



Federal Aviation  
Administration

# Rotorcraft Directorate ASW-100

## Monthly Accident Briefing

March 2016

By: ASW-112, Safety Management Group



# FY 16 – U.S. Registered Rotorcraft Accidents

## Cumulative Counts – 49 Accidents, 6 Fatal Accidents, 14 Fatalities

Same time period, previous FY: 51 Accidents, 11 Fatal Accidents, 21 Fatalities

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Accidents:</b>	10	12	8	7	4	8							49
<b>Fatal:</b>	0	1	2	0	1	2							6
<b>Fatalities:</b>	0	2	6	0	1	5							14

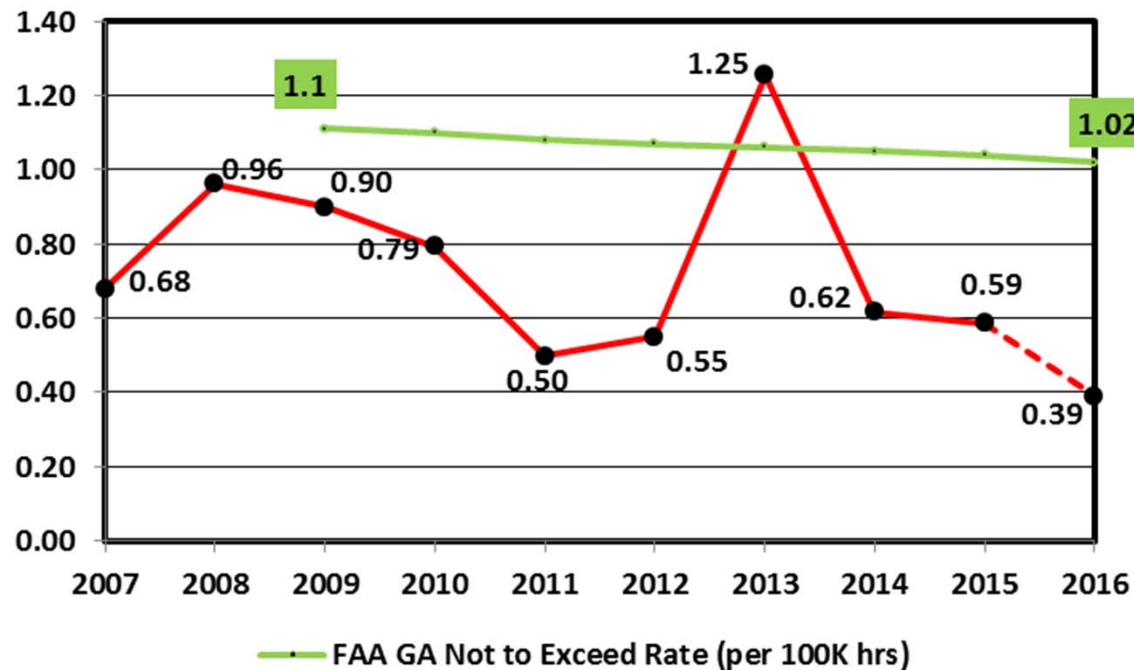
Data Source: FAA, NTSB Databases. Includes only events classified as accidents and does not include incidents. The accident numbers for each month of the Fiscal Year may vary from the previous monthly briefing based on analysis between FAA and NTSB databases for the specified month. The NTSB database 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>	7	1	3	1	3	2		32	
<b>Fatal:</b>	3				1			2	
<b>Fatalities:</b>	10				1			3	

