



Federal Aviation  
Administration

# Rotorcraft Directorate ASW-100

## Monthly Accident Briefing

September 2016

By: ASW-112, Safety Management Group



# FY 16 – U.S. Registered Rotorcraft Accidents

## Cumulative Counts – 114 Accidents, 17 Fatal Accidents, 32 Fatalities

Same time period, previous FY: 118 Accidents, 19 Fatal Accidents, 31 Fatalities

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Accidents:</b>	10	11	7	7	4	9	13	8	16	13	10	6	114
<b>Fatal:</b>	0	1	2	0	1	2	1	3	2	2	2	1	17
<b>Fatalities:</b>	0	2	6	0	1	5	5	3	3	2	2	3	32

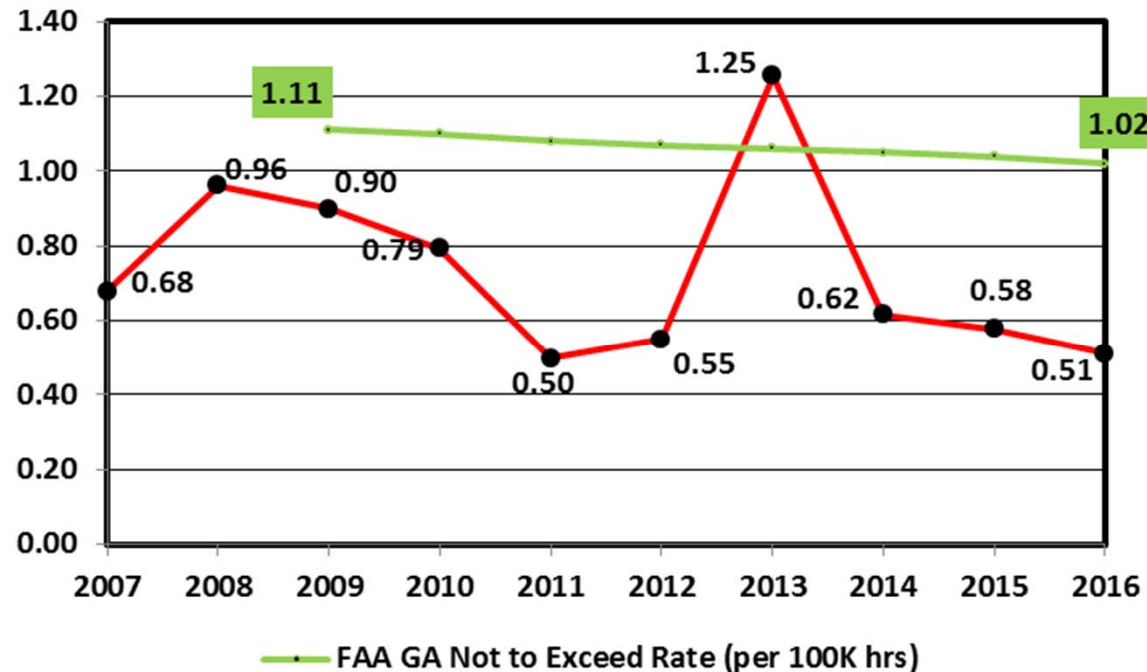
Data Source: FAA, NTSB Databases. Includes only events classified as accidents and does not include incidents. The accident numbers for each month of the Fiscal Year may vary from the previous monthly briefing based on analysis between FAA and NTSB databases for the specified month. The NTSB database 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>	13	1	6	3	7	19		63	2
<b>Fatal:</b>	3		1	1	2	1		9	
<b>Fatalities:</b>	10		1	1	6	1		13	

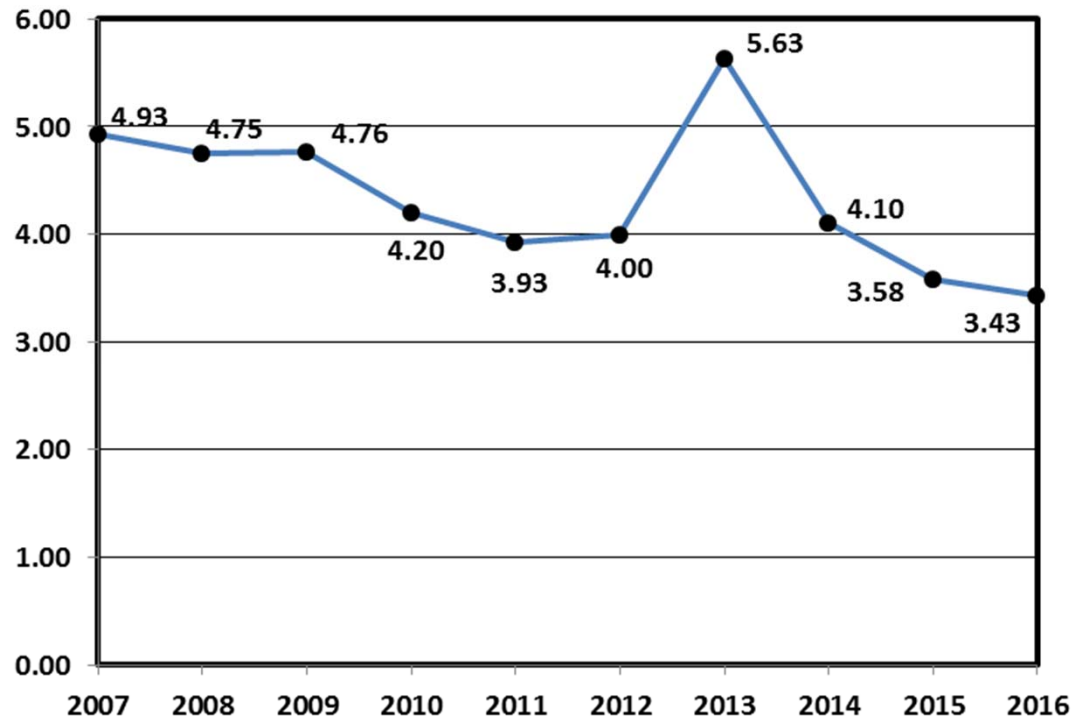
# Estimated Rotorcraft FATAL Accident Rate (per 100,000 hours) – 10 Year Lookback



