

Rotorcraft Standards Branch

**AIR-680** 

Monthly Accident Briefing

August 2020

By: AIR-682, Safety Management Section,

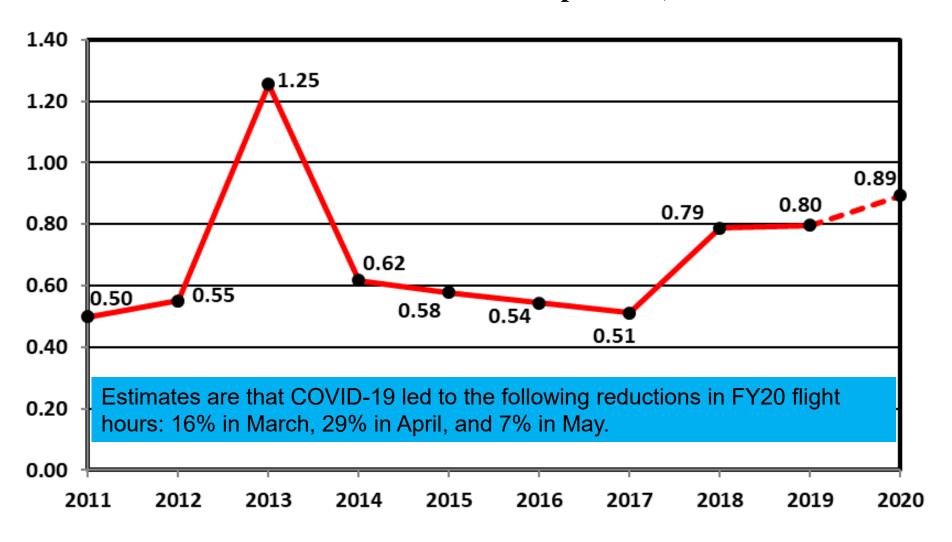
**Rotorcraft Standards Branch** 



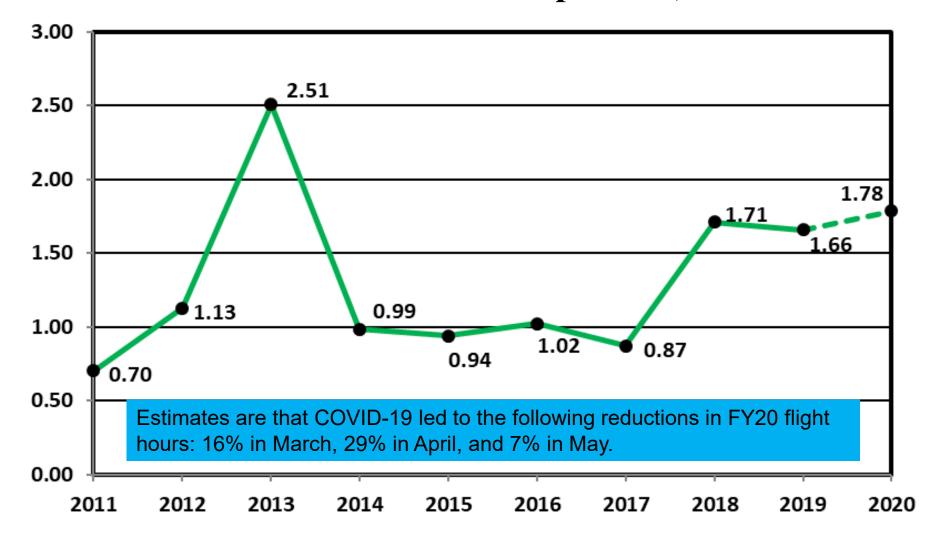




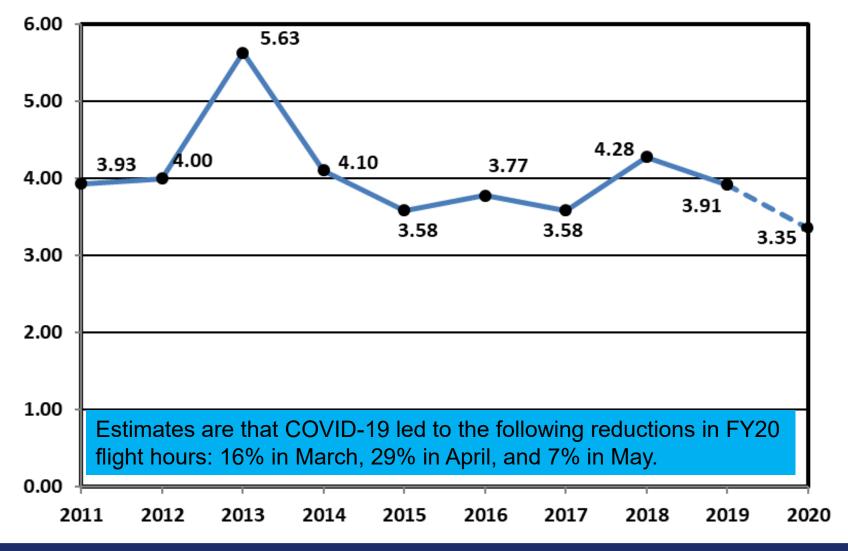
### Estimated U.S. Rotorcraft <u>FATAL</u> Accident Rate by FY 10 Year Lookback – Rates per 100,000 Hours



## Estimated U.S. Rotorcraft Fatality Rate by FY 10 Year Lookback – Rates per 100,000 Hours



## Estimated U.S. Rotorcraft Accident Rate by FY 10 Year Lookback – Rates per 100,000 Hours



#### FY 20 – U.S. Registered Rotorcraft Event Counts

**Accidents:** 

Fatal Acc:

**Fatalities:** 

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	YTD
:	11	4	7	6	7	4	7	4	12	19	9		90
	4	0	3	2	0	1	1	2	3	4	4		24