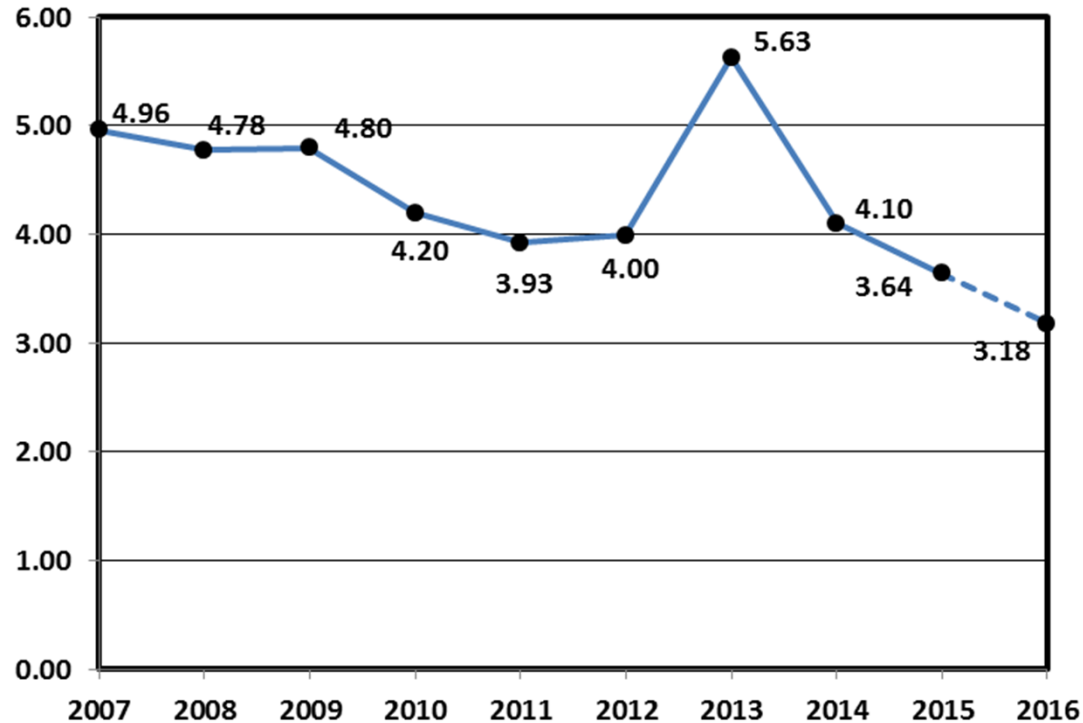
# Estimated Rotorcraft FATAL Accident Rate (per 100,000 hours) – 10 Year Lookback, FY16 YTD



## 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) FYs 11 & 15 rotorcraft flight hours and the projected hours for FY 16 were based on the FAA's FY2016-2036 forecast.
- 4) FY 16 rotorcraft flight hours to date were based on a sample of reported monthly hours distribution provided by various industry sectors.

