Inbound for minor maintenance to engine cowl fastener [NTSB: CEN17FA112](#)
  
- 2-15-17 – Bell 429, N598PB, Shreveport, LA, Part 91, 2 Fatal
  - Night flight returning from Shreveport, LA to Center, TX
  - IMC prevailed and no flight plan filed [NTSB: CEN17FA103](#)
  
- 2-6-17 – Bell 206B, N978RH, 8 mi offshore Galveston, TX, Part 135, 1 Fatal, 2 Serious
  - Night passenger flight returning from oil tanker in Galveston Bay
  - Reported lights of Galveston in sight; impacted water [NTSB: CEN17FA100](#)

# FY 17 – U.S. Registered Fatal Rotorcraft Accidents

- 1-4-17 – Robinson R22, N702JJ, San Pedro, CA, Part 91, 2 Fatal  
– Local photography flight of cruise ships  
– Collided with water after making several orbits around a ship  
– Came to rest upright in 18 feet of water NTSB: [WPR17FA047](#)
- 11-16-16 – MDHI 369D, N81GG, Pukoo, HI, Part 91, 2 Fatal  
– Night VFR Personal/Private flight from Oahu to private residence on Molokai  
– Localized low visibility with heavy rain  
– Crashed ½ mile from pilot’s private helipad NTSB: [WPR17FA021](#)
- 10-6-16 – Fairchild Hiller FH 1100, N4035G, Lino Lakes, MN, Part 91, 2 Fatal  
– Personal/Private flight, in-flight breakup; post crash fire  
– Main rotor separated; mast bumping (NTSB Prob Cause) NTSB: [CEN17FA012](#)

# FY 17 – U.S. Registered Fatal Rotorcraft Accidents Outside U.S.

- 5-10-17 – Enstrom 480B, N480W, Fundres, Italy, 1 Fatal
  - Enroute from Bolzano to Linz, Italy; inflight break up [NTSB: ERA17WA183](#)
- 2-7-17 – MDHI 600N, N245SE, Guatemala City, Guatemala, 4 Fatal
  - Crashed at Guatemala City-La Aurora Airport NTSB: CEN17WA102
- 11-19-16 – Agusta Westland A109AII, N109W, Varese, Italy, 1 Fatal, 2 Serious
  - Crashed in mountainous area near Italian/Swiss border [NTSB: ERA17WA060](#)

# FY16 vs. FY17 Accidents, By Industry

Industry	2016 Accident Count	2017 Accident Count	Year to Year Change
Personal/Private	22	22	No change
Aerial Application	21	24	14% Increase
Instructional/Training	19	24	26% Increase
Helicopter Air Ambulance	13	4	69% Decrease
Commercial	8	5	38% Decrease
Air Tour / Sightseeing	7	10	43% Increase
Law Enforcement	7	6	14% Decrease
External Load	6	2	67% Decrease
Utilities Patrol / Construction	6	3	50% Decrease
Aerial Observation	5	6	20% Increase
Unknown	1	2	100% Increase
Offshore	1	3	200% Increase
Electronic News Gathering	0	1	Increased
Firefighting	0	1	Increased
Business	0	5	Increased

