

GA ACCIDENT 2016 2017 SCORECARD



General Aviation Accidents Summary

he GA Accident Scorecard is produced by the Air Safety Institute to provide a broad view of GA safety performance and trends. The GA Scorecard precedes ASI's Joseph T. Nall Report, which provides much deeper analysis of GA accidents, trends and causes. The Nall Report relies heavily on NTSB accident investigations, which can take up to two years to complete for fatal accidents. The GA Scorecard is produced to provide an earlier view of GA performance to include total numbers of GA accidents. and the GA accident rate viewed in total and broken into several broad categories of GA activity. Each year, the GA Scorecard provides an initial look at the most recently completed year (2017 in this issue), and then completes the data for the initial look that was provided in the preceding year (2016 in this issue).

The news across GA is once again encouraging. For the third straight year, the overall GA fatal accident rate declined. Initial data from 2017 indicates that 2017 will reveal a fourth straight year. GA is benefiting from the combined impact of more activity and fewer numbers of fatal accidents, producing a substantial reduction in the overall fatal accident rate. Such overall performance indicates the constant work by all in the GA industry to drive safety initiatives is producing results in preserving aircraft and saving lives.

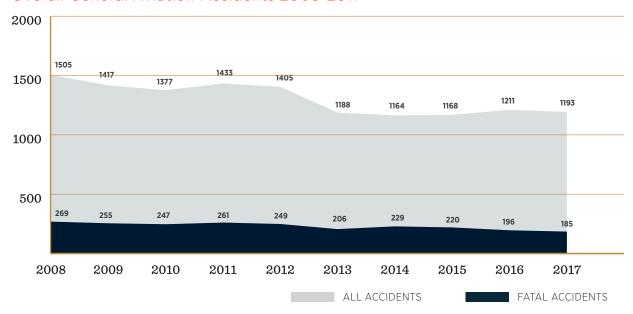
There is so much more we can do...must do to drive the GA accident rates even lower. Every fraction of a point improvement in the accident rate represents lives saved. ASI joins others in the GA industry in relentless pursuit of enhancing training, proficiency, equipment and the GA culture to continue these inspiring results.

Contents

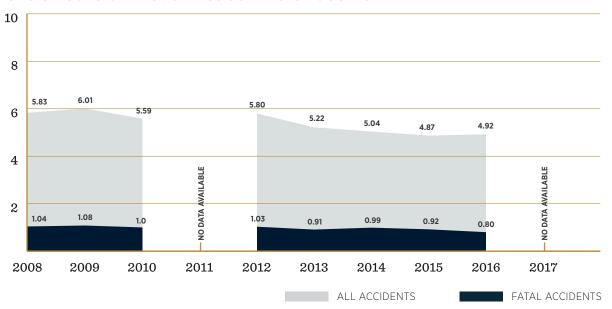
| General Aviation Accidents Summary1 | |
|---|--|
| SECTIONI | SECTION II |
| Fixed Wing Non-Commercial and Commercial | Helicopter Non-Commercial and Commercial |
| General Aviation Accidents, 2008-20174 | General Aviation Accidents, 2008-201716 |
| General Aviation Accident Rates, 2008-20175 | General Aviation Accident Rates, 2008-201717 |
| Summary of General Aviation Fixed-Wing Accidents by Year $\boldsymbol{6}$ | Summary of General Aviation Helicopter Accidents by Year18 |
| 2017 Accident Conditions: Non-Commercial Fixed-Wing | 2017 Accident Conditions: Non-Commercial Helicopter19 |
| 2017 Accident Conditions: Commercial Fixed-Wing9 | 2017 Accident Conditions: Commercial Helicopter21 |
| 2016 Accident Conditions: Non-Commercial Fixed-Wing11 | 2016 Accident Conditions: Non-Commercial Helicopter24 |



