

Rotorcraft Standards Branch

AIR-680

Monthly Accident Briefing

July 2020

By: AIR-682, Safety Management Section,

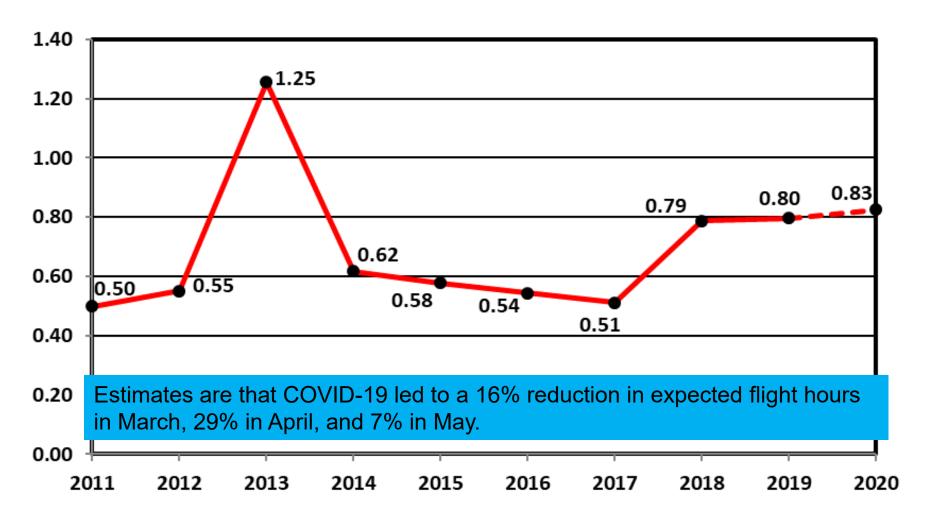
Rotorcraft Standards Branch



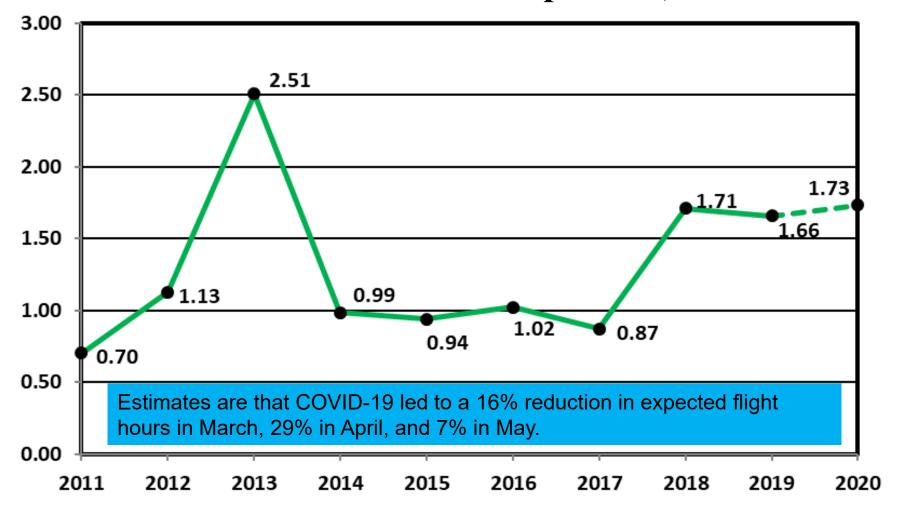




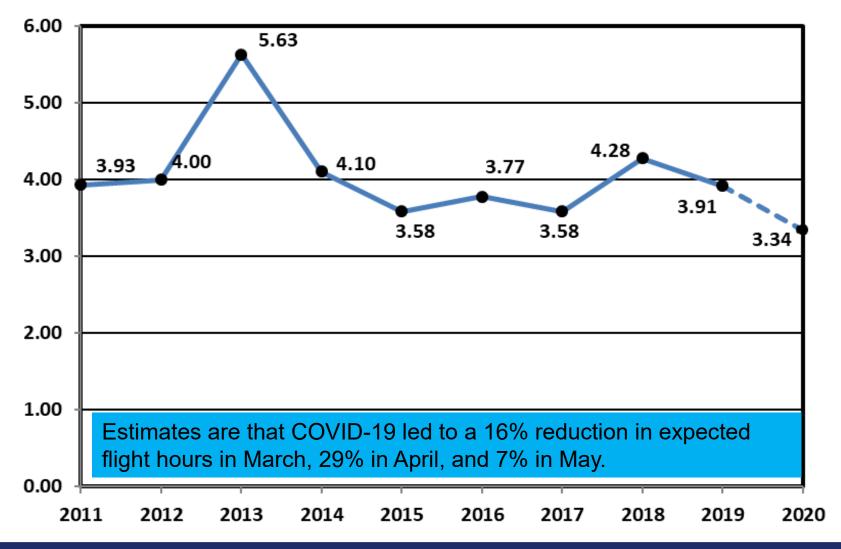
Estimated U.S. Rotorcraft <u>FATAL</u> Accident Rate by FY 10 Year Lookback – Rates per 100,000 Hours