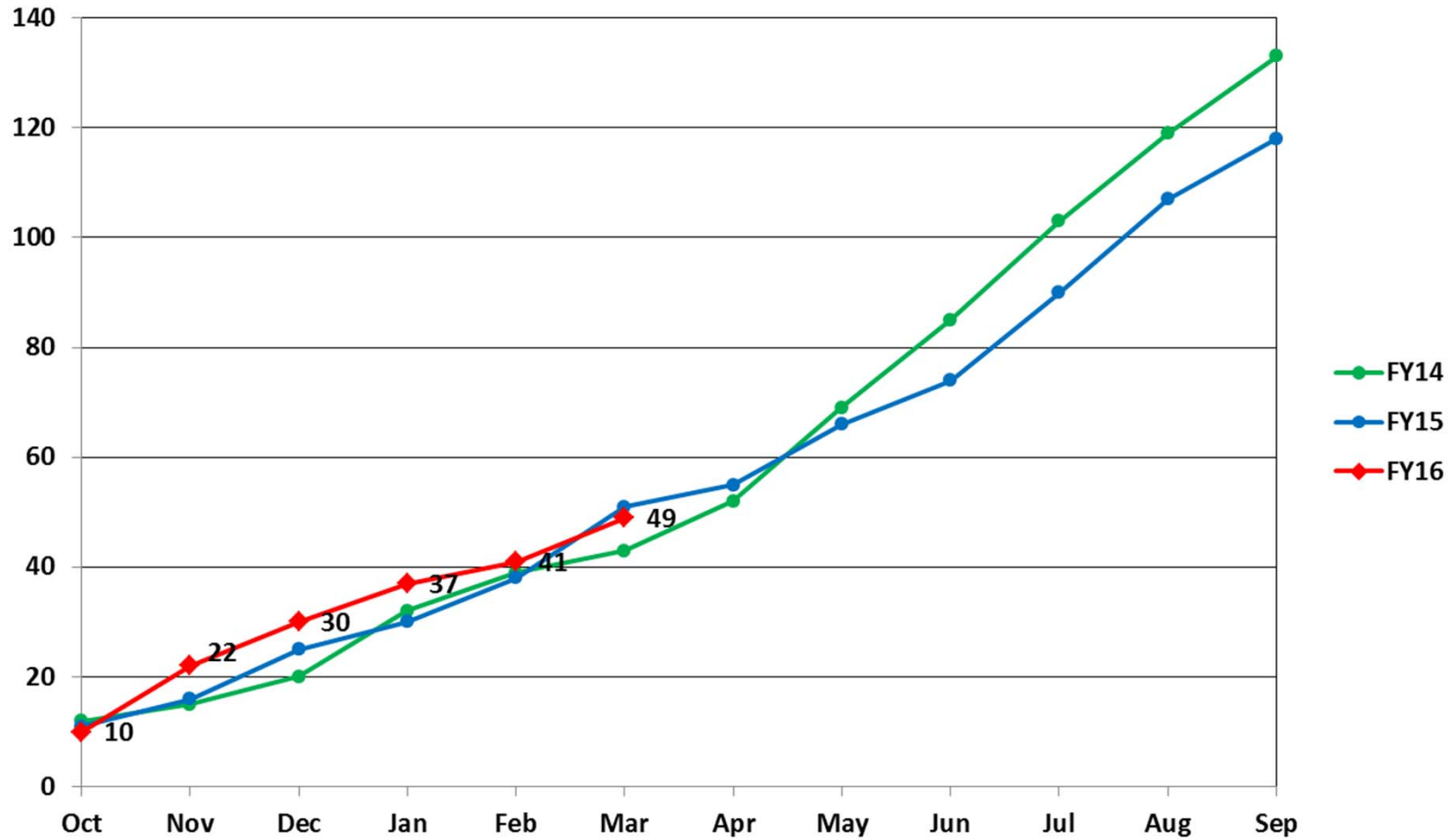
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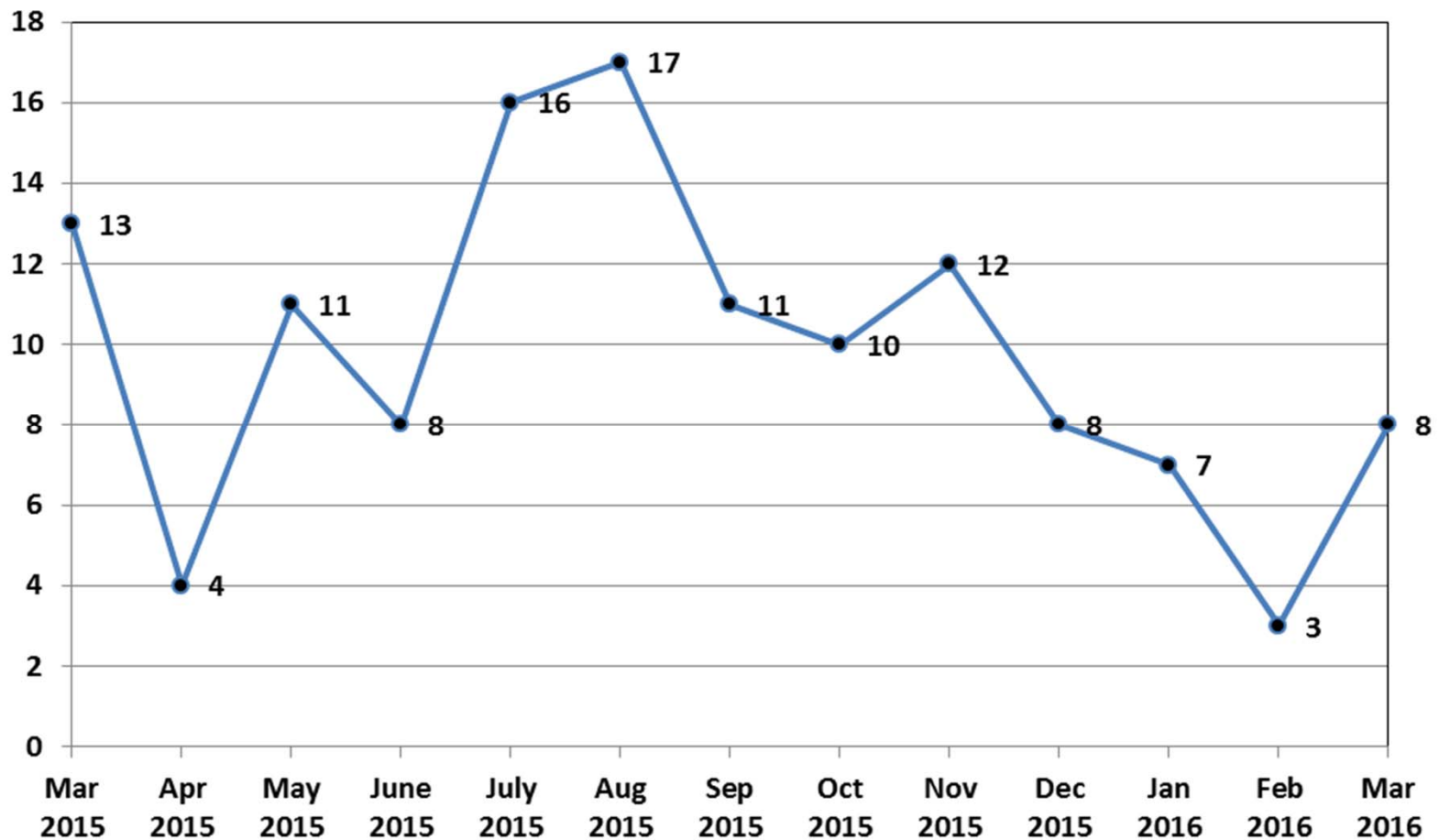