Overall General Aviation Accidents 2008-2017



Overall General Aviation Accident Rate 2008-2017

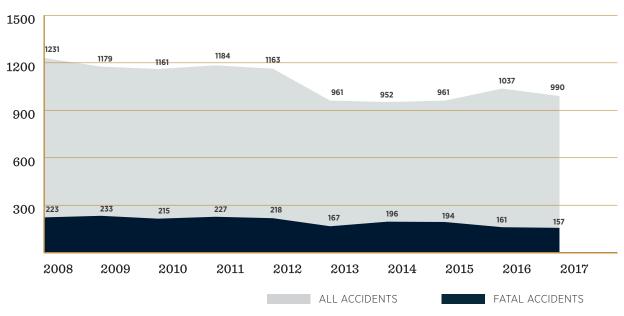






General Aviation Accidents, 2008-2017

NON-COMMERCIAL FIXED-WING



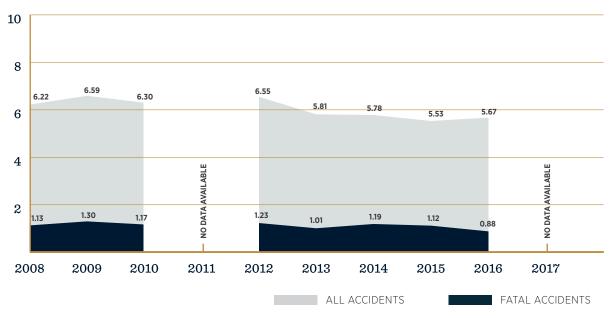
COMMERCIAL FIXED-WING





General Aviation Accident Rates, 2008-2017

NON-COMMERCIAL FIXED-WING



COMMERCIAL FIXED-WING



NOTE: ACCIDENT RATES ARE PER 100,000 FLIGHT HOURS



Summary of General Aviation Fixed-Wing Accidents by Year

| 2016 | Non-Commercial FIXED-WING | Commercial FIXED-WING |
|---------------------------|------------------------------|------------------------------|
| Number of accidents | 1037 | 62 |
| Number of aircraft* | 1052 | 63 |
| Number of fatal accidents | 161 | 18 |
| Lethality (percent) | 15.5 | 29 |
| Fatalities | 305 | 34 |

| 2017 | Non-Commercial FIXED-WING | Commercial FIXED-WING |
|---------------------------|------------------------------|------------------------------|
| Number of accidents | 990 | 76 |
| Number of aircraft* | 1000 | 76 |
| Number of fatal accidents | 157 | 10 |
| Lethality (percent) | 15.9 | 13.2 |
| Fatalities | 263 | 12 |

*EACH AIRCRAFT INVOLVED IN A COLLISION IS COUNTED SEPARATELY.



SECTION 1 2017 PRELIMINARY DATA FIXED-WING

2017 Accident Conditions: Non-Commercial Fixed-Wing

AIRCRAFT CLASS

| CONFIGURATION | ACCIDENTS | FATAL ACCIDENTS | FATALITIES |
|---------------------------|------------------|-----------------|------------|
| Single-engine fixed-gear | 724 72.4% | 98 62.0% | 143 54.4% |
| SEF tailwheel | 302 | 32 | 43 |
| Single-engine retractable | 200 19.9% | 40 25.3% | 73 27.8% |
| Single-engine turbine | 14 | 3 | 4 |
| Multiengine | 74 7.4% | 20 12.7% | 47 17.9% |
| Multiengine turbine | 15 | 4 | 7 |
| Unknown/Unclassified | 2 0.2% | 0 0.0% | 0 0.0% |

TYPE OF OPERATION

| PURPOSE OF FLIGHT | ACCI | ACCIDENTS | | FATAL ACCIDENTS | | ALITIES |
|--------------------|------|-----------|-----|-----------------|-----|---------|
| Personal | 754 | 75.4% | 128 | 81.0% | 215 | 81.7% |
| Instructional | 158 | 15.8% | 20 | 12.7% | 33 | 12.5% |
| Public use | 4 | 0.4% | 0 | 0.0% | 0 | 0.0% |
| Positioning | 13 | 1.3% | 0 | 0.0% | 0 | 0.0% |
| Aerial observation | 5 | 0.5% | 1 | 0.6% | 1 | 0.4% |
| Business | 25 | 2.5% | 5 | 3.2% | 10 | 3.8% |
| Other work use | 15 | 1.5% | 1 | 0.6% | 1 | 0.4% |
| Other or unknown | 26 | 2.6% | 3 | 1.9% | 3 | 1.1% |



SECTION 1: 2017 PRELIMINARY DATA FIXED-WING

Non-Commercial Fixed-Wing, 2017 (Continued)

PILOT QUALIFICATIONS

| CERTIFICATE LEVEL | ACCI | DENTS | FATAL A | FATAL ACCIDENTS | | ALITIES |
|-----------------------|------|-------|---------|-----------------|-----|---------|
| ATP | 149 | 14.9% | 26 | 16.5% | 46 | 17.5% |
| Commercial | 248 | 24.8% | 48 | 30.4% | 74 | 28.1% |
| Private | 486 | 48.6% | 75 | 47.5% | 133 | 50.6% |
| Sport | 14 | 1.4% | 4 | 2.5% | 5 | 1.9% |
| Student | 56 | 5.6% | 4 | 2.5% | 4 | 1.5% |
| None | 7 | 0.7% | 0 | 0.0% | 0 | 0.0% |
| Other or unknown | 40 | 4.0% | 1 | 0.6% | 1 | 0.4% |
| Second pilot on board | 125 | 12.5% | 24 | 15.2% | 44 | 16.7% |
| CFI on board* | 192 | 19.2% | 34 | 21.5% | 61 | 23.2% |
| IFR pilot on board* | 495 | 49.5% | 96 | 60.8% | 162 | 61.6% |

^{*} INCLUDES SINGLE-PILOT FLIGHTS

LIGHT AND WEATHER CONDITIONS

| CONDITIONS | ACCIDENTS | FATAL ACCIDENTS | FATALITIES | |
|--------------|-----------|-----------------|------------|--|
| Day VMC | 858 86.7% | 118 75.2% | 173 66.3% | |
| Night VMC* | 70 7.1% | 13 8.3% | 30 11.5% | |
| Day IMC | 28 2.8% | 15 9.6% | 41 15.7% | |
| Night IMC* | 12 1.2% | 6 3.8% | 12 4.6% | |
| Not Reported | 22 2.2% | 5 3.2% | 5 1.9% | |