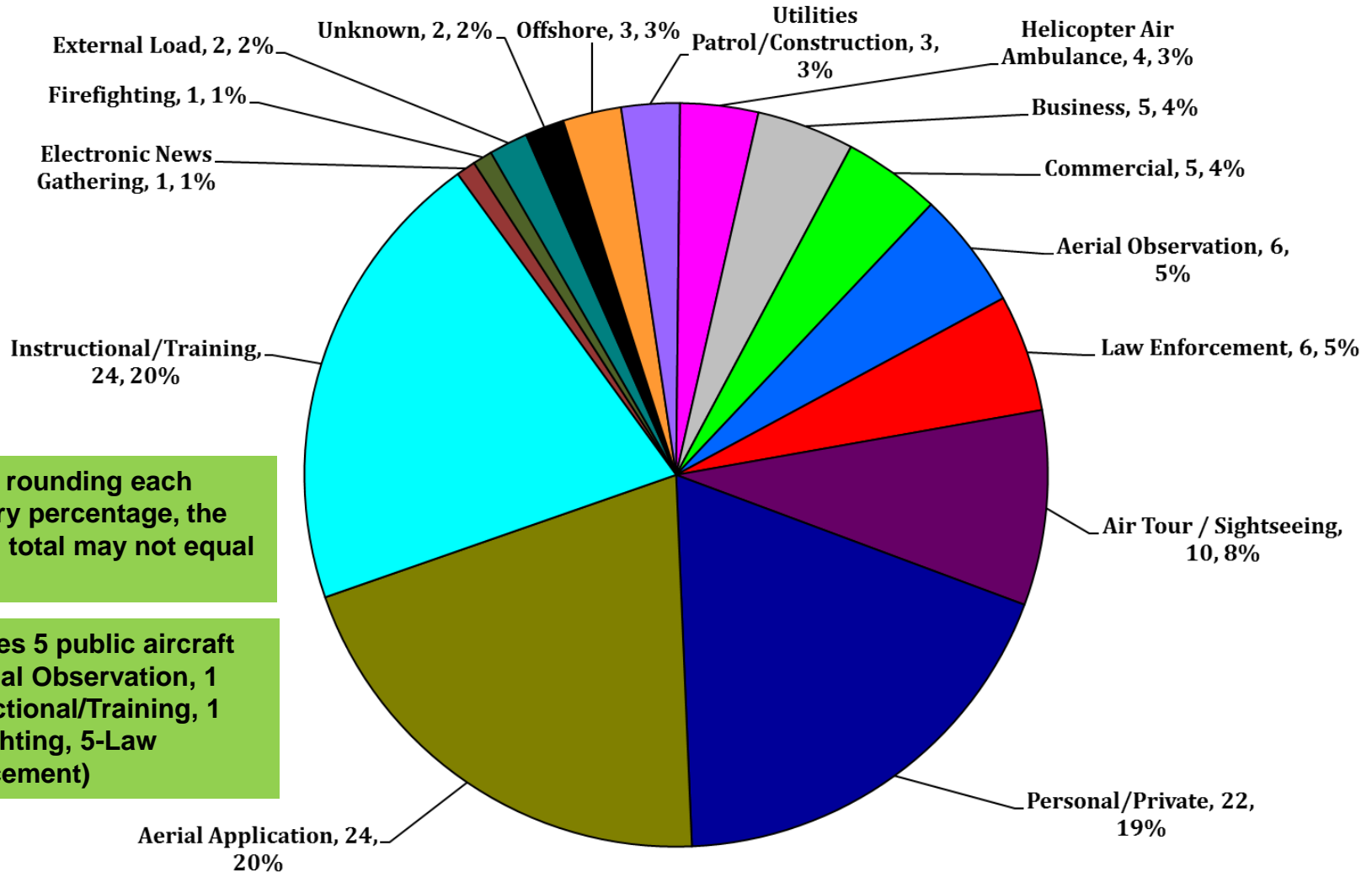
**116**

**118**

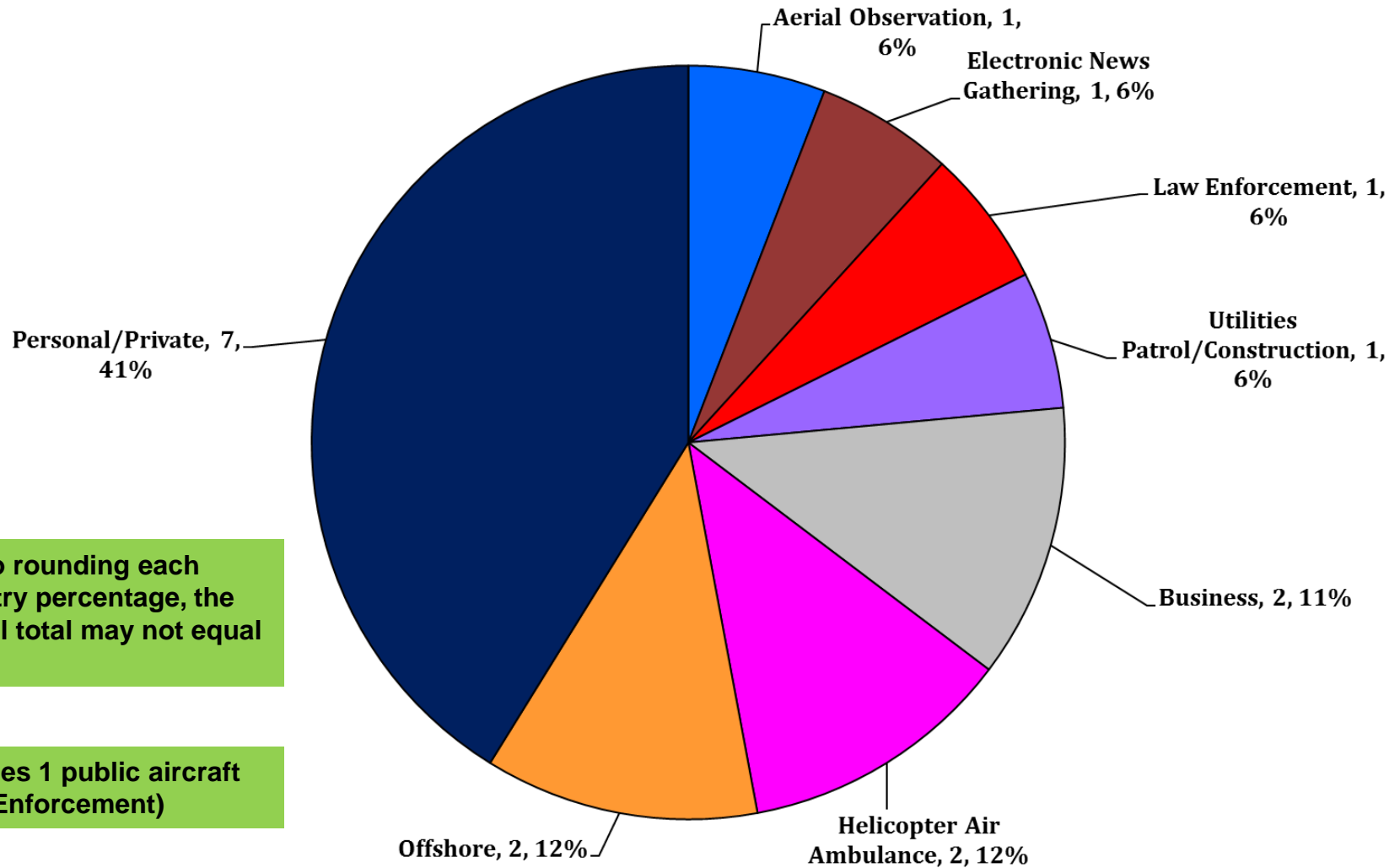




# FY 17 – Total Accidents by Industry (Oct 2016-Sep 2017)



# FY 17 – Total FATAL Accidents by Industry (Oct 2016-Sep 2017)



Due to rounding each Industry percentage, the overall total may not equal 100%.

Includes 1 public aircraft (Law Enforcement)

# FY16 vs. FY17 Accidents, By Model

Manufacturer	Model	% of U.S. Fleet in 2017	2016 Accident Count	2017 Accident Count	Year to Year Change
Robinson	R-44	14%	20	27	35% Increase
Bell	206Bs	9%	8	11	38% Increase
Robinson	R-22	9%	8	21	163% Increase
Airbus Helicopters	AS350	8%	9	6	33% Decrease
Bell	407	6%	6	5	17% Decrease
Bell	206Ls	5%	8	2	75% Decrease
MDHI	369s	5%	9	9	No change
Scott's Bell	47	5%	11	6	45% Decrease
Sikorsky	269s/300s	5%	9	5	44% Decrease

Note: Table only shows models that accounted for at least 5% of the U.S. registered rotorcraft fleet in 2017. Together, these models accounted for 66% of the fleet. They accounted for 76% of all rotorcraft accidents in 2016 and 78% in 2017.