## Rate calculation based on the following:

- 1) Accident totals compiled by ASW-112.
- 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 16 were based on the FAA's FY2016-2036 forecast.

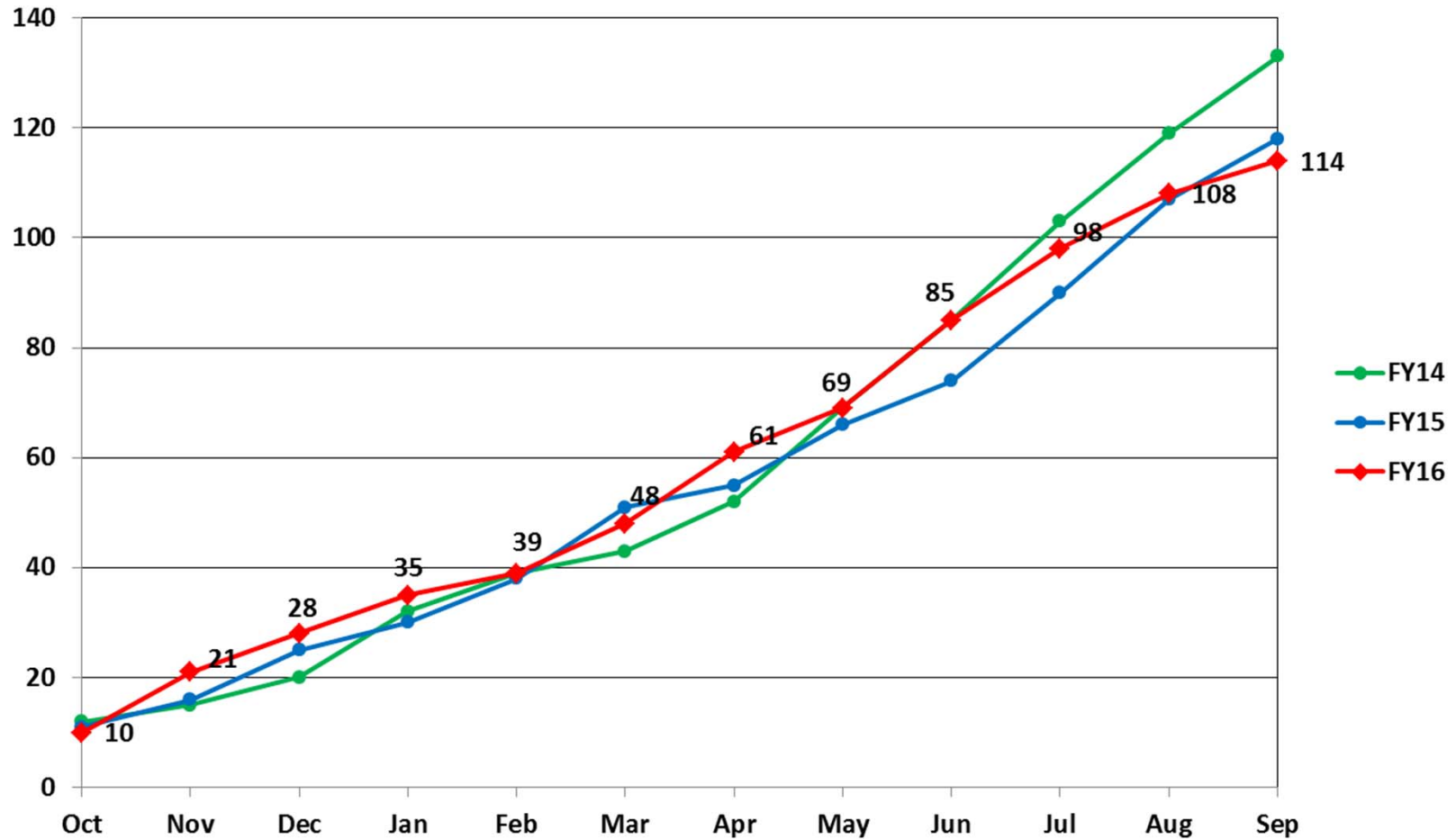
# Estimated Rotorcraft Accident Rate (per 100,000 hours) – 10 Year Lookback