^{*} INCLUDES DUSK



2017 Accident Conditions: Commercial Fixed-Wing

| TYPE OF OPERATION | | | | | | | |
|--------------------------------|-----|--------|------|------|----------|----|----------|
| PURPOSE OF FLIGHT | ACC | IDENTS | FATA | L AC | CCIDENTS | FA | TALITIES |
| Aerial application (Part 137) | 40 | 52.6% | | 6 | 60.0% | 6 | 50.0% |
| Charter or cargo (Part 135) | 36 | 47.4% | | 4 | 40.0% | 6 | 50.0% |
| | | | | | | | |
| AERIAL APPLICATION (PART 137) | | | | | | | |
| AIRCRAFT CLASS | ACC | IDENTS | FATA | L AC | CCIDENTS | FA | TALITIES |
| Single-engine fixed-gear (SEF) | 40 | 100.0% | | 6 1 | 100.0% | 6 | 100.0% |
| SEF tailwheel | 38 | | | 6 | | 6 | |
| Single-engine turbine | 20 | | | 5 | | 5 | |
| | | | | | | | |
| CONDITIONS | | | | | | | |
| Day VMC | 37 | 92.5% | | 4 | 66.7% | 4 | 66.7% |
| Day IMC | 3 | 7.5% | | 2 | 33.3% | 2 | 33.3% |
| | | | | | | | |
| PILOT QUALIFICATIONS | | | | | | | |
| ATP | 1 | 2.5% | | 0 | 0.0% | 0 | 0.0% |
| Commercial | 37 | 92.5% | | 6 1 | 100.0% | 6 | 100.0% |
| Other or unknown | 2 | 5.0% | | 0 | 0.0% | 0 | 0.0% |
| CFI on board* | 3 | 7.5% | | 1 | 16.7% | 1 | 16.7% |
| IFR pilot on board* | 19 | 47.5% | | 2 | 33.3% | 2 | 33.3% |

^{*} INCLUDES SINGLE-PILOT FLIGHTS



SECTION 1: 2017 PRELIMINARY DATA FIXED-WING

Commercial Fixed-Wing, 2017 (Continued)

CHARTER AND CARGO (PART 135)

| AIRCRAFT CLASS | ACC | IDENTS | FATAL A | CCIDENTS | FAT | ALITIES |
|--------------------------------|-----|--------|---------|----------|-----|---------|
| Single-engine fixed-gear (SEF) | 23 | 63.9% | 2 | 50.0% | 2 | 33.3% |
| SEF tailwheel | 6 | | 0 | | 0 | |
| Single-engine retractable | 3 | 8.3% | 1 | 25.0% | 3 | 50.0% |
| Single-engine turbine | 6 | | 2 | | 4 | |
| Multiengine | 10 | 27.8% | 1 | 25.0% | 1 | 16.7% |
| Multiengine turbine | 7 | | 0 | | 0 | |
| | | | | | | |
| CONDITIONS | | | | | | |
| Day VMC | 26 | 72.2% | 1 | 25.0% | 1 | 16.7% |
| Night VMC* | 3 | 8.3% | 0 | 0.0% | 0 | 0.0% |
| Day IMC | 2 | 5.6% | 0 | 0.0% | 0 | 0.0% |
| Night IMC* | 3 | 8.3% | 1 | 25.0% | 3 | 50.0% |
| Not reported | 2 | 5.6% | 2 | 50.0% | 2 | 33.3% |

^{*} INCLUDES DUSK

PILOT QUALIFICATIONS

| ATP | 10 | 27.8% | 2 | 50.0% | 4 | 66.7% |
|-----------------------|----|-------|---|-------|---|-------|
| Commercial | 23 | 63.9% | 2 | 50.0% | 2 | 33.3% |
| Other or unknown | 3 | 8.3% | 0 | 0.0% | 0 | 0.0% |
| Second pilot on board | 2 | 5.6% | 0 | 0.0% | 0 | 0.0% |
| CFI on board* | 15 | 41.7% | 3 | 75.0% | 5 | 83.3% |
| IFR pilot on board* | 31 | 86.1% | 3 | 75.0% | 5 | 83.3% |

^{*} INCLUDES SINGLE-PILOT FLIGHTS



SECTION 1 2016 UPDATED DATA FIXED-WING

2016 Accident Conditions: Non-Commercial Fixed-Wing

AIRCRAFT CLASS

| CONFIGURATION | ACCIDENTS | FATAL ACCIDENTS | FATALITIES |
|--------------------------------|-----------|-----------------|------------|
| Single-engine fixed-gear (SEF) | 780 74.1% | 102 61.4% | 180 59.0% |
| SEF tailwheel | 324 | 37 | 60 |
| Single-engine retractable gear | 193 18.3% | 44 26.5% | 78 25.6% |
| Single-engine turbine | 22 | 4 | 7 |
| Multiengine | 79 7.5% | 20 12.0% | 47 15.4% |
| Multiengine turbine | 20 | 3 | 6 |