I	6	0	10	11	0	2	1	2	5	5	6		48

Same time period, previous FY: 111 Accidents, 24 Fatal Accidents, 50 Fatalities

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.

#### **Estimated Rates by Month (per 100,000 flight hours)**

Accidents:	
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**Fatal Acc:** 

**Fatalities:** 

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	YTD
:	4.01	1.71	3.41	2.88	2.94	1.72	3.54	1.57	4.15	6.55	3.39		3.35
ł	7.01	1,71	3.41	2.00	2,,,,	1.72	3.34	1.57	7.13	0.33	3.37		<b>5.5</b> 5
	1.46	0	1.46	0.96	0	0.43	0.51	0.79	1.04	1.38	1.5		0.89
	2.19	0	4.88	5.28	0	0.86	0.51	0.79	1.73	1.72	2.26		1.78

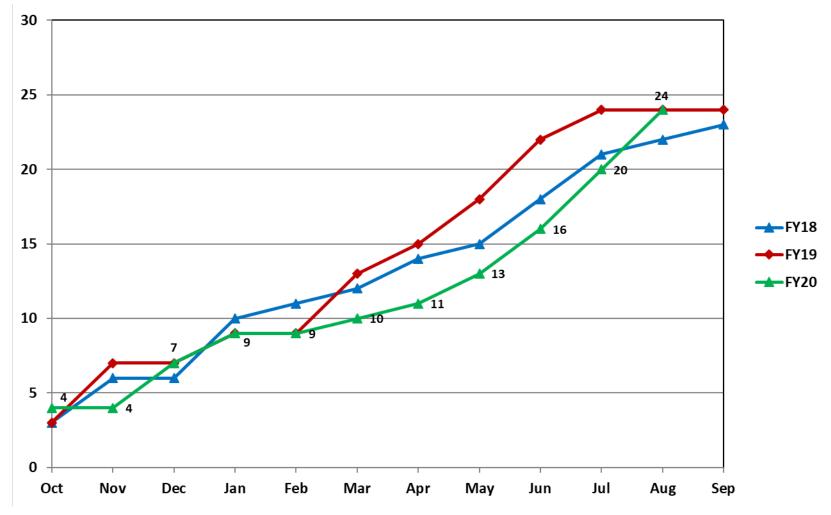
Estimates are that COVID-19 led to the following reductions in FY20 flight hours: 16% in March, 29% in April, and 7% in May.