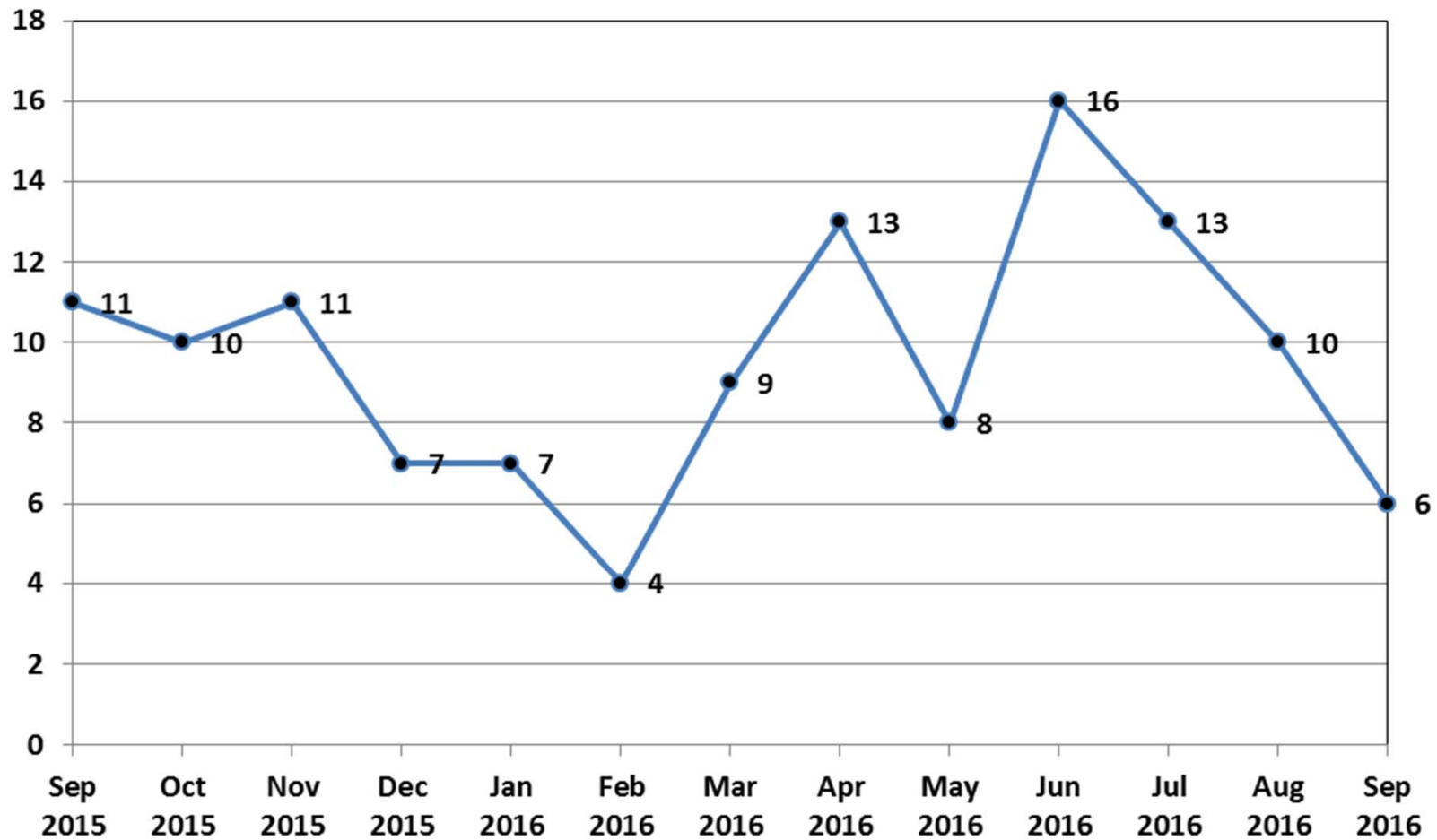
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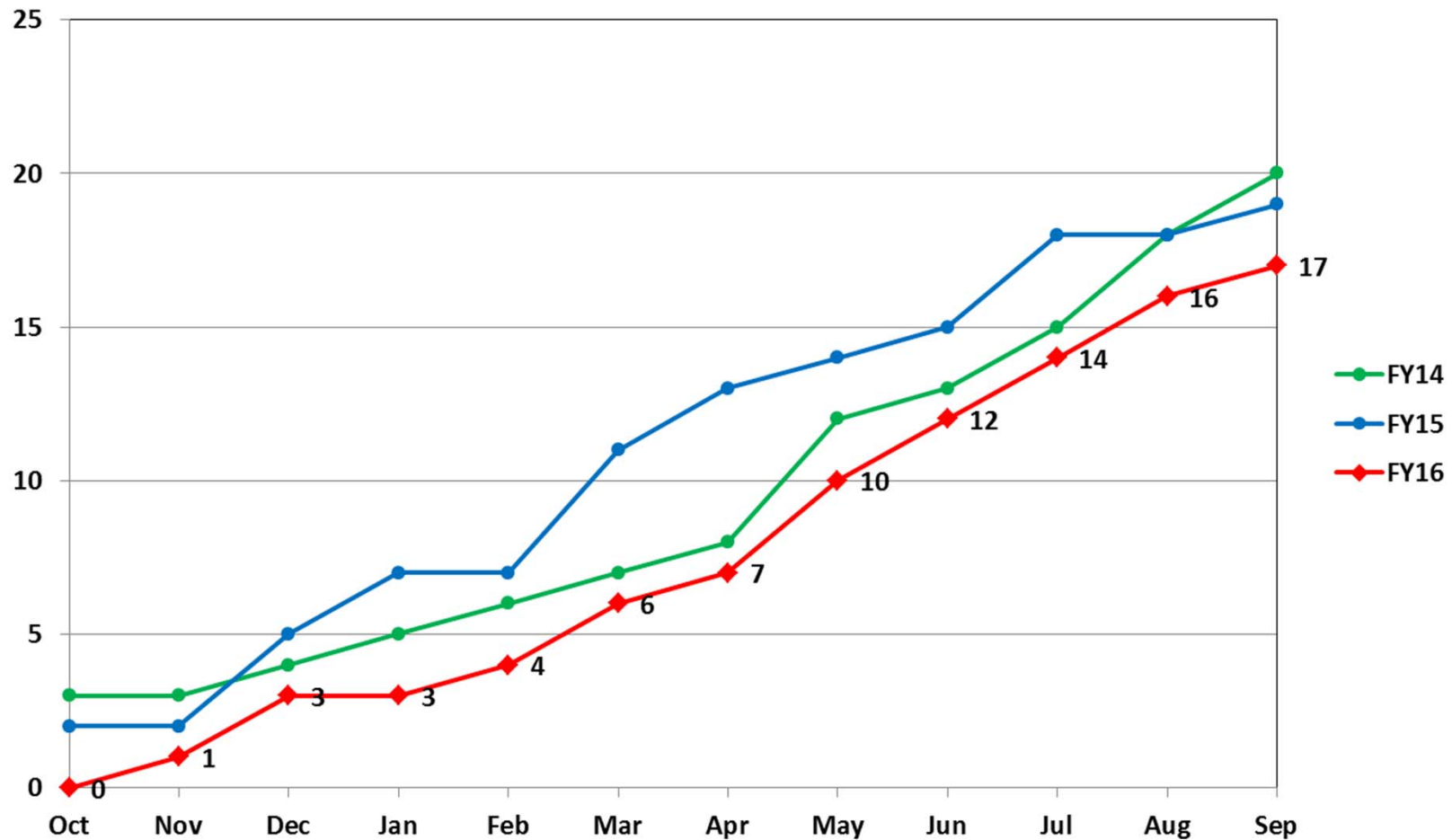
# U.S. Registered Rotorcraft Cumulative Accident Count: FY14 - 16