TYPE OF OPERATION

| PURPOSE OF FLIGHT | ACCI | DENTS | FATAL AG | CCIDENTS | FAT | ALITIES |
|--------------------|------|-------|----------|----------|-----|---------|
| Personal | 777 | 73.9% | 129 | 77.7% | 242 | 79.3% |
| Instructional | 175 | 16.6% | 15 | 9.0% | 22 | 7.2% |
| Public use | 7 | 0.7% | 3 | 1.8% | 5 | 1.6% |
| Positioning | 11 | 1.0% | 2 | 1.2% | 3 | 1.0% |
| Aerial observation | 9 | 0.9% | 1 | 0.6% | 3 | 1.0% |
| Business | 24 | 2.3% | 5 | 3.0% | 12 | 3.9% |
| Other work use | 23 | 2.2% | 5 | 3.0% | 12 | 3.9% |
| Other or unknown | 26 | 2.5% | 6 | 3.6% | 6 | 2.0% |

NOTE: PERCENTAGES ARE PERCENT OF ALL ACCIDENTS, ALL FATAL ACCIDENTS, OR INDIVIDUAL FATALITIES, RESPECTIVELY.



SECTION 1: 2016 UPDATED DATA FIXED-WING

Non-Commercial Fixed-Wing, 2016 (Continued)

PILOT QUALIFICATIONS

| CERTIFICATE LEVEL | ACCI | DENTS | FATAL A | CCIDENTS | FAT | ALITIES |
|-----------------------|------|-------|---------|----------|-----|---------|
| ATP | 197 | 18.7% | 33 | 19.9% | 65 | 21.3% |
| Commercial | 265 | 25.2% | 49 | 29.5% | 86 | 28.2% |
| Private | 472 | 44.9% | 79 | 47.6% | 148 | 48.5% |
| Sport | 20 | 1.9% | 2 | 1.2% | 2 | 0.7% |
| Student | 83 | 7.9% | 2 | 1.2% | 3 | 1.0% |
| None | 7 | 0.7% | 0 | 0.0% | 0 | 0.0% |
| Other or unknown | 8 | 0.8% | 1 | 0.6% | 1 | 0.3% |
| Second pilot on board | 152 | 14.4% | 31 | 18.7% | 64 | 21.0% |
| CFI on board* | 260 | 24.7% | 41 | 24.7% | 74 | 24.3% |
| IFR pilot on board* | 555 | 52.8% | 93 | 56.0% | 182 | 59.7% |

^{*} INCLUDES SINGLE-PILOT FLIGHTS

LIGHT AND WEATHER CONDITIONS

| CONDITIONS | ACCIDENTS | FATAL ACCIDENTS | FATALITIES |
|------------------|-----------|-----------------|-----------------|
| Day VMC | 921 88.8% | 126 78.3% | 223 76.4% |
| Night VMC* | 86 8.3% | 23 14.3% | 45 15.4% |
| Day IMC | 23 2.2% | 6 3.7% | 11 3.8% |
| Night IMC* | 5 0.5% | 5 3.1% | 10 3.4% |
| Not yet reported | 2 0.2% | 1 0.6% | 3 1.0% |

* INCLUDES DUSK



2016 Accident Conditions: Commercial Fixed-Wing

| TYPE OF OPERATION | | | | | | |
|--------------------------------|-----|--------|---------|-----------|---------|-----------|
| PURPOSE OF FLIGHT | ACC | IDENTS | FATAL / | ACCIDENTS | FA | TALITIES |
| Aerial application (Part 137) | 38 | 60.3% | 12 | 63.2% | 12 | 35.3% |
| Charter or cargo (Part 135) | 25 | 39.7% | 7 | 36.8% | 22 | 64.7% |
| | | | | | | |
| AERIAL APPLICATION (PART 137) | | | | | | |
| AIRCRAFT CLASS | ACC | IDENTS | FATAL / | ACCIDENTS | FA | TALITIES |
| Single-engine fixed-gear (SEF) | 38 | 100.0% | 12 | 100.0% | 12 | 100.0% |
| SEF tailwheel | 37 | | 12 | | 12 | |
| Single-engine turbine | 22 | | 9 | | 9 | |
| | | | | | | |
| CONDITIONS | | | | | | |
| Day VMC | 35 | 92.1% | 12 | 100.0% | 12 | 100.0% |
| Night VMC* | 2 | 5.3% | 0 | 0.0% | 0 | 0.0% |
| Day IMC | 1 | 2.6% | 0 | 0.0% | 0 | 0.0% |
| | | | | | * INCLU | IDES DUSK |
| PILOT QUALIFICATIONS | | | | | | |
| ATP | 2 | 5.3% | 0 | 0.0% | 0 | 0.0% |
| Commercial | 36 | 94.7% | 12 | 100.0% | 12 | 100.0% |
| CFI on board* | 5 | 13.2% | 2 | 16.7% | 2 | 16.7% |
| IFR pilot on board* | 15 | 39.5% | 6 | 50.0% | 6 | 50.0% |