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 | 5 | 8 | 4 | 12 | 17 | | | 81 |
| | 4 | 0 | 3 | 2 | 0 | 1 | 1 | 2 | 3 | 4 | | | 20 |
| | 6 | 0 | 10 | 11 | 0 | 2 | 1 | 2 | 5 | 5 | | | 42 |

Same time period, previous FY: 101 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:

Fatal Acc:

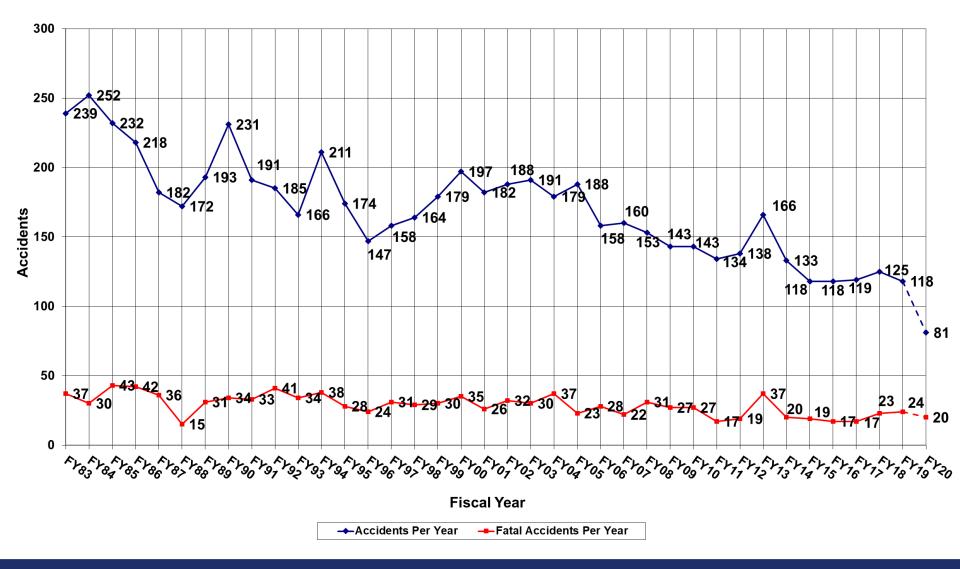
Fatalities:

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | YTD |
|---|------|------|------|------|------|------|------|------|------|------|-----|-----|------|
| | 4.01 | 1.71 | 3.41 | 2.88 | 2.94 | 2.16 | 4.05 | 1.57 | 4.15 | 5.86 | | | 3.34 |
| - | 7.01 | 1,/1 | 3.71 | 2.00 | 2,77 | 2.10 | 7.03 | 1.57 | 7.13 | 3.00 | | | 3.34 |
| | 1.46 | 0 | 1.46 | 0.96 | 0 | 0.43 | 0.51 | 0.79 | 1.04 | 1.38 | | | 0.83 |
| | 2.19 | 0 | 4.88 | 5.28 | 0 | 0.86 | 0.51 | 0.79 | 1.73 | 1.72 | | | 1.73 |

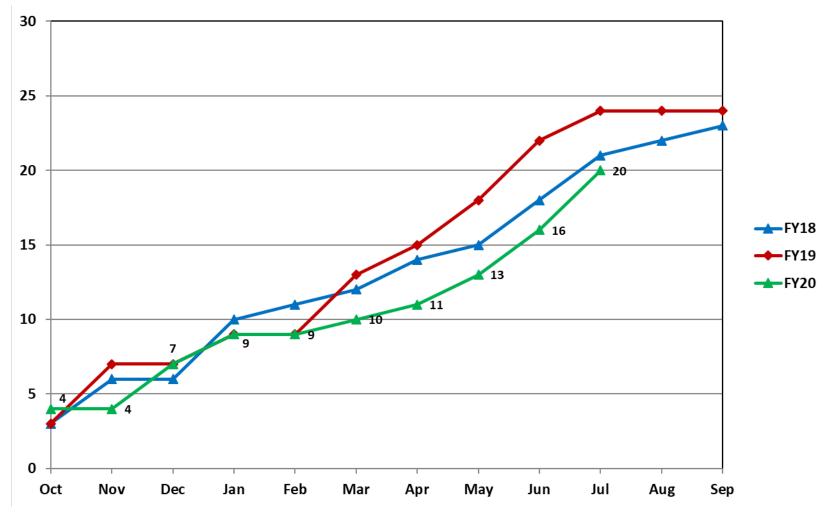
Estimates are that COVID-19 led to a 16% reduction in expected flight hours in March, 29% in April, and 7% in May.