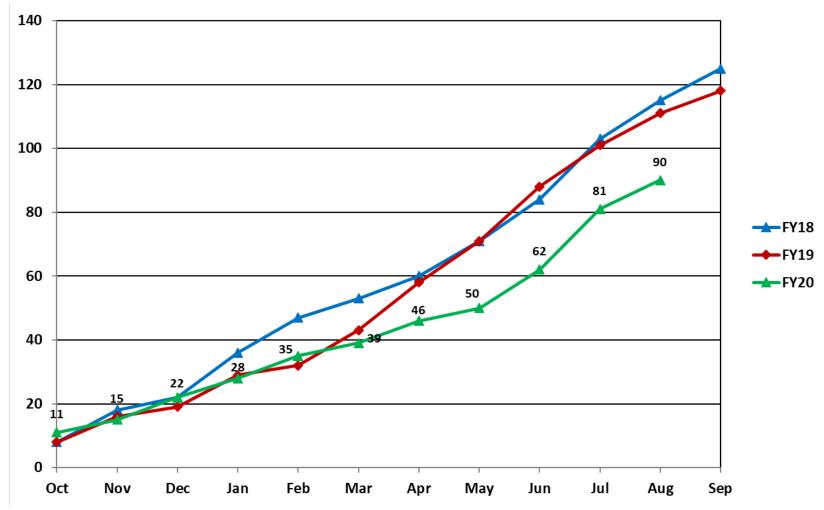
#### U.S. Registered Rotorcraft Accidents FY83 - FY20



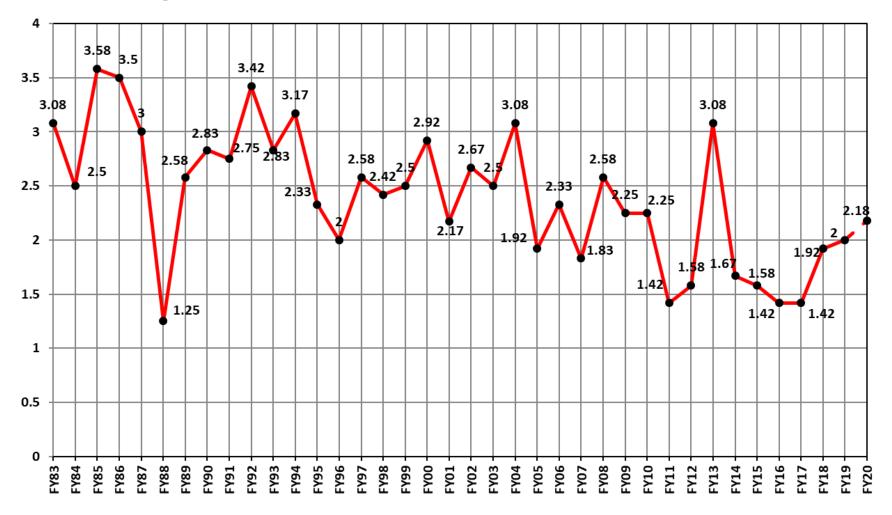
### U.S. Registered Rotorcraft Cumulative Fatal Accident Count: FY18 - 20