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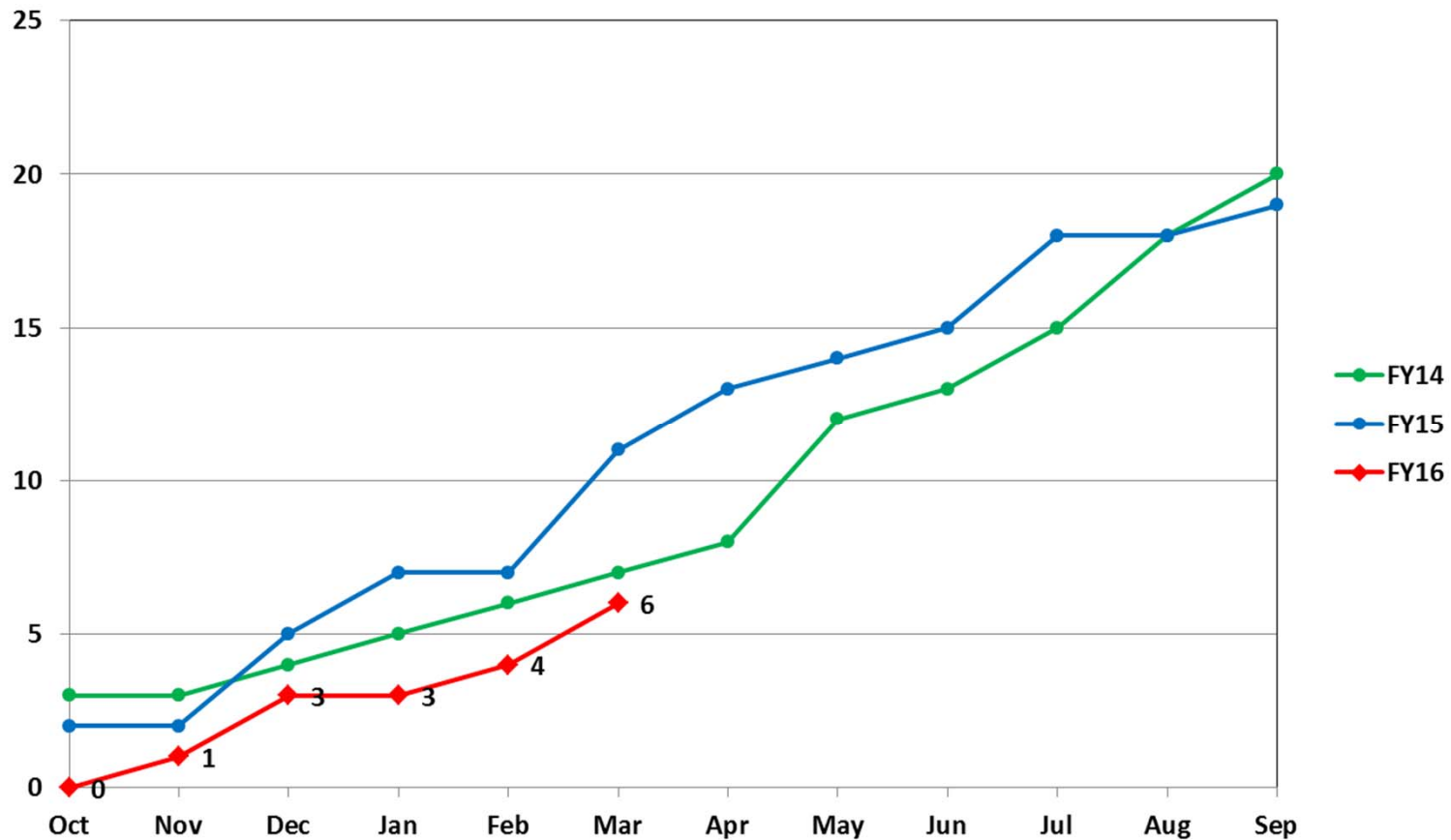
# U.S. Registered Rotorcraft Cumulative Accident Count: FY14 - 16