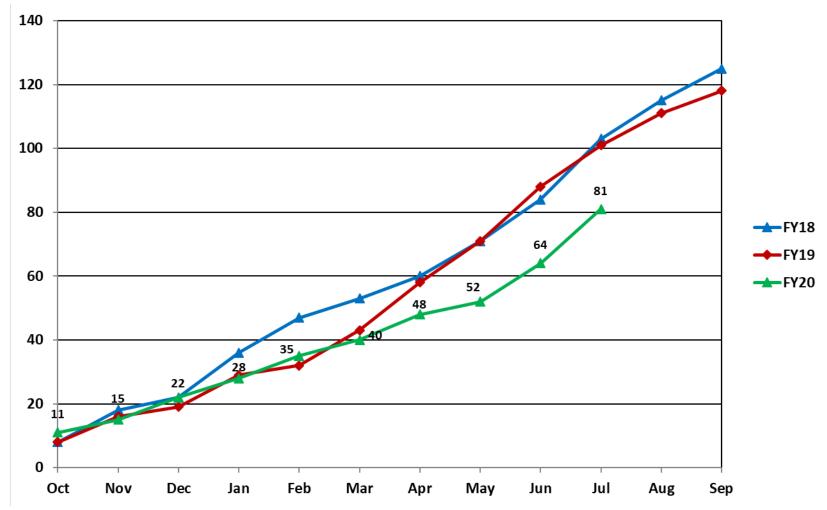
U.S. Registered Rotorcraft Accidents FY83 - FY20



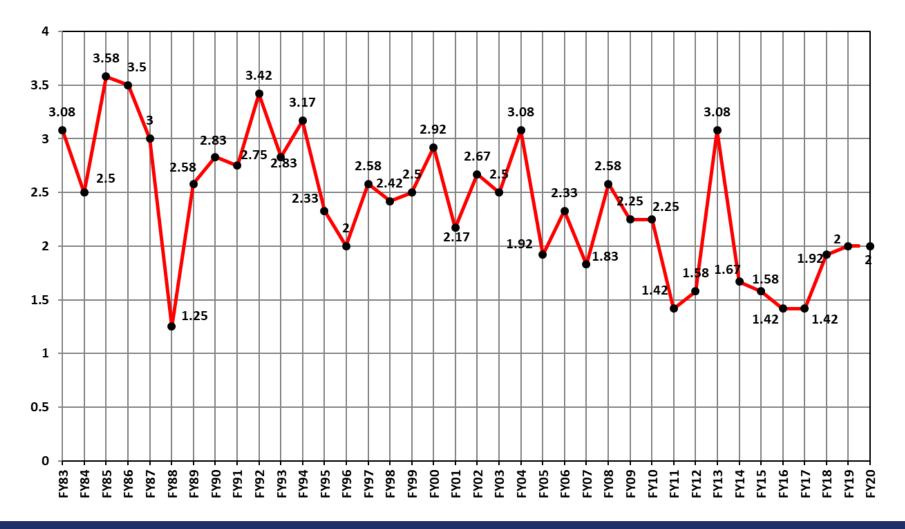
U.S. Registered Rotorcraft Cumulative Fatal Accident Count: FY18 - 20



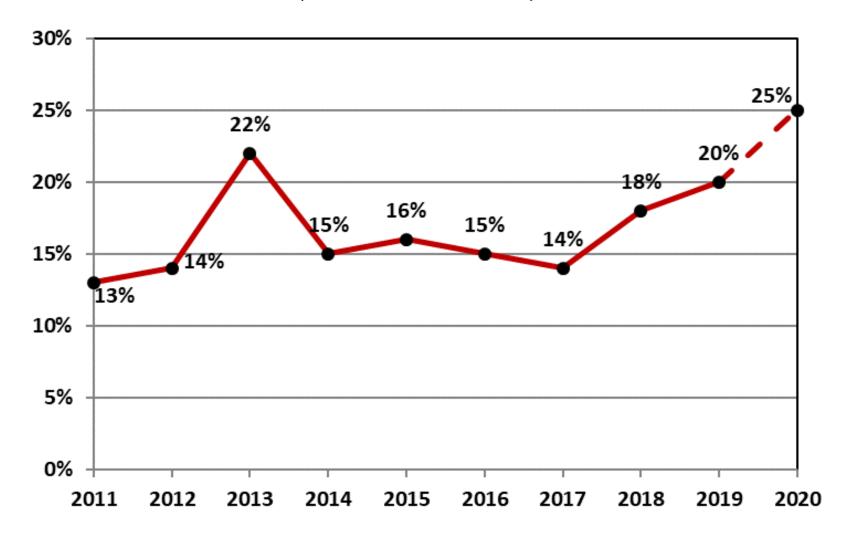
U.S. Registered Rotorcraft Cumulative Accident Count: FY18 - 20