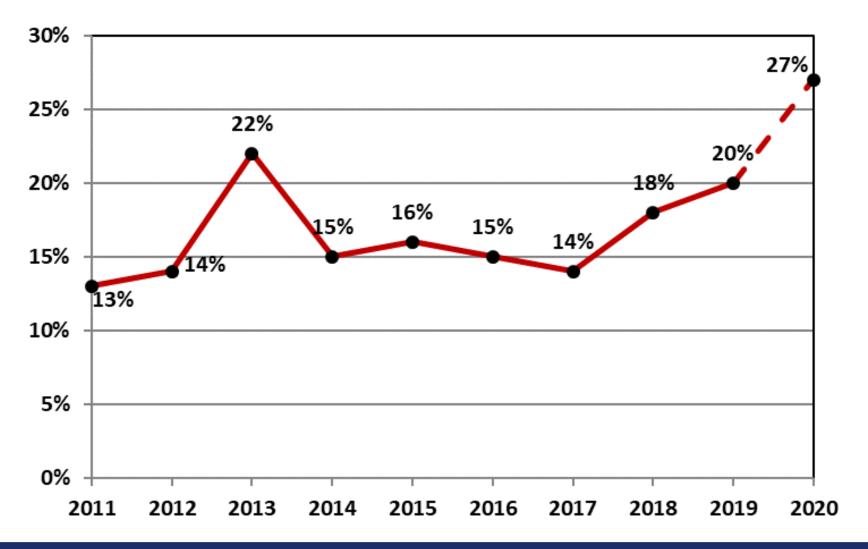
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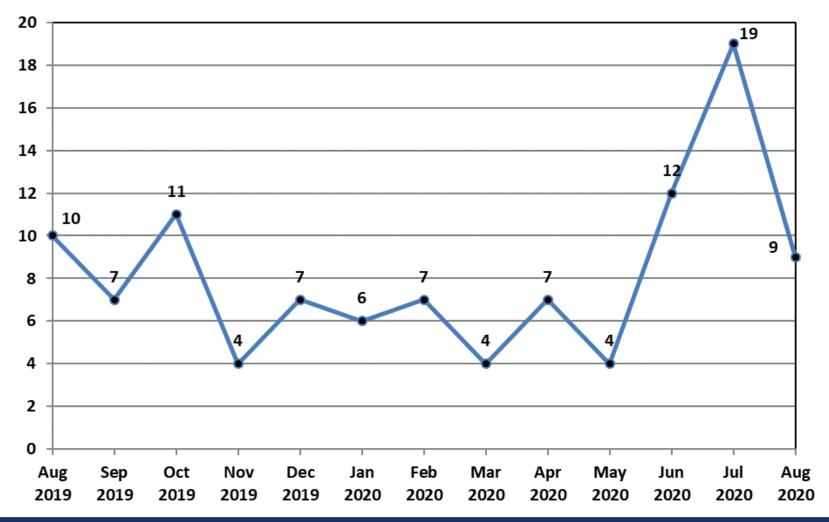
### U.S. Registered Rotorcraft Average Fatal Accidents Per Month, FY83-FY20



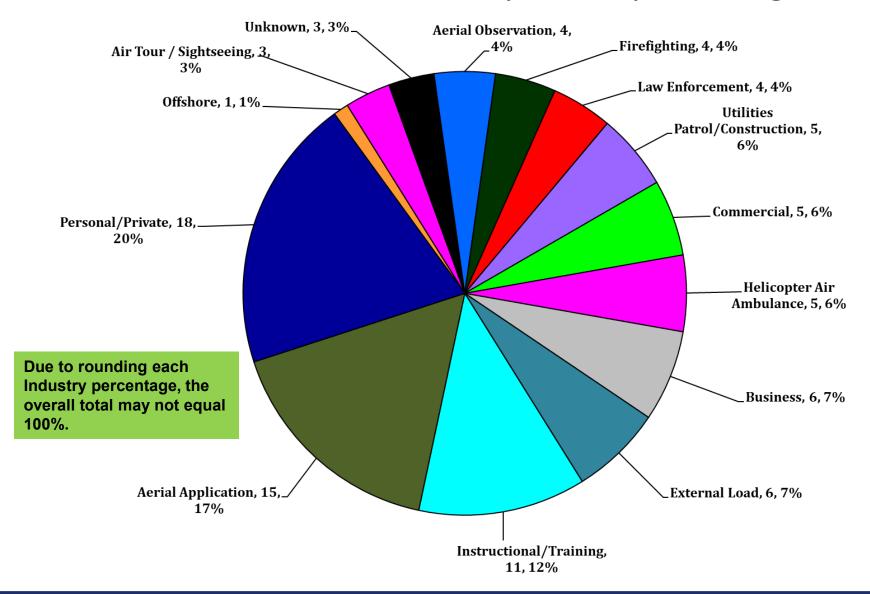
# % of U.S. Rotorcraft Accidents with a Fatality (FY20, Oct-Aug)