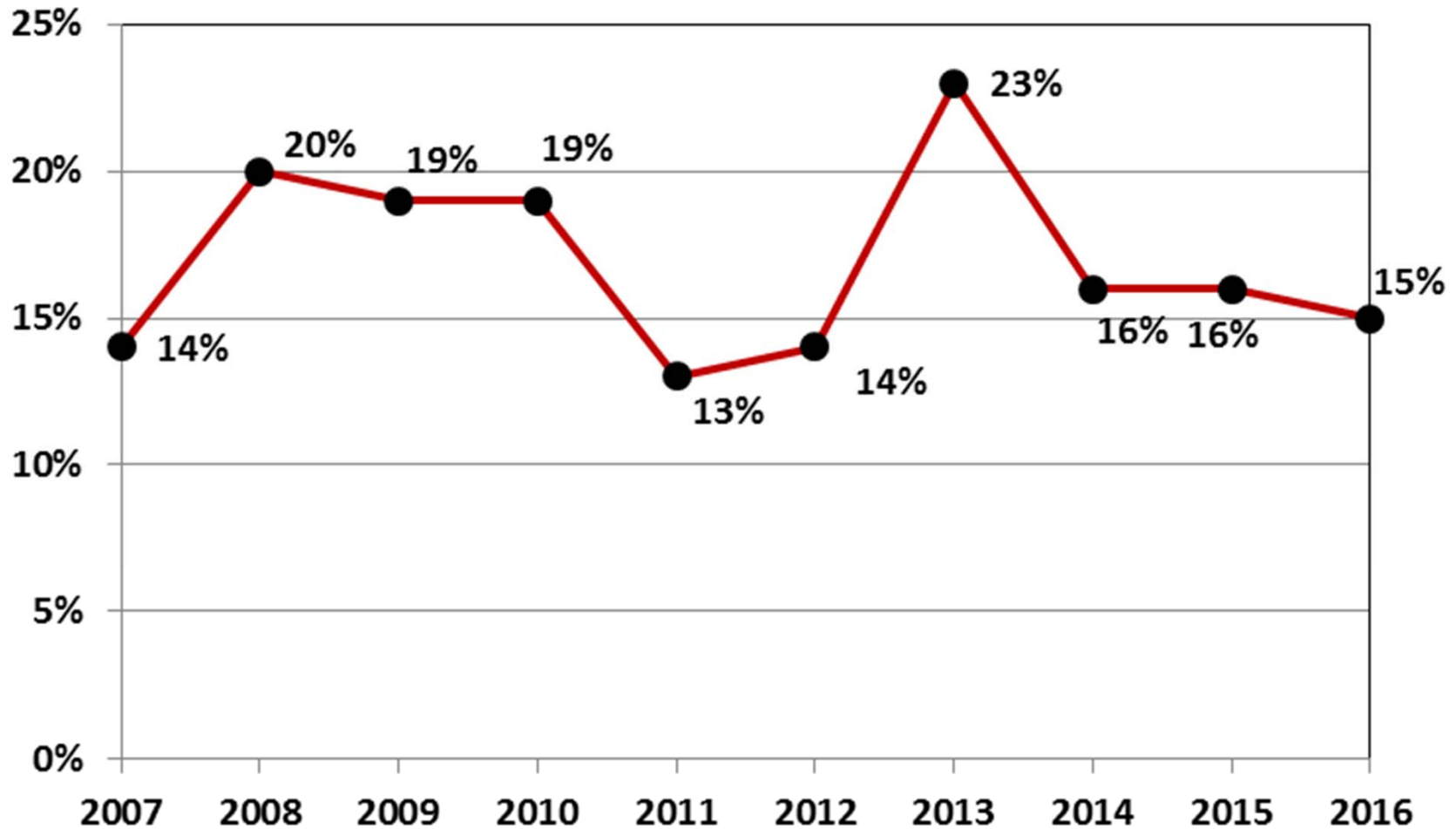
# U.S. Registered Rotorcraft 13 Month Rolling Accident Count