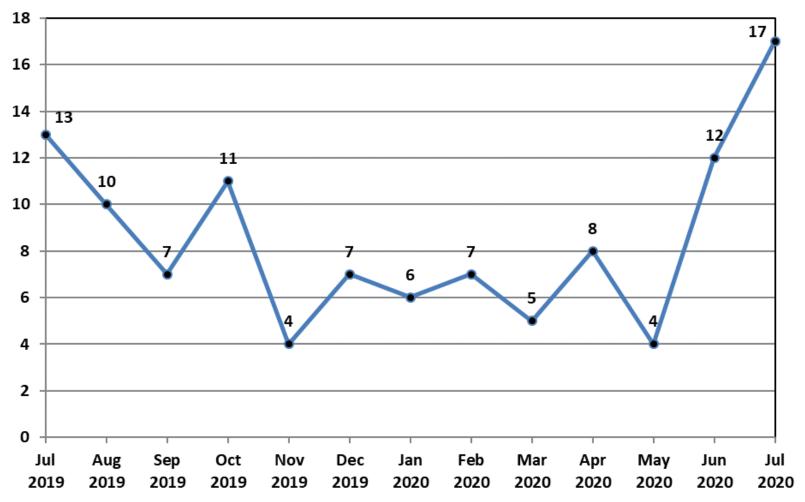
U.S. Registered Rotorcraft Average Fatal Accidents Per Month, FY83-FY20



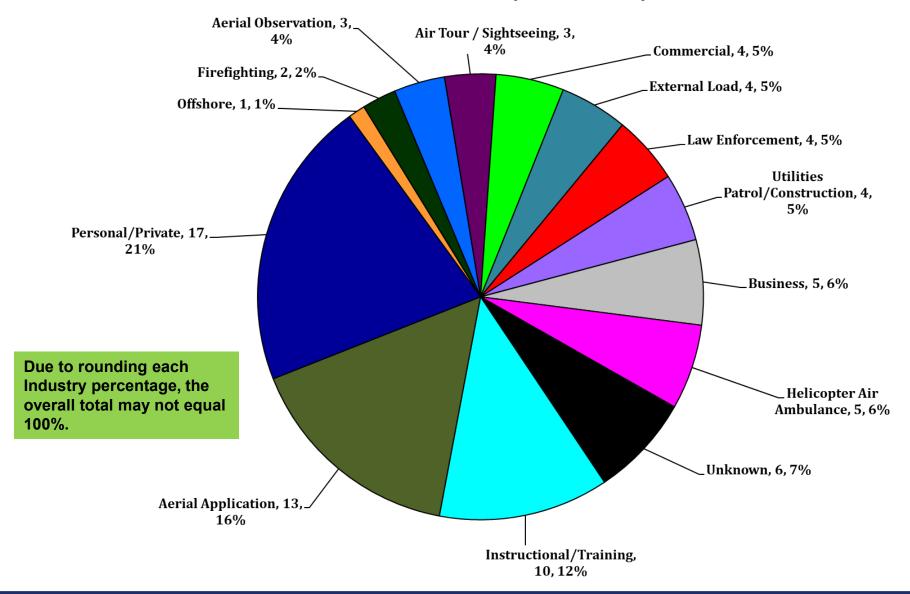
% of U.S. Rotorcraft Accidents with a Fatality (FY20, Oct-Jul)