^{*} INCLUDES SINGLE-PILOT FLIGHTS



SECTION 1: 2016 UPDATED DATA FIXED-WING

Commercial Fixed-Wing, 2016 (Continued)

| CHARTER AND CARGO (PART 135) | | | | | | | |
|------------------------------|-----|--------|------|------|-----------|---------|-----------|
| AIRCRAFT CLASS | ACC | IDENTS | FATA | AL A | ACCIDENTS | FA | TALITIES |
| Single-engine fixed-gear | 16 | 64.0% | | 4 | 57.1% | 12 | 54.5% |
| SEF tailwheel | 5 | | | 0 | | 0 | |
| Single-engine retractable | 1 | 4.0% | | 0 | | 0 | |
| Single-engine turbine | 6 | | | 3 | | 9 | |
| Multiengine | 8 | 32.0% | | 3 | 42.9% | 10 | 45.5% |
| Multiengine turbine | 6 | | | 2 | | 8 | |
| CONDITIONS | | | | | | | |
| Day VMC | 16 | 64.0% | | 2 | 28.6% | 8 | 36.4% |
| Night VMC* | 3 | 12.0% | | 2 | 28.6% | 5 | 22.7% |
| Day IMC | 4 | 16.0% | | 2 | 28.6% | 5 | 22.7% |
| Night IMC* | 2 | 8.0% | | 1 | 14.3% | 4 | 18.2% |
| | | | | | | * INCLU | IDES DUSH |
| PILOT QUALIFICATIONS | | | | | | | |
| ATP | 16 | 64.0% | | 4 | 57.1% | 15 | 68.2% |
| Commercial | 9 | 36.0% | | 3 | 42.9% | 7 | 31.8% |
| Second pilot on board | 2 | 8.0% | | 1 | 14.3% | 3 | 13.6% |
| CFI on board* | 10 | 40.0% | | 4 | 57.1% | 10 | 45.5% |
| IFR pilot on board* | 24 | 96.0% | | 7 | 100.0% | 22 | 100.0% |

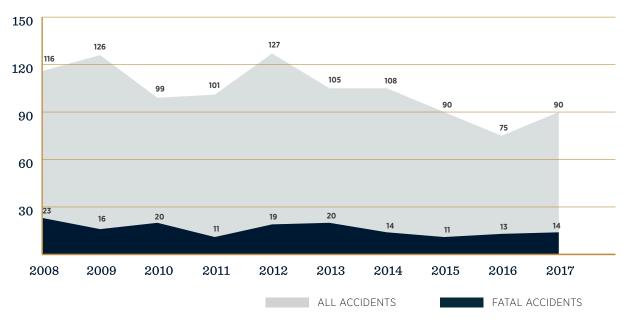
^{*} INCLUDES SINGLE-PILOT FLIGHTS



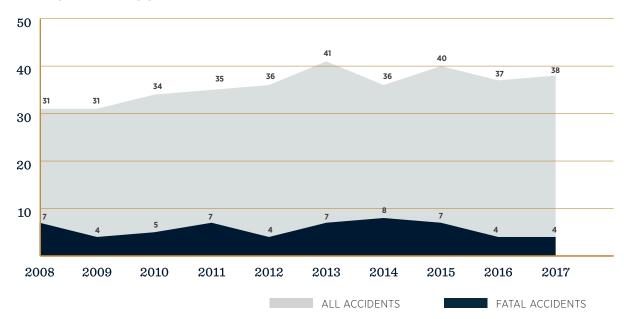


General Aviation Accidents, 2008-2017

NON-COMMERCIAL HELICOPTER



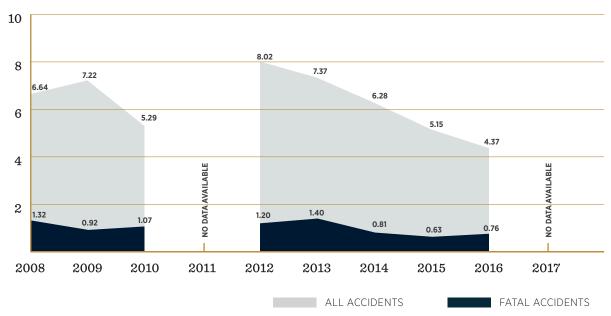
COMMERCIAL HELICOPTER



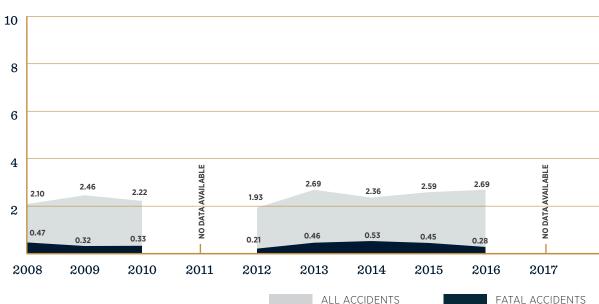


General Aviation Accident Rates, 2008-2017

NON-COMMERCIAL HELICOPTER



COMMERCIAL HELICOPTER







Summary of General Aviation Helicopter Accidents by Year

| 2016 | Non-Commercial HELICOPTER | Commercial HELICOPTER |
|---------------------------|---------------------------|--------------------------|
| Number of accidents | 75 | 37 |
| Number of aircraft* | 75 | 37 |
| Number of fatal accidents | 13 | 4 |
| Lethality (percent) | 17.3 | 10.8 |
| Fatalities | 23 | 7 |

| 2017 | Non-Commercial HELICOPTER | Commercial HELICOPTER |
|---------------------------|---------------------------|--------------------------|
| Number of accidents | 90 | 38 |
| Number of aircraft* | 90 | 38 |
| Number of fatal accidents | 14 | 4 |
| Lethality (percent) | 15.6 | 10.5 |
| Fatalities | 21 | 8 |

 * EACH AIRCRAFT INVOLVED IN A COLLISION IS COUNTED SEPARATELY.