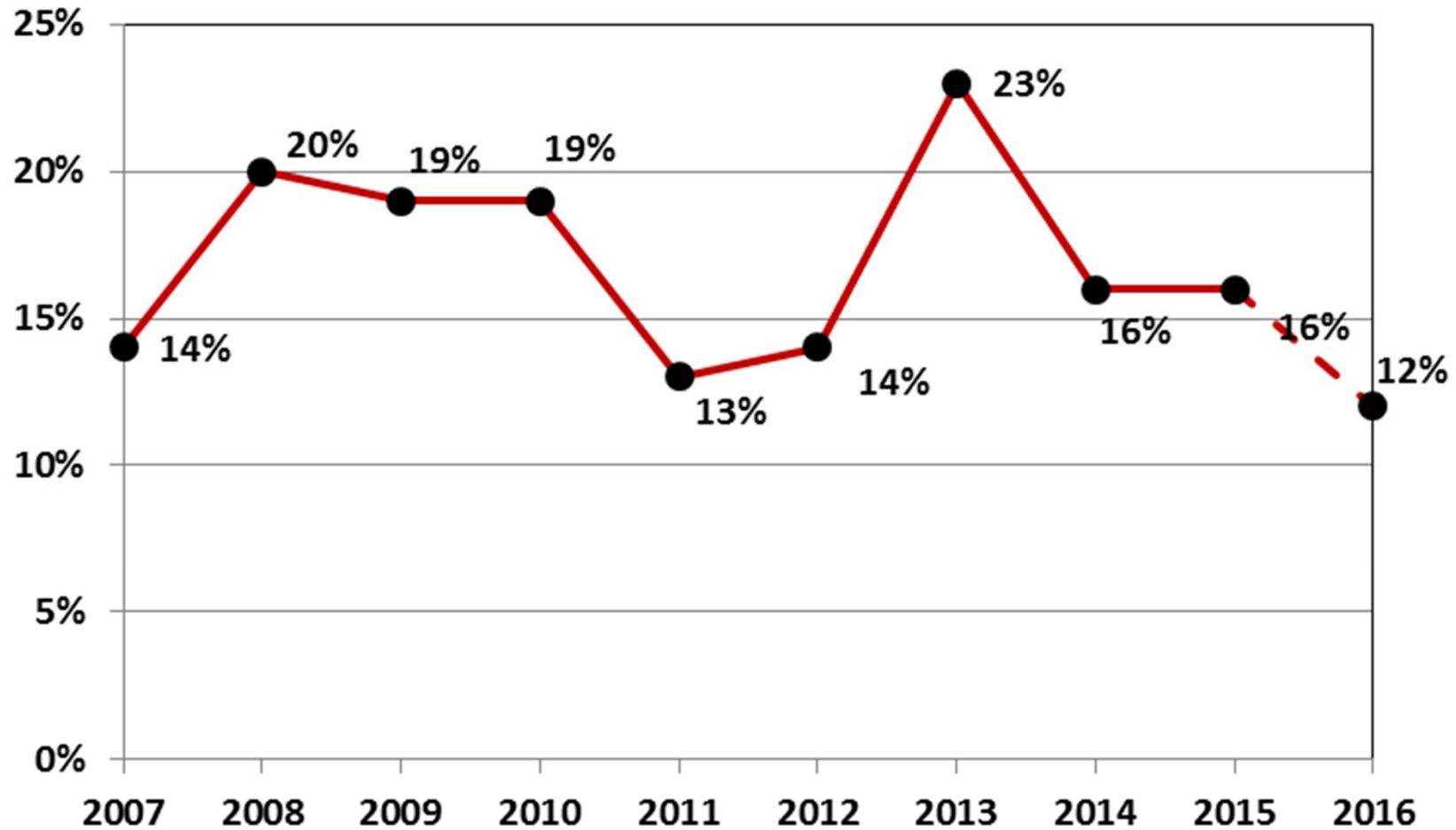
# U.S. Registered Rotorcraft 13 Month Rolling Accident Count