## FY 17 - US Rotorcraft Accidents By Model

MFR	Model	Registered U.S. Fleet Size	Percentage of Total U.S. Fleet	Number of FY17 U.S. Registered Accidents	Percentage of Total FY17 U.S. Registered Accidents
<b>Airbus Helicopters</b>	<b>AS350 (H125)</b>	<b>851</b>	<b>8%</b>	<b>6</b>	<b>5%</b>
	<b>BK117 (H145)</b>	<b>176</b>	<b>2%</b>	<b>2</b>	<b>2%</b>
	<b>EC120 (H120)</b>	<b>89</b>	<b>1%</b>		
	<b>EC130 (H130)</b>	<b>214</b>	<b>2%</b>	<b>3</b>	<b>3%</b>
	<b>EC135 (H135)</b>	<b>278</b>	<b>2%</b>	<b>2</b>	<b>2%</b>

**Only models that comprise at least 1% of U.S. registered rotorcraft are listed unless an accident has occurred.**

\*Fleet size based on analysis of rotorcraft on FAA registry as of Feb 2017

## FY 17 - US Rotorcraft Accidents By Model

<b>MFR</b>	<b>Model</b>	<b>Registered U.S. Fleet Size</b>	<b>Percentage of Total U.S. Fleet</b>	<b>Number of FY17 U.S. Registered Accidents</b>	<b>Percentage of Total FY17 U.S. Registered Accidents</b>
<b>Bell</b>	<b>206Bs</b>	<b>1,007</b>	<b>9%</b>	<b>11</b>	<b>9%</b>
	<b>206Ls</b>	<b>569</b>	<b>5%</b>	<b>2</b>	<b>2%</b>
	<b>407</b>	<b>707</b>	<b>6%</b>	<b>5</b>	<b>4%</b>
	<b>412</b>	<b>104</b>	<b>1%</b>		
	<b>429</b>	<b>78</b>	<b>1%</b>	<b>1</b>	<b>1%</b>

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<b>Robinson</b>	<b>R-22</b>	<b>1,023</b>	<b>9%</b>	<b>21</b>	<b>18%</b>
	<b>R-44</b>	<b>1,577</b>	<b>14%</b>	<b>27</b>	<b>23%</b>
	<b>R-66</b>	<b>212</b>	<b>2%</b>	<b>1</b>	<b>1%</b>

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## FY 17 - US Rotorcraft Accidents By Model

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<b>Sikorsky</b>	<b>(Schweizer) 269/300/TH-55</b>	<b>600</b>	<b>5%</b>	<b>5</b>	<b>4%</b>
	<b>S-76</b>	<b>203</b>	<b>2%</b>		
	<b>S-92</b>	<b>79</b>	<b>1%</b>		

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\*Fleet size based on analysis of rotorcraft on FAA registry as of Feb 2017

# FY 17 - US Rotorcraft Accidents By Model

MFR	Model	Registered U.S. Fleet Size	Percentage of Total U.S. Fleet	Number of FY17 U.S. Registered Accidents	Percentage of Total FY17 U.S. Registered Accidents
Brantly	B-2	82	1%	2	2%
Enstrom	280	100	1%		
	480	60	1%	1	1%
	F28	171	2%	1	1%
Fairchild Hiller	FH-1100	21	< 1%	1	1%
Helicopteres Guimbal	Cabri G2	13	< 1%	1	1%
Hiller	UH-12/H-23	285	3%	1	1%
Kaman	K1200	16	< 1%	1	1%
Leonardo (formerly Agusta Westland)	A109	148	1%	1	1%
	A119	80	1%		
	AW139	111	1%	1	1%
MDHI	369	558	5%	9	8%
	600N	26	< 1%	1	1%
Restricted Category (all TCs)	HH-1/TH-1/UH-1	217	2%	2	2%
	OH-58	111	1%	4	3%
Scott's Bell	47	608	5%	6	5%

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