2017 Accident Conditions: Non-Commercial Helicopter

AIRCRAFT CLASS

| CONFIGURATION | ACCIDENTS | FATAL ACCIDENTS | FATALITIES |
|-----------------------|-----------|-----------------|------------|
| Single-engine piston | 63 70.0% | 8 57.1% | 11 52.4% |
| Single-engine turbine | 23 25.6% | 4 28.6% | 7 33.3% |
| Multiengine turbine | 4 4.4% | 2 14.3% | 3 14.3% |

TYPE OF OPERATION

| PURPOSE OF FLIGHT | ACCIDENTS | FATAL ACCIDENTS | FATALITIES |
|--------------------|-----------|-----------------|------------|
| Personal | 28 31.1% | 5 35.7% | 7 33.3% |
| Instructional | 27 30.0% | 1 7.1% | 2 9.5% |
| Public use | 6 6.7% | 1 7.1% | 2 9.5% |
| Positioning | 7 7.8% | 2 14.3% | 4 19.0% |
| Aerial observation | 6 6.7% | 1 7.1% | 2 9.5% |
| Business | 8 8.9% | 2 14.3% | 2 9.5% |
| Other work use | 6 6.7% | 2 14.3% | 2 9.5% |
| Other or unknown | 2 2.2% | 0 0.0% | 0 0.0% |



SECTION 2: 2017 PRELIMINARY DATA HELICOPTER

Non-Commercial Helicopter, 2017 (Continued)

PILOT QUALIFICATIONS

| CERTIFICATE LEVEL | ACCIE | DENTS | FATAL A | CCIDENTS | FATA | ALITIES |
|-----------------------|-------|-------|---------|----------|------|---------|
| ATP | 17 | 18.9% | 2 | 14.3% | 3 | 14.3% |
| Commercial | 47 | 52.2% | 7 | 50.0% | 10 | 47.6% |
| Private | 20 | 22.2% | 4 | 28.6% | 5 | 23.8% |
| Student | 5 | 5.6% | 0 | 0.0% | 0 | 0.0% |
| Other or unknown | 1 | 1.1% | 1 | 7.1% | 3 | 14.3% |
| Second pilot on board | 22 | 24.4% | 2 | 14.3% | 4 | 19.0% |
| CFI on board* | 41 | 45.6% | 4 | 28.6% | 7 | 33.3% |
| IFR pilot on board* | 57 | 63.3% | 9 | 64.3% | 14 | 66.7% |

^{*} INCLUDES SINGLE-PILOT FLIGHTS

LIGHT AND WEATHER CONDITIONS

| CONDITIONS | ACCIDENTS | FATAL ACCIDENTS | FATALITIES |
|------------|-----------|-----------------|------------|
| Day VMC | 80 88.0% | 9 64.3% | 11 52.4% |
| Night VMC* | 7 7.8% | 3 21.4% | 7 33.3% |
| Day IMC | 2 2.2% | 1 7.1% | 1 4.8% |
| Night IMC* | 1 1.1% | 1 7.1% | 2 9.5% |

^{*} INCLUDES DUSK



2017 Accident Conditions: Commercial Helicopter

| T \ / | | \sim \sim | \circ | $M \cap M \cap M$ |
|-------|--------|---------------|--------------|---------------------------|
| 1 \/ | 1) | / 11 | / NI) L I) | /\ I I / \ \ I \ |
| I Y | \sim | | LIPER. | Δ 1 11 11 \times |

| PURPOSE OF FLIGHT | ACCIDENTS | FATAL ACCIDENTS | FATALITIES |
|-------------------------------|-----------|-----------------|------------|
| Aerial application (Part 137) | 22 57.9% | 0 0.0% | 0 0.0% |
| Charter or cargo (Part 135) | 12 31.6% | 2 50.0% | 5 62.5% |
| External load (Part 133) | 4 10.5% | 2 50.0% | 3 37.5% |

AERIAL APPLICATION (PART 137)

| AIRCRAFT CLASS | ACC | IDENTS | FATAL | ACCIDENTS | FATA | ALITIES |
|-----------------------|-----|--------|-------|-----------|----------|---------|
| Single-engine piston | 13 | 59.1% | C | 0.0% | 0 | 0.0% |
| Single-engine turbine | 9 | 40.9% | C | 0.0% | 0 | 0.0% |
| | | | | | | |
| CONDITIONS | | | | | | |
| Day VMC | 21 | 95.5% | C | 100.0% | 0 | 0.0% |
| Night VMC* | 1 | 4.5% | C | 0.0% | 0 | 0.0% |
| | | | | | * INCLUD | ES DUSK |
| PILOT QUALIFICATIONS | | | | | | |
| ATP | 1 | 4.5% | C | 0.0% | 0 | 0.0% |
| Commercial | 17 | 77.3% | C | 0.0% | 0 | 0.0% |
| Private | 1 | 4.5% | C | 0.0% | 0 | 0.0% |
| None | 1 | 4.5% | C | 0.0% | 0 | 0.0% |
| Other or unknown | 2 | 9.1% | C | 0.0% | 0 | 0.0% |
| CFI on board* | 6 | 27.3% | C | 0.0% | 0 | 0.0% |
| IFR pilot on board* | 12 | 54.5% | C | 0.0% | 0 | 0.0% |