# U.S. Registered Rotorcraft Cumulative Fatal Accident Count: FY14 - 16



# % of Rotorcraft Accidents with a Fatality, FY16





## FY 16 – U.S. Registered Fatal Rotorcraft Accidents

- 9-6-16 – Sikorsky S-61N, N805AR, Palm Bay, FL, Part 91, 3 Fatal
  - Post maintenance test flight following fore/aft servo replacement
  - Crashed in a field, post crash fireNTSB: [ERA16FA311](#)
  
- 8-9-16 – Sikorsky 269C, N9277R, Howe, TX, Part 91, 1 Fatal, 1 Serious
  - Instructional/training flight, simulated engine failure
  - Impacted sloping terrain at high rate of descentNTSB: [CEN16FA315](#)
  
- 8-3-16 – Sikorsky 269C-1, N1549W, Jeanerette, LA, Part 91, 1 Fatal
  - Low altitude pipeline patrol flight; wreckage located next day
  - A/c found partially submerged in wooded swampNTSB: [CEN16FA304](#)

## FY 16 – U.S. Registered Fatal Rotorcraft Accidents

- 7-11-16 – Bell 429, N1SP, Georgetown, DE, Public Aircraft, 1 Fatal, 3 Uninjured
  - Rescue hoist training for emergency response team
  - Hoist system operator fell from the aircraftNTSB: [ERA16LA253](#)
  
- 7-11-16 – Bell 407, N427TV, Hickory, KY, Part 91, 1 Fatal
  - Approach to customer service center to pick up lineman to inspect power lines
  - 100 feet AGL, a/c banked right, descended to groundNTSB: [ERA16FA248](#)
  
- 6-23-16 – Robinson R-66, N117TW, Wikieup, AZ, Part 91, 2 Fatal
  - Cross country positioning flight from Prescott, AZ to Riverside, CA
  - Collided with terrain, post-crash fire occurred
  - ASW-112 assisted with investigationNTSB: [WPR16FA130](#)
  
- 6-12-16 – Robinson R-44, N789MR, Jonesboro, AR, Part 91, 1 Fatal
  - Personal/Private flight, maneuvering over airstrip
  - Impacted airstrip, post-crash fire occurredNTSB: [CEN16FA215](#)

## FY 16 – U.S. Registered Fatal Rotorcraft Accidents

- 5-13-16 – Scott’s Bell 47G-3B-1, N48316, Portia, AR, Part 137, 1 Ground Fatal, 1 No Injury
  - Aerial application flight, departing from elevated platform on service truck
  - Collided w/service truck during takeoff
  - Debris from crash fatally injured ground attendantNTSB: [CEN16LA182](#)
  
- 5-6-16 – Airbus Helicopters AS350B2, N94TH, Skagway, AK, Part 135, 1 Fatal
  - On demand charter; dropped off 1 pax and 12 dogs at a remote dog sledding camp
  - Impacted terrain 2 miles from dog camp
  - Marginal VMC reported at time of accidentNTSB: [ANC16FA023](#)
  
- 5-4-16 – MDHI 369E, N629JK, Reedsville, WI, Part 133, 1 Fatal
  - Power line maintenance flight; sudden descent observed
  - Impacted trees and terrainNTSB: [CEN16FA171](#)