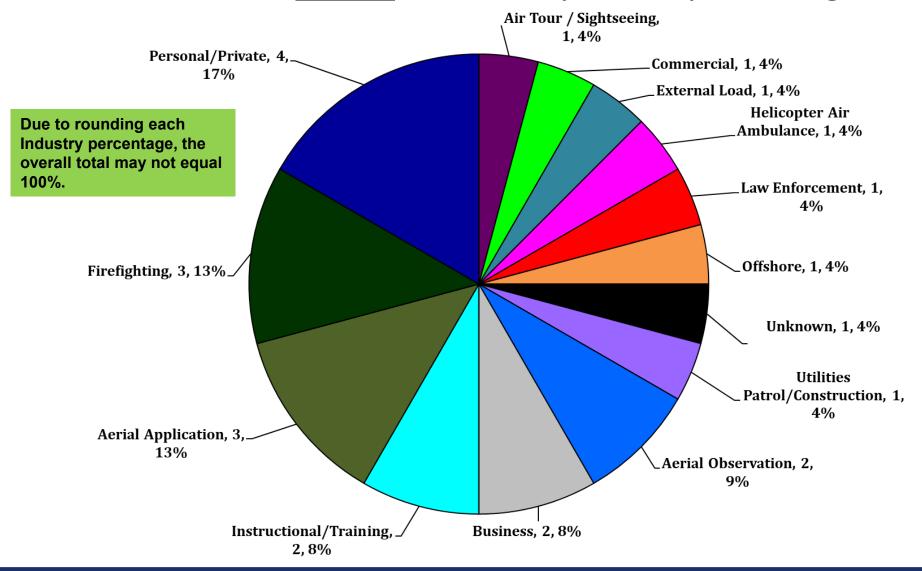
## U.S. Registered Rotorcraft 13 Month Rolling Accident Count



#### FY 20 – Total Accidents by Industry (Oct-Aug)



#### FY 20 – Total FATAL Accidents by Industry (Oct-Aug)



- 8-24-20 Kaman K1200, N314, Part 133, Mount Hood, OR, 1 fatal
  - Firefighting, crashed under unknown circumstances NTSB: WPR20LA283
- 8-19-20 Arrow Falcon Exporters UH-1H, N711GH, Part 133, Coalinga, CA, 1 fatal
  - Firefighting, crashed under unknown circumstances NTSB: WPR20LA280

- 8-8-20 Bell 206B, N284S, Marathon, TX, Part 135, 3 fatal
  - Aerial observation, wild game survey flight
  - Crashed under unknown circumstances
     NTSB: CEN20LA328
- 8-3-20 Airbus Helicopters EC130B4, N55GJ, Knoxville, TN, Part 91, 1 fatal, 3 no injuries
  - Personal use flight; descending to land at site near Tennessee River's edge
  - Tried to stop descent, but a/c settled into the water NTSB: ERA20LA273
- 7-29-20 Airbus Helicopters AS350B3, N755AE, Pioche, NV, Part 91, 2 fatal
  - Preparing for external load work, was enroute to support truck
  - Long line found entangled in separated tail rotor
     NTSB: WPR20LA244
- 7-24-20 Brantly B-2B, N383ES, Monrovia, IN, Part 91, 1 fatal
  - Personal use flight
  - Departed from residence and crashed in adjacent field
     NTSB: CEN20LA304

- 7-17-20 Hiller UH-12D, N2297W, Mehama, OR, Part 137, 1 fatal

   Aerial application, had departed support truck for next field
   Impacted tall trees in between Christmas tree fields
   NTSB: WPR20LA224

   7-7-20 Rotorcraft Development Corp UH-1H, N623PB, Payson, AZ, Part 133, 1 fatal

   Transporting supplies by long line to firefighting crew
   Erratic pitch/bank attitudes before rapid descent
   NTSB: WPR20LA211