^{*} INCLUDES SINGLE-PILOT FLIGHTS



SECTION 2: 2017 PRELIMINARY DATA HELICOPTER

Commercial Helicopter, 2017 (Continued)

CHARTER AND CARGO (PART 135)

| AIRCRAFT CLASS | ACCIDENTS | FATAL ACCIDENTS | FATALITIES |
|-----------------------|-----------|-----------------|------------|
| Single-engine piston | 3 25.0% | 0 0.0% | 0 0.0% |
| Single-engine turbine | 6 50.0% | 1 50.0% | 1 20.0% |
| Multiengine turbine | 3 25.0% | 1 50.0% | 4 80.0% |
| | | | |
| CONDITIONS | | | |

| Day VMC | 9 | 75.0% | 1 | 50.0% | 4 80.0% |
|------------|---|-------|---|-------|---------|
| Night VMC* | 2 | 16.7% | 0 | 0.0% | 0 0.0% |
| Night IMC* | 1 | 8.3% | 1 | 50.0% | 1 20.0% |

^{*} INCLUDES DUSK

PILOT QUALIFICATIONS

| ATP | 3 2 | 5.0% 1 | 50.0% | 1 20.0% |
|---------------------|------------|---------|--------|----------|
| Commercial | 7 5 | 88.3% 1 | 50.0% | 4 80.0% |
| Other or unknown | 2 1 | 16.7% | 0.0% | 0 0.0% |
| CFI on board* | 4 3 | 33.3% | 0.0% | 0 0.0% |
| IFR pilot on board* | 8 6 | 66.7% 2 | 100.0% | 5 100.0% |

^{*} INCLUDES SINGLE-PILOT FLIGHTS



SECTION 2: 2017 PRELIMINARY DATA HELICOPTER

Commercial Helicopter, 2017 (Continued)

IFR pilot on board*

| EXTERNAL LOAD (PART 133) | | | |
|--------------------------|-----------|-----------------|------------|
| AIRCRAFT CLASS | ACCIDENTS | FATAL ACCIDENTS | FATALITIES |
| Single-engine turbine | 4 100.0% | 2 100% | 3 100% |
| | | | |
| CONDITIONS | | | |
| Day VMC | 4 100.0% | 2 100% | 3 100% |
| | | | |
| PILOT QUALIFICATIONS | | | |
| Commercial | 4 100.0% | 2 100.0% | 3 100.0% |
| CFI on board* | 4 100.0% | 2 100.0% | 3 100.0% |
| | | | |

4 100.0%

3 100.0%

2 100.0%



^{*} INCLUDES SINGLE-PILOT FLIGHTS



2016 Accident Conditions: Non-Commercial Helicopter

AIRCRAFT CLASS

| CONFIGURATION | ACCIDENTS | CIDENTS FATAL ACCIDENTS | |
|-----------------------|-----------------|-------------------------|----------|
| Single-engine piston | 46 61.3% | 5 38.5% | 6 26.1% |
| Single-engine turbine | 25 33.3% | 6 46.2% | 13 56.5% |
| Multiengine turbine | 4 5.3% | 2 15.4% | 4 17.4% |

TYPE OF OPERATION

| PURPOSE OF FLIGHT | ACCIDENTS | FATAL ACCIDENTS | FATALITIES |
|--------------------|-----------|-----------------|------------|
| Personal | 23 30.7% | 4 30.8% | 6 26.1% |
| Instructional | 18 24.0% | 1 7.7% | 1 4.3% |
| Public use | 10 13.3% | 1 7.7% | 1 4.3% |
| Positioning | 4 5.3% | 1 7.7% | 2 8.7% |
| Aerial observation | 6 8.0% | 3 23.1% | 7 30.4% |
| Business | 5 6.7% | 1 7.7% | 1 4.3% |
| Other work use | 2 2.7% | 0 0.0% | 0 0.0% |
| Other or Unknown | 7 9.3% | 2 15.4% | 5 21.7% |



SECTION 2: 2016 UPDATED DATA HELICOPTER

Non-Commercial Helicopter, 2016 (Continued)

PILOT QUALIFICATIONS

| CERTIFICATE LEVEL | ACCIDENTS | FATAL ACCIDENTS | FATALITIES |
|-----------------------|-----------|-----------------|------------|
| ATP | 15 20.0% | 5 38.5% | 11 47.8% |
| Commercial | 42 56.0% | 7 53.8% | 11 47.8% |
| Private | 12 16.0% | 1 7.7% | 1 4.3% |
| Student | 2 2.7% | 0 0.0% | 0 0.0% |
| None | 3 4.0% | 0 0.0% | 0 0.0% |
| Other or unknown | 1 1.3% | 0 0.0% | 0 0.0% |
| Second pilot on board | 18 24.0% | 4 30.8% | 8 34.8% |
| CFI on board* | 38 50.7% | 8 61.5% | 17 73.9% |
| IFR pilot on board* | 50 66.7% | 12 92.3% | 22 95.7% |