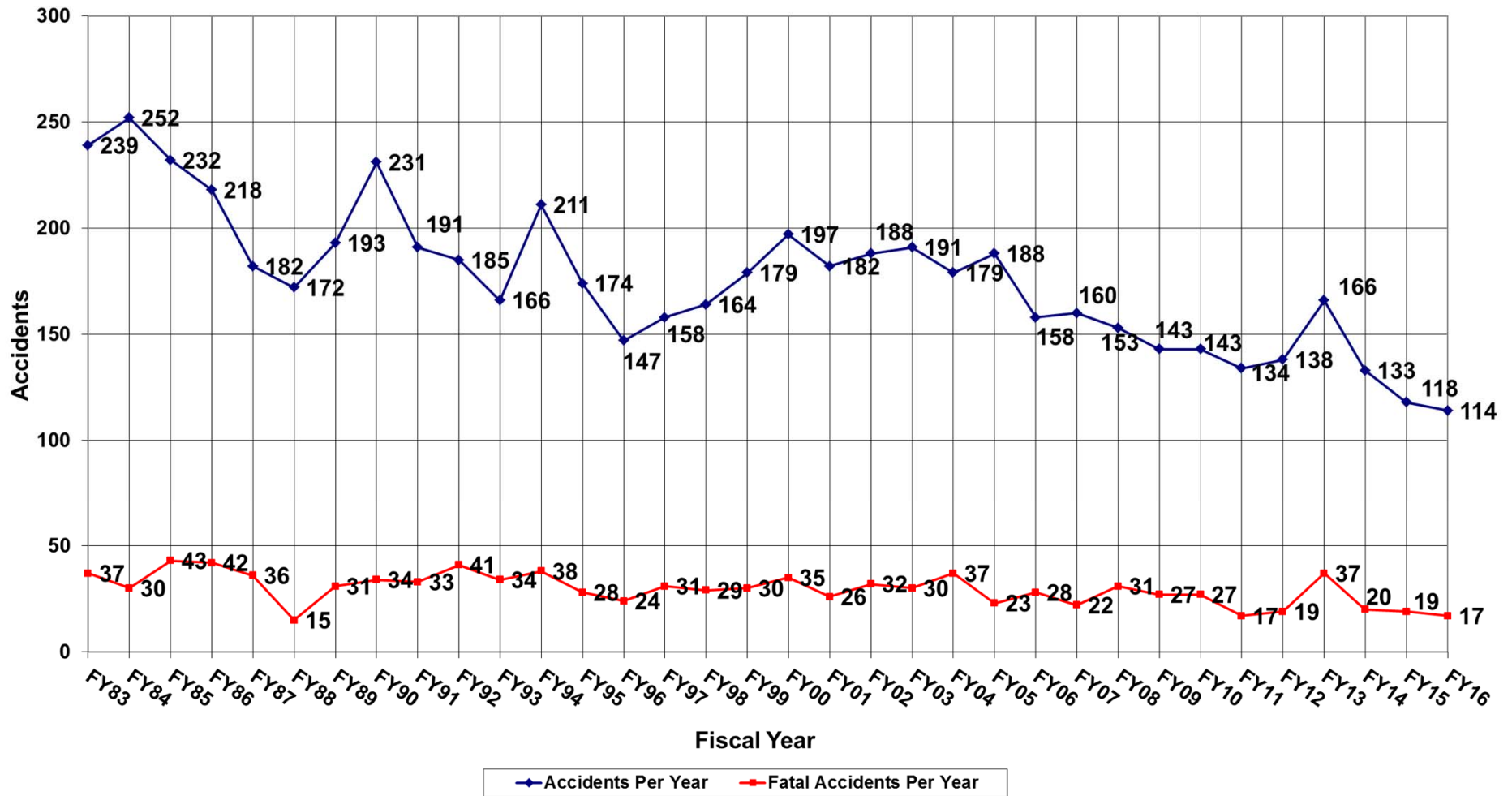
## FY 16 – U.S. Registered Fatal Rotorcraft Accidents

- 4-4-16 – Bell 206L, N16760, Pigeon Forge, TN, Part 91, 5 Fatal
  - Local air tour flight; impacted terrain in a wooded area
  - Post-crash fire occurred
  - ASW-112 assisted with investigationNTSB: [ERA16FA144](#)
  
- 3-27-16 – Robinson R-44, N776JM, Canadensis, PA, Part 91, 1 Fatal
  - Personal/Private flight from Doylestown to Greentown
  - Impacted terrain; IMC prevailed at time of eventNTSB: [ERA16FA143](#)
  
- 3-26-16 – Airbus Helicopters AS350B2, N911GF, Enterprise, AL, Part 135, 4 Fatal
  - Air ambulance night flight with patient onboard
  - Impacted in a heavily wooded area
  - ASW-112 assisted with investigationNTSB: [ERA16FA140](#)
  
- 2-18-16 – Bell 206B, N80918, Honolulu, HI, Part 91, 1 Fatal, 3 Serious, 1 Minor
  - Local air tour flight over Ford Island
  - Loss of engine rpm, ditched in water near shoreline
  - Submerged in about 40 feet of waterNTSB: [WPR16FA072](#)