   6-23-20 Enstrom 280FX, N280MM, Hayden, ID, Part 91, 1 fatal, 1 serious

   Instructional/training, rapid loss of altitude while flying low altitude
   Post-crash fire
   NTSB: WPR20LA191
- 6-18-20 Robinson R66, N4QW, Pikeville, NC, Part 137, 1 fatal Aerial Application, struck power line <u>NTSB: ERA20LA220</u>
- Bell 206L3, N65PJ, Fairfield, CA, Part 133, 3 fatal
   Utility Patrol/Construction; power line repair work; 2 linemen on external load
   Struck power line during transition to forward flight
   NTSB: WPR20LA163

- 5-30-20 Schweizer 269C-1, N9421P, Ozark, AL, Part 91, 1 fatal
  - Instructional/training, solo student flight
  - Crashed near Ozark-Blackwell field <u>NTSB: ERA20LA197</u>
- 5-2-20 MDHI 369E, N8375F, Houston, TX, Public Aircraft, 1 fatal, 1 serious
  - Night law enforcement search operation
- 4-24-20 Overseas Aircraft Support UH-1H, N3276T, Mesa, AZ, Part 91, 1 fatal, 1 minor
  - Repositioning flight; witnesses report observing tail rotor separation in-flight
  - Rotorcraft spun then impacted the ground
     NTSB: WPR20LA130
- 3-31-20 Robinson R44, N107EH, Audubon, IA, Part 91, 2 fatal
  - Aerial observation flight for bird research
  - Wire strike during low-level flight, post-crash fire
     NTSB: CEN20LA136
- 1-26-20 Sikorsky S-76B, N72EX, Calabasas, CA, Part 135, 9 fatal
  - Passenger transport from John Wayne Airport; Special VFR clearance
  - Crashed in Santa Monica mountains, post-crash fire NTSB: DCA20MA059

- 1-9-20 Robinson R66, N450MC, Mechanicsburg, PA, Part 91, 2 fatal
  - Personal use flight, night VMC; in-flight break up
     NTSB: ERA20FA074
- 12-26-19 Airbus Helicopters AS350B2, N985SA, Lihue, HI, Part 135, 7 fatal
  - Air Tour on island of Kauai, crashed, post-crash fire NTSB: ANC20MA010
- 12-25-19 Bell 407, N663SF, Headland, AL, Part 135, 1 fatal, 2 w/no injuries
  - HAA flight returning to base; a/c began abrupt roll while nearing helipad
  - A/c crashed onto its left side
  - Flight nurse and paramedic found pilot unresponsive NTSB: ERA20FA056
- 12-7-19 Bell 407, N79LP, Gulf of Mexico, Part 135, 2 fatal
  - Offshore flight between oil platforms; reported 10 min out but never arrived
  - Main wreckage located at depth of 190 feet NTSB: CEN20FA035

- 10-25-19 Enstrom 280F, N280F, Adrian, OR, Part 91, 1 fatal, 1 serious
  - Personal use flight; low rotor rpm, then rapid descent NTSB: WPR20FA016
- 10-23-19 Robinson R44, N225JM, Las Vegas, NV, Part 91, 2 fatal
  - Personal use flight; impacted near Red Rock Recreation Visitor Center

NTSB: WPR20FA013

- 10-23-19 Robinson R22, N7189D, Hebbronville, TX, Part 91, 2 fatal
  - Two R22s on business flight to spot and capture wildlife
  - Collided mid-air while operating 50-100' ft AGL

NTSB: CEN20FA012A

- 10-17-19 Bell 206B, N167AG, New Salem, NC, Part 137, 1 fatal
  - Aerial application flight; 22nd aerial application of the day
  - Struck power lines then impacted terrain

NTSB: ERA20FA012

MFR	Model	Registered U.S. Fleet Size	Percentage of Total U.S. Fleet	Number of FY20 U.S. Registered Accidents	Percentage of Total FY20 U.S. Registered Accidents	
Airbus Helicopters	AS350 (H125)	915	7%	4	4%	
	AS355	40	< 1%	1	1%	
	BK117 (H145)	216	2%	1	1%	
	EC120 (H120)	92	1%			
	EC130 (H130)	263	2%	2	2%	
	EC135 (H135)	331	3%			
	SA342	6	< 1%	1	1%	