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



# % of Rotorcraft Accidents with a Fatality (FY16, Oct-Mar)





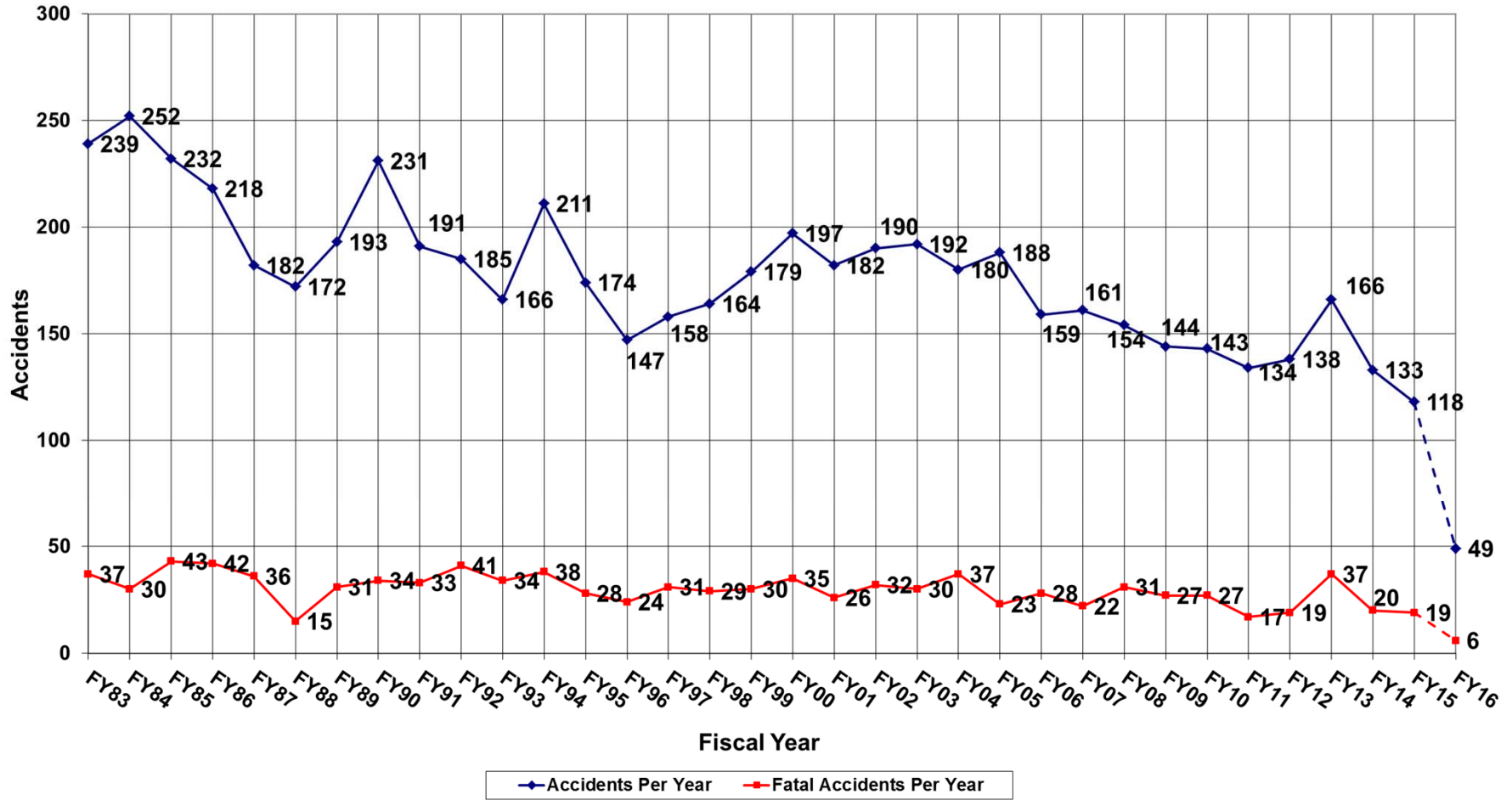
## FY 16 – U.S. Registered Fatal Rotorcraft Accidents

- 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 event [NTSB: ERA16FA143](#)
  
- 3-26-16 – Airbus Helicopters AS350B2, N911GF, Goodman, AL, Part 135, 4 Fatal
  - Air ambulance night flight with patient onboard
  - Impacted in a heavily wooded area
  - ASW-112 assisted with investigation [NTSB: 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 water [NTSB: WPR16FA072](#)