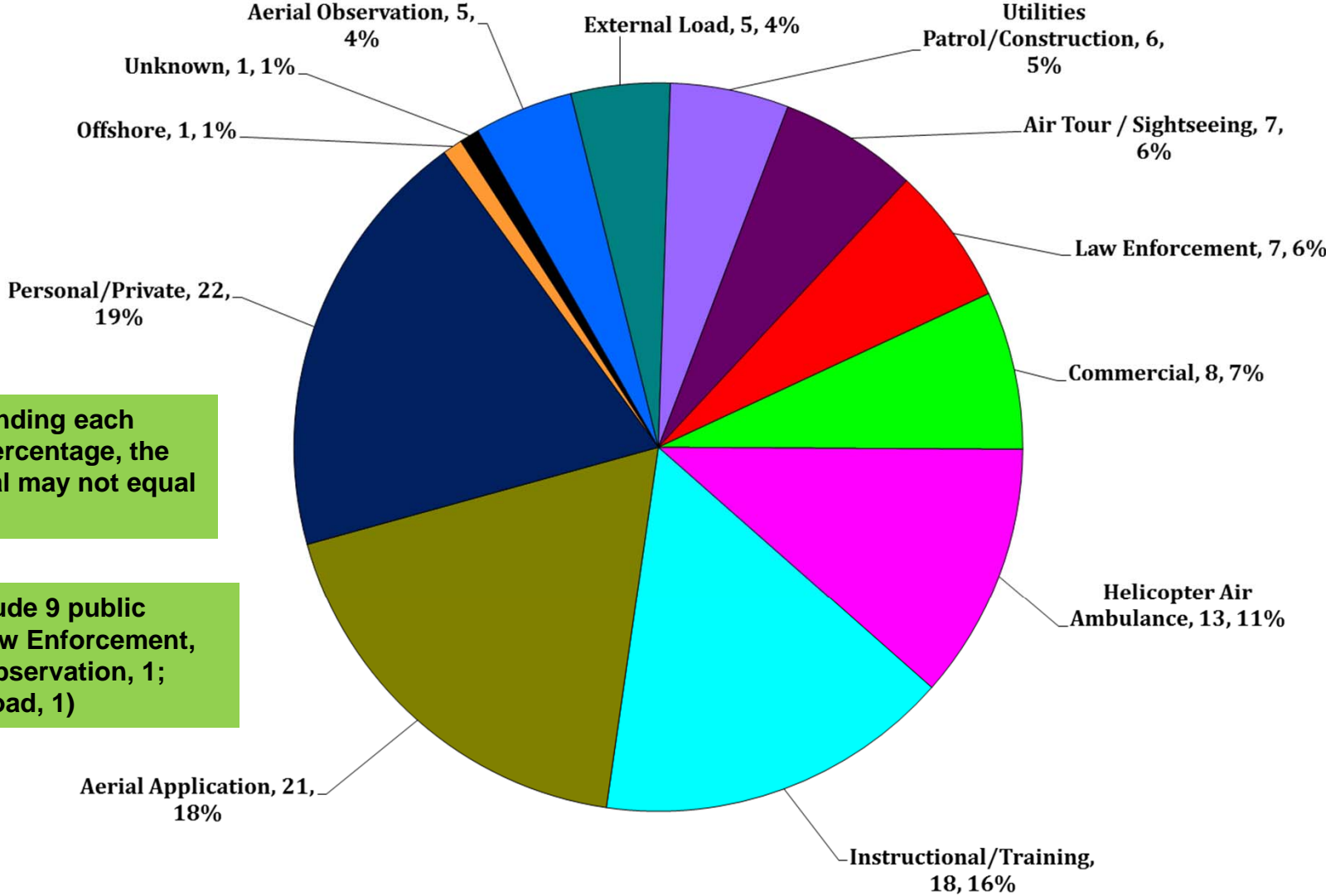
## FY 16 – U.S. Registered Fatal Rotorcraft Accidents

- 12-15-15 – Airbus Helicopters AS350B3, N74317, Superior, AZ, Part 135, 2 Fatal, 1 Serious  
– Air Ambulance positioning flight following patient drop off  
– Impacted mountainous terrain after refueling NTSB: [WPR16FA040](#)
- 12-10-15 – Bell 407, N408FC, McFarland, CA, Part 135, 4 Fatal  
– Air Ambulance night flight conducting patient transfer  
– Impacted terrain during cruise flight NTSB: [WPR16FA037](#)
- 11-18-15 – Airbus Helicopters AS350B3, N711BE, Carlsbad, CA, Part 91, 2 Fatal  
– Multiple attempts to land from a hover  
– Departed controlled flight during last attempt  
– ASW-112 assisted with investigation NTSB: [WPR16FA029](#)

# U.S. Registered Rotorcraft Accidents FY83 - FY16



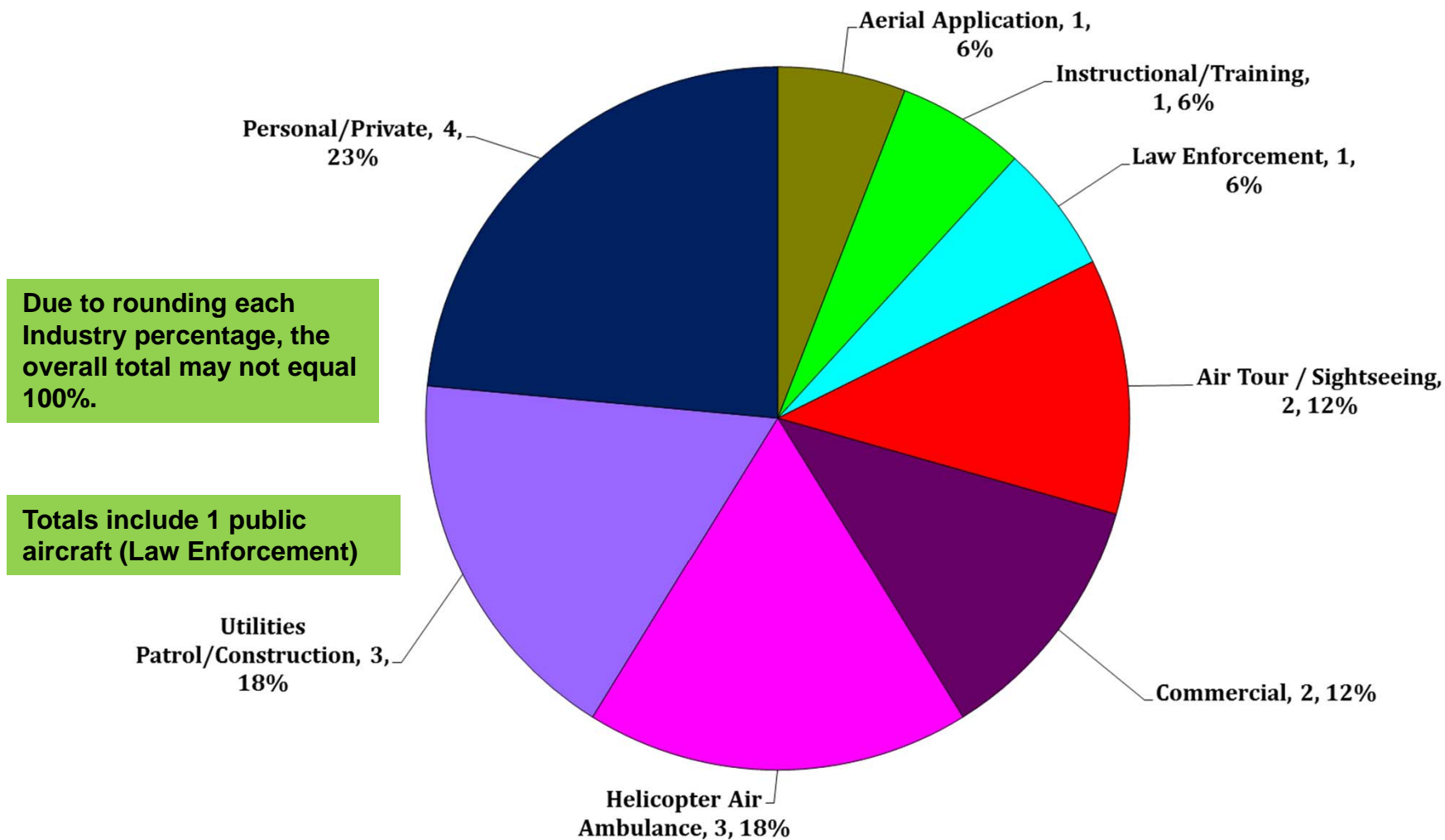
# FY 16 – Total Accidents by Industry (Oct 2015 - Sep 2016)