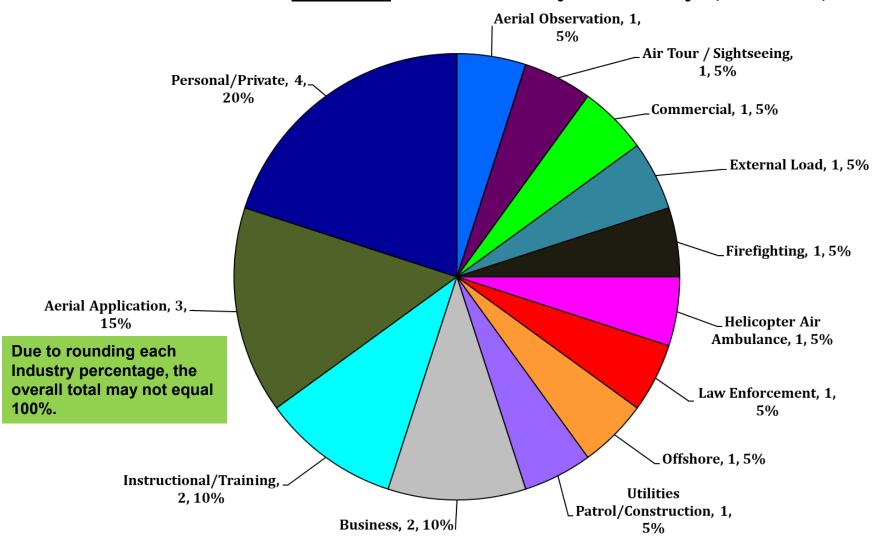
U.S. Registered Rotorcraft 13 Month Rolling Accident Count



FY 20 – Total Accidents by Industry (Oct-Jul)



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



- 7-29-20 Airbus Helicopters, N755AE, Pioche, NV, Part 133, 2 fatal
 - Preparing for external load work, was enroute to support truck
 - Crashed about half a mile from support truck
 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 - Rotorcraft Development Corp UH-1H, N623PB, Payson, AZ, Part 133, 1 fatal 7-7-20 - Transporting supplies by long line to firefighting crew - Erratic pitch/bank attitudes before rapid descent NTSB: WPR20LA211 - Enstrom 280FX, N280MM, Hayden, ID, Part 91, 1 fatal, 1 serious 6-23-20 - 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 NTSB: ERA20LA220 6-2-20 – 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
 NTSB: ERA20LA197
- 5-2-20 MDHI 369E, N8375F, Houston, TX, Public Aircraft, 1 fatal, 1 serious
 - Night law enforcement search operation
 - Impacted unoccupied building and terrain
 NTSB: CEN20LA167
- 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 | 5% | |
| | AS355 | 40 | < 1% | 1 | 1% | |
| | BK117 (H145) | 216 | 2% | 1 | 1% | |
| | EC120 (H120) | 92 | 1% | | | |
| | EC130 (H130) | 263 | 2% | 1 | 1% | |
| | 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.

^{*}Fleet size based on analysis of rotorcraft on FAA registry as of March 2020

| MFR | Model | Model Registered U.S. Fleet Size | | Number of FY20 U.S. Registered Accidents | Percentage of Total FY20 U.S. Registered Accidents | | |
|------|-------|----------------------------------|----|---|--|--|--|
| Bell | 206Bs | 934 | 7% | 3 | 4% | | |
| | 206Ls | 559 | 4% | 5 | 6% | | |
| | 212 | 81 | 1% | | | | |
| | 407 | 773 | 6% | 4 | 5% | | |
| | 412 | 96 | 1% | | | | |
| | 429 | 106 | 1% | | | | |
| | 505 | 82 | 1% | | | | |

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

| MFR | Model | Registered Percentage of U.S. Total U.S. Fleet Size | | Number of FY20 U.S. Registered Accidents | Percentage of Total FY20 U.S. Registered Accidents | |
|----------|-------|---|-----|---|--|--|
| Robinson | R-22 | 864 | 7% | 11 | 14% | |
| | R-44 | 1,667 | 13% | 12 | 15% | |
| | R-66 | 288 | 2% | 3 | 4% | |

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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 |
|----------|-------|----------------------------------|--------------------------------------|---|--|
| 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 | 4% |
| | 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 | 4% |
| Leonardo | A109 | 167 | 1% | 1 | 1% |
| (formerly Agusta Westland) | A119 | 91 | 1% | 1 | 1% |
| | AW139 | 130 | 1% | | |
| MDHI | 369 | 715 | 6% | 3 | 3% |
| | 600N | 30 | < 1% | 2 | 2% |
| Restricted Category (all TCs) | HH-1/TH-1/UH-1 | 549 | 4% | 4 | 5% |
| | OH-58 | 403 | 3% | 3 | 4% |
| | H-60 | 213 | 2% | | |
| Schweizer Rotorcraft Services Group | 269/300/TH-55 | 516 | 4% | 4 | 5% |
| Scott's Bell | 47 | 532 | 4% | 3 | 4% |

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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)