^{*} INCLUDES SINGLE-PILOT FLIGHTS

LIGHT AND WEATHER CONDITIONS

| CONDITIONS | ACCIDENTS FATAL ACCIDENTS FATA | | FATALITIES |
|------------|--------------------------------|----------|------------|
| Day VMC | 69 92.0% | 10 76.9% | 19 82.6% |
| Night VMC* | 5 6.7% | 2 15.4% | 3 13.0% |
| Day IMC | 1 1.3% | 1 7.7% | 1 4.3% |

^{*} INCLUDES DUSK



2016 Accident Conditions: Commercial Helicopter

TYPE OF OPERATION

| PURPOSE OF FLIGHT | ACCIDENTS FATAL ACCIDENTS | | FATALITIES |
|-------------------------------|---------------------------|---------|------------|
| Aerial application (Part 137) | 21 56.8% | 1 25.0% | 1 14.3% |
| Charter or cargo (Part 135) | 13 35.1% | 2 50.0% | 5 71.4% |
| External load (Part 133) | 3 8.1% | 1 25.0% | 1 14.3% |

AERIAL APPLICATION (PART 137)

| AIRCRAFT CLASS | ACCIDE | ACCIDENTS | | ACCIDENTS | FATALITIES | |
|-----------------------|--------|-----------|---|-----------|------------|--------|
| Single-engine piston | 10 4 | 47.6% | 0 | 0.0% | 0 | 0.0% |
| Single-engine turbine | 11 5 | 52.4% | 1 | 100.0% | 1 | 100.0% |
| | | | | | | |
| CONDITIONS | | | | | | |
| Day VMC | 18 8 | 35.7% | 1 | 100.0% | 1 | 100.0% |
| Night VMC* | 3 | 14.3% | 0 | 0.0% | 0 | 0.0% |

^{*} INCLUDES DUSK

PILOT QUALIFICATIONS

| ATP | 2 | 9.5% | 0 0.0% | 0 | 0.0% |
|---------------------|----|-------|----------|---|--------|
| Commercial | 19 | 90.5% | 1 100.0% | 1 | 100.0% |
| CFI on board* | 8 | 38.1% | 0 0.0% | 0 | 0.0% |
| IFR pilot on board* | 10 | 47.6% | 0 0.0% | 0 | 0.0% |

^{*} INCLUDES SINGLE-PILOT FLIGHTS



SECTION 2: 2016 UPDATED DATA HELICOPTER

Commercial Helicopter, 2016 (Continued)

CHARTER AND CARGO (PART 135)

| AIRCRAFT CLASS | ACCIDENTS | FATAL ACCIDENTS | FATALITIES |
|-----------------------|-----------------|-----------------|------------|
| Single-engine turbine | 12 92.3% | 2 100.0% | 5 100.0% |
| Multiengine turbine | 1 7.7% | 0 0.0% | 0 0.0% |
| | | | |
| CONDITIONS | | | |
| Day VMC | 9 69.2% | 1 50.0% | 1 20.0% |
| Night VMC* | 2 15.4% | 0 0.0% | 0 0.0% |
| Night IMC* | 2 15.4% | 1 50.0% | 4 80.0% |
| | | | |

^{*} INCLUDES DUSK

PILOT QUALIFICATIONS

| ATP | 1 7.7% | 1 50.0% | 4 80.0% |
|-----------------------|------------------|----------|---------|
| Commercial | 12 92.3% | 1 50.0% | 1 20.0% |
| Second pilot on board | 1 7.7% | 0 0.0% | 0 0.0% |
| CFI on board* | 4 30.8% | 1 50.0% | 4 80.0% |
| IFR pilot on board* | 12 92.30% | 1 50.00% | 4 80.0% |

^{*} INCLUDES SINGLE-PILOT FLIGHTS



SECTION 2: 2016 UPDATED DATA HELICOPTER

Commercial Helicopter, 2016 (Continued)

EXTERNAL LOAD (PART 133)

| AIRCRAFT CLASS | ACCIDENTS | FATAL ACCIDENTS | FATALITIES |
|-----------------------|-----------|-----------------|------------|
| Single-engine turbine | 3 100.0% | 1 100.0% | 1 100.0% |
| | | | |
| CONDITIONS | | | |
| Day VMC | 3 100.0% | 1 100.0% | 1 100.0% |
| | | | |
| PILOT QUALIFICATIONS | | | |
| PILOT QUALIFICATIONS | | | |
| ATP | 1 33.3% | 0 0.0% | 0 0.0% |
| Commercial | 2 66.7% | 1 100.0% | 1 100.0% |
| CFI on board* | 2 66.7% | 1 100.0% | 1 100.0% |
| IFR pilot on board* | 1 33.3% | 0 0.0% | 0 0.0% |

* INCLUDES SINGLE-PILOT FLIGHTS

PAGE 28 2016-2017 GA ACCIDENT SCORECARD

The GA Scorecard and other research reports are funded through donations to the AOPA Foundation. If you'd like to donate in support of this and other Air Safety Institute work, please visit airsafetyinstitute.org.





421 AVIATION WAY, FREDERICK, MD 21701 AIRSAFETYINSTITUTE.ORG

COPYRIGHT © 2018 AOPA AIR SAFETY INSTITUTE