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

Totals include 9 public aircraft (Law Enforcement, 7; Aerial Observation, 1; External Load, 1)

# FY 16 – Total FATAL Accidents by Industry (Oct 2015 - Sep 2016)





## FY 16 - 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 FY16 U.S. Registered Accidents</b>	<b>Percentage of Total FY16 U.S. Registered Accidents</b>
<b>Airbus Helicopters</b>	<b>AS350</b>	<b>846</b>	<b>8%</b>	<b>9</b>	<b>8%</b>
	<b>BK117</b>	<b>173</b>	<b>2%</b>	<b>1</b>	<b>1%</b>
	<b>BO105</b>	<b>70</b>	<b>1%</b>		
	<b>EC120</b>	<b>93</b>	<b>1%</b>	<b>1</b>	<b>1%</b>
	<b>EC130</b>	<b>204</b>	<b>2%</b>	<b>2</b>	<b>2%</b>
	<b>EC135</b>	<b>265</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 Jan 2016

## FY 16 - 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 FY16 U.S. Registered Accidents</b>	<b>Percentage of Total FY16 U.S. Registered Accidents</b>
<b>Bell</b>	<b>206 Jet Ranger</b>	<b>1,003</b>	<b>9%</b>	<b>7</b>	<b>6%</b>
	<b>206 Long Ranger</b>	<b>557</b>	<b>5%</b>	<b>8</b>	<b>7%</b>
	<b>212</b>	<b>59</b>	<b>1%</b>		
	<b>407</b>	<b>667</b>	<b>6%</b>	<b>6</b>	<b>5%</b>
	<b>412</b>	<b>102</b>	<b>1%</b>		
	<b>429</b>	<b>64</b>	<b>1%</b>	<b>1</b>	<b>1%</b>

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## FY 16 - US Rotorcraft Accidents By Model

MFR	Model	Registered U.S. Fleet Size	Percentage of Total U.S. Fleet	Number of FY16 U.S. Registered Accidents	Percentage of Total FY16 U.S. Registered Accidents
<b>Robinson</b>	<b>R-22</b>	<b>1,017</b>	<b>9%</b>	<b>8</b>	<b>7%</b>
	<b>R-44</b>	<b>1,492</b>	<b>13%</b>	<b>20</b>	<b>18%</b>
	<b>R-66</b>	<b>191</b>	<b>2%</b>	<b>2</b>	<b>2%</b>

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<b>Sikorsky</b>	<b>(Schweizer) 269/300/TH-55</b>	<b>619</b>	<b>6%</b>	<b>8</b>	<b>7%</b>
	<b>S-61</b>	<b>61</b>	<b>1%</b>	<b>1</b>	<b>1%</b>
	<b>S-76</b>	<b>214</b>	<b>2%</b>		
	<b>S-92</b>	<b>84</b>	<b>1%</b>		

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Agusta	A109	145	1%	1	1%
	A119	78	1%		
	AW139	105	1%		
Brantly	B-2	82	1%	1	1%
Continental Copters	MK-5/MK-6	25	< 1%	1	1%
Enstrom	280	96	1%	2	2%
	480	58	1%		
	F28	172	2%	1	1%
Hiller	UH-12/H-23	291	3%	1	1%
Helicopteres Guimbal	Cabri G2	4	< 1%	1	1%
MDHI	369	572	5%	9	8%
	500N	38	< 1%	1	1%
	600N	22	< 1%	2	2%
Restricted Category (all TCs)	HH-1/TH-1/UH-1	238	2%	2	2%
	OH-58	111	1%	4	4%
Scott's Bell	47	624	6%	11	10%
Texas Helicopter Corporation	M74A	17	< 1%	1	1%

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