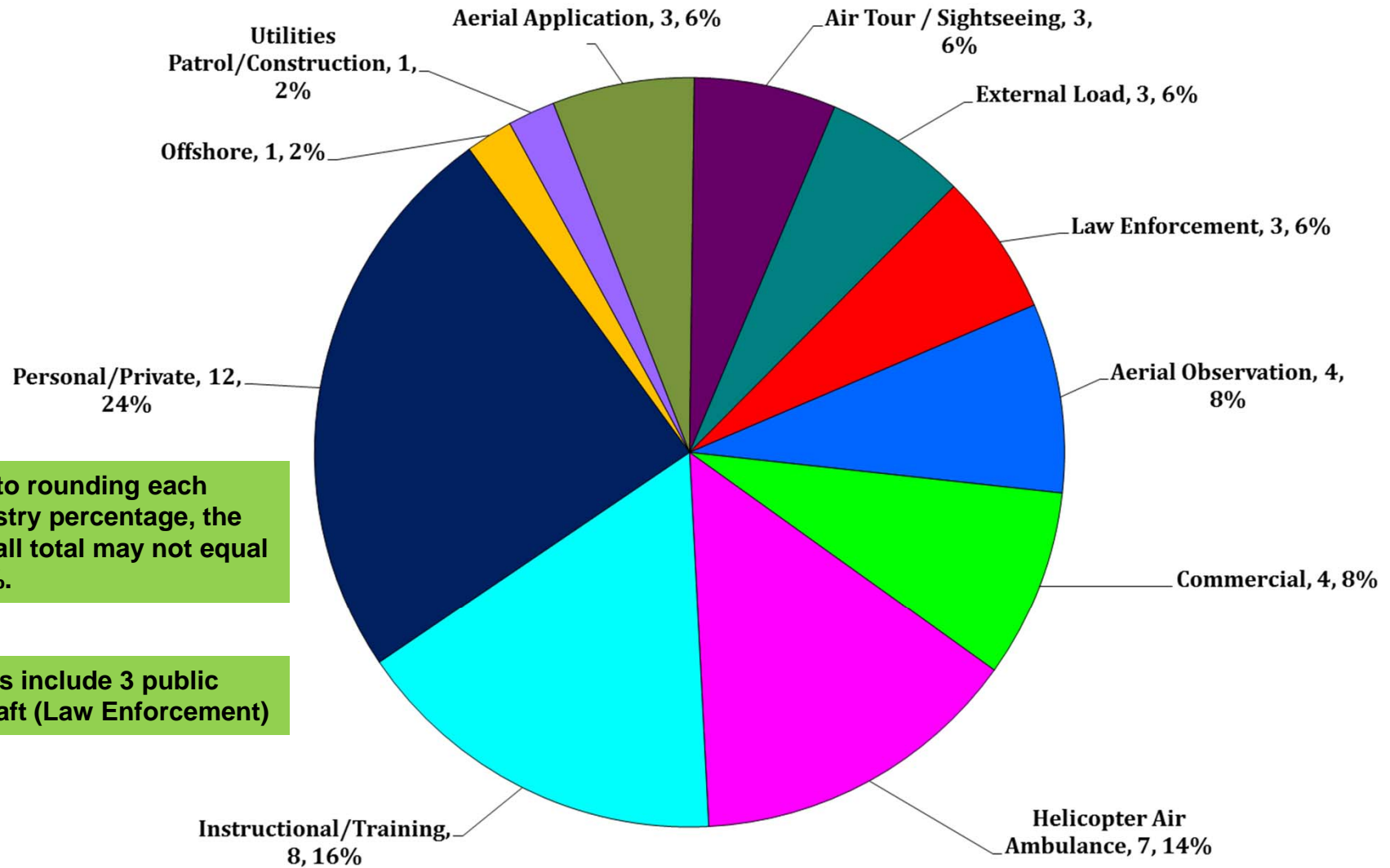
## FY 16 – U.S. Registered Fatal Rotorcraft Accidents

- 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 NTSB: [WPR16FA029](#)