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

<sup>\*</sup>Fleet size based on analysis of rotorcraft on FAA registry as of March 2020

MFR	Model	Registered U.S. Fleet Size	Percentage of Total U.S. Fleet	Number of FY20 U.S. Registered Accidents	Percentage of Total FY20 U.S. Registered Accidents
Bell	205	52	< 1%	1	1%
	206Bs	934	7%	4	4%
	206Ls	559	4%	4	4%
	212	81	1%		
	407	773	6%	4	4%
	412	96	1%		
	429	106	1%		
	505	82	1%		

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MFR	Model	Registered U.S. Fleet Size	Percentage of Total U.S. Fleet	Number of FY20 U.S. Registered Accidents	Percentage of Total FY20 U.S. Registered Accidents	
Robinson	R-22	864	7%	11	12%	
	R-44	1,667	13%	15	17%	
	R-66	288	2%	3	3%	

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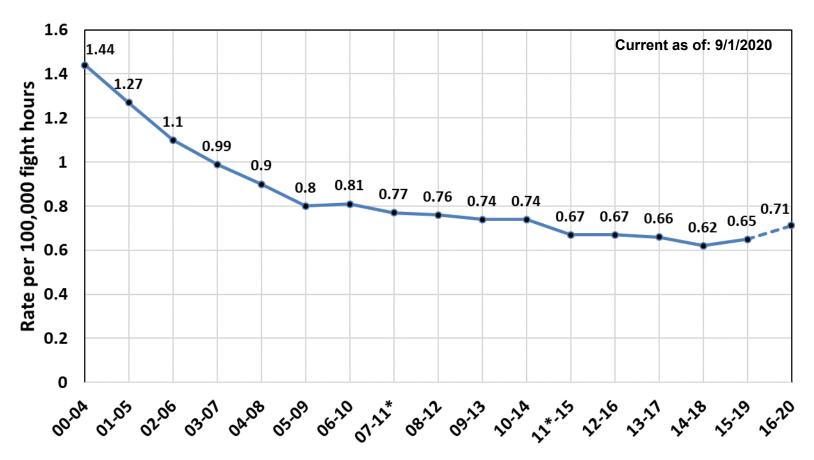
MFR	Model	Registered Percentage of U.S. Total U.S. Fleet Size Fleet		Number of FY20 U.S. Registered Accidents	Percentage of Total FY20 U.S. Registered Accidents	
Sikorsky	S-61	93	1%	1	1%	
	S-76	231	2%	1	1%	
	S-92	87	1%			

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MFR	Model	Registered U.S. Fleet Size	Percentage of Total U.S. Fleet	Number of FY20 U.S. Registered Accidents	Percentage of Total FY20 U.S. Registered Accidents
Brantly	B-2	52	< 1%	1	1%
California Helicopter Airways	S-58	35	< 1%	1	1%
Enstrom	280	126	1%	3	3%
	480	63	< 1%	1	1%
	F28	160	1%	2	2%
Helicopteres Guimbal	Cabri G2	34	< 1%	1	1%
Hiller	UH-12/H-23	285	2%	3	3%
Kaman	K1200	26	< 1%	1	1%
Leonardo	A109	167	1%	1	1%
(formerly Agusta Westland)	A119	91	1%	1	1%
	AW139	130	1%		
MDHI	369	715	6%	5	4%
	600N	30	< 1%	2	2%
Restricted Category (all TCs)	HH-1/TH-1/UH-1	549	4%	5	6%
	OH-58	403	3%	3	3%
	H-60	213	2%		
Schweizer Rotorcraft Services Group	269/300/TH-55	516	4%	4	4%
Scott's Bell	47	532	4%	3	3%

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# U.S. Helicopter Safety Team (USHST) 5 Year Average Fatal Accident Rate (CY)



Goal: By 2025, reduce the 5 year average fatal accident rate to 0.55 per 100K hours

### U.S. Helicopter Safety Team (USHST) Key Fatal Accident Rate Markers (CY)