# U.S. Registered Rotorcraft Accidents FY83 - FY16



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

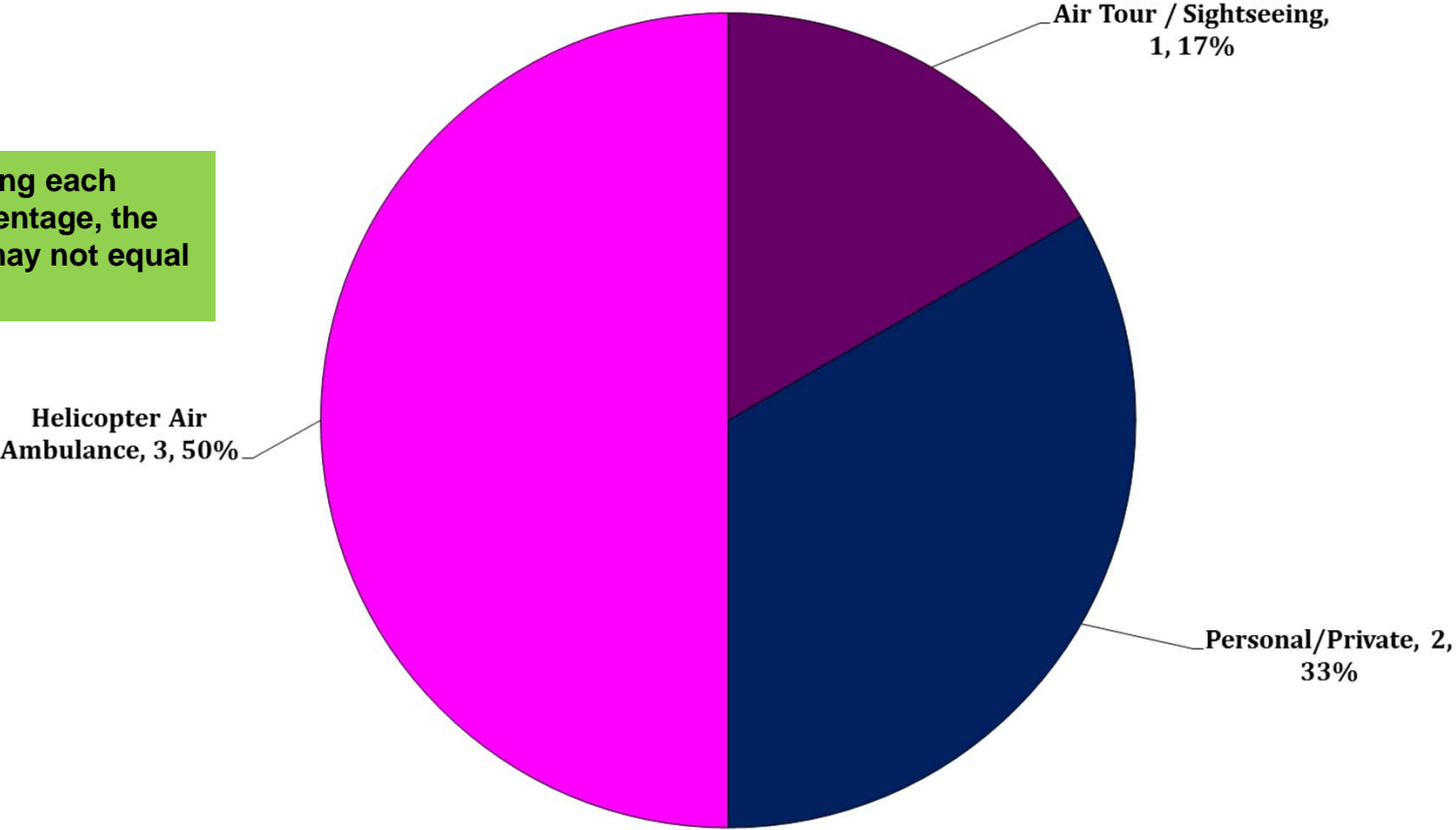


Due to rounding each Industry percentage, the overall total may not equal 100%.

Totals include 3 public aircraft (Law Enforcement)

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

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



## Oct-Mar (6 month) Trends for Historically High Accident Producing Industry Sectors

Accidents	Oct-Mar 5 Yr Average			Oct-Mar 2016	
Industry	Count	Est Rate	Std Dev	Count	Est Rate
Air Ambulance	4.6	1.86	1.74	7	2.69
Aerial Application	4.6	2.12	0.8	3	1.34
Instructional/Training	12.4	5.46	1.36	8	3.41
Personal/Private	10.6	23.55	5	12	26.17

Fatal Accidents	Oct-Mar 5 Yr Average			Oct-Mar 2016	
Industry	Count	Est Rate	Std Dev	Count	Est Rate
Air Ambulance	1.4	0.59	1.36	3	1.15
Aerial Application	0.8	0.39	0.75	0	0
Instructional/Training	0.8	0.37	1.17	0	0
Personal/Private	2.6	5.68	1.2	2	4.36

Fatalities	Oct-Mar 5 Yr Average			Oct-Mar 2016	
Industry	Count	Est Rate	Std Dev	Count	Est Rate
Air Ambulance	3.2	1.35	3.06	10	3.85
Aerial Application	1	0.48	0.89	0	0
Instructional/Training	1.4	0.67	1.74	0	0
Personal/Private	4.4	9.5	1.5	3	6.54

## 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>4</b>	<b>8%</b>
	<b>BK117</b>	<b>173</b>	<b>2%</b>		
	<b>BO105</b>	<b>70</b>	<b>1%</b>		
	<b>EC120</b>	<b>93</b>	<b>1%</b>	<b>1</b>	<b>2%</b>
	<b>EC130</b>	<b>204</b>	<b>2%</b>	<b>2</b>	<b>4%</b>
	<b>EC135</b>	<b>265</b>	<b>2%</b>	<b>2</b>	<b>4%</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



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<b>Bell</b>	<b>206 Jet Ranger</b>	<b>1,003</b>	<b>9%</b>	<b>5</b>	<b>10%</b>
	<b>206 Long Ranger</b>	<b>557</b>	<b>5%</b>	<b>1</b>	<b>2%</b>
	<b>212</b>	<b>59</b>	<b>1%</b>		
	<b>407</b>	<b>667</b>	<b>6%</b>	<b>3</b>	<b>6%</b>
	<b>412</b>	<b>102</b>	<b>1%</b>		

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<b>Robinson</b>	<b>R-22</b>	<b>1,017</b>	<b>9%</b>	<b>5</b>	<b>10%</b>
	<b>R-44</b>	<b>1,492</b>	<b>13%</b>	<b>9</b>	<b>18%</b>
	<b>R-66</b>	<b>191</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>2</b>	<b>4%</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%		
	A119	78	1%		
	AW139	105	1%		
Brantly	B-2	82	1%	1	2%
Enstrom	280	96	1%	1	2%
	480	58	1%	1	2%
	F28	172	2%	1	2%
Hiller	UH-12/H-23	291	3%		
Helicopteres Guimbal	Cabri G2	4	< 1%	1	2%
MDHI	369	572	5%	3	6%
	500N	38	< 1%	1	2%
	600N	22	< 1%	2	4%
Restricted Category (all TCs)	HH-1/TH-1/UH-1	238	2%		
	OH-58	111	1%		
Scott's Bell	47	624	6%	4	8%

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