

Table 1

## Reportable Aircraft Occurrences

|  | December  |           |                      | Year to Date (December) |            |                      |
|--|-----------|-----------|----------------------|-------------------------|------------|----------------------|
|  | 2015      | 2014      | 2010-2014<br>Average | 2015                    | 2014       | 2010-2014<br>Average |
| <b>Number of reportable accidents</b>                            | <b>7</b>  | <b>5</b>  | <b>9</b>             | <b>250</b>              | <b>249</b> | <b>272</b>           |
| Accidents in Canada involving Canadian-registered aircraft       | 7         | 5         | 9                    | 232                     | 238        | 256                  |
| Accidents outside Canada involving Canadian-registered aircraft  | 0         | 0         | 0                    | 9                       | 4          | 5                    |
| Accidents in Canada involving foreign-registered aircraft        | 0         | 0         | 0                    | 9                       | 7          | 12                   |
| <b>Number of accidents by operator type</b>                      | <b>7</b>  | <b>5</b>  | <b>9</b>             | <b>250</b>              | <b>249</b> | <b>272</b>           |
| Commercial   | 3         | 3         | 4                    | 74                      | 65         | 74                   |
| Airliner (705)   | 0         | 0         | 0                    | 8                       | 4          | 6                    |
| Commuter (704)   | 0         | 0         | 1                    | 3                       | 2          | 5                    |
| Air taxi (703)   | 2         | 0         | 2                    | 24                      | 34         | 36                   |
| Aerial work (702)  | 0         | 1         | 1                    | 18                      | 17         | 24                   |
| Foreign/Other (a)  | 1         | 2         | 1                    | 21                      | 9          | 4                    |
| State  | 0         | 0         | 0                    | 1                       | 4          | 4                    |
| Corporate  | 0         | 0         | 0                    | 0                       | 4          | 5                    |
| Private/Other (b)  | 4         | 2         | 5                    | 176                     | 177        | 190                  |
| <b>Number of accidents by aircraft type</b>                      | <b>7</b>  | <b>5</b>  | <b>9</b>             | <b>250</b>              | <b>249</b> | <b>272</b>           |
| Aeroplane  | 6         | 4         | 6                    | 195                     | 176        | 203                  |
| Helicopter   | 1         | 1         | 2                    | 34                      | 34         | 34                   |
| Ultralight   | 0         | 1         | 0                    | 17                      | 32         | 28                   |
| Other (c)  | 0         | 0         | 0                    | 7                       | 8          | 8                    |
| <b>Number of aircraft involved in accidents*</b>                 | <b>8</b>  | <b>6</b>  | <b>9</b>             | <b>258</b>              | <b>253</b> | <b>276</b>           |
| Aeroplanes   | 7         | 4         | 6                    | 200                     | 179        | 206                  |
| Helicopters  | 1         | 1         | 2                    | 34                      | 34         | 34                   |
| Ultralights  | 0         | 1         | 0                    | 17                      | 32         | 28                   |
| Others (c)   | 0         | 0         | 0                    | 7                       | 8          | 8                    |
| <b>Number of fatal accidents by aircraft type</b>                | <b>2</b>  | <b>0</b>  | <b>1</b>             | <b>29</b>               | <b>14</b>  | <b>33</b>            |
| Aeroplane  | 2         | 0         | 1                    | 20                      | 12         | 23                   |
| Helicopter   | 0         | 0         | 0                    | 5                       | 0          | 5                    |
| Ultralight   | 0         | 0         | 0                    | 4                       | 2          | 4                    |
| Other (c)  | 0         | 0         | 0                    | 0                       | 0          | 2                    |
| <b>Reportable accident fatalities</b>                            | <b>2</b>  | <b>0</b>  | <b>2</b>             | <b>47</b>               | <b>21</b>  | <b>57</b>            |
| <b>Reportable accident serious injuries</b>                      | <b>2</b>  | <b>1</b>  | <b>1</b>             | <b>31</b>               | <b>36</b>  | <b>38</b>            |
| <b>Accidents in Canada involving foreign-registered aircraft</b> | <b>0</b>  | <b>0</b>  | <b>0</b>             | <b>9</b>                | <b>7</b>   | <b>12</b>            |
| Fatal accidents  | 0         | 0         | 0                    | 3                       | 2          | 2                    |
| Fatalities   | 0         | 0         | 0                    | 4                       | 4          | 2                    |
| Serious Injuries   | 0         | 0         | 0                    | 0                       | 1          | 1                    |
| <b>Occurrences with a dangerous good release</b>                 | <b>2</b>  | <b>0</b>  | <b>0</b>             | <b>6</b>                | <b>4</b>   | <b>2</b>             |
| <b>Number of reportable incidents**</b>                          | <b>55</b> | <b>52</b> | <b>56</b>            | <b>785</b>              | <b>739</b> | <b>710</b>           |
| Incidents in Canada involving Canadian-registered aircraft       | 40        | 46        | 41                   | 645                     | 596        | 544                  |
| Incidents outside Canada involving Canadian-registered aircraft  | 7         | 4         | 5                    | 62                      | 58         | 57                   |
| Incidents in Canada involving foreign-registered aircraft        | 10        | 2         | 9                    | 106                     | 100        | 134                  |
| <b>Number of reportable incidents by type</b>                    | <b>55</b> | <b>52</b> | <b>56</b>            | <b>785</b>              | <b>739</b> | <b>710</b>           |
| Risk of collision/Loss of separation                             | 8         | 4         | 4                    | 110                     | 94         | 127                  |
| Declared emergency   | 29        | 25        | 27                   | 331                     | 313        | 290                  |
| Engine failure   | 4         | 11        | 10                   | 108                     | 104        | 92                   |
| Smoke/Fire   | 6         | 5         | 6                    | 87                      | 88         | 79                   |
| Collision  | 0         | 0         | 0                    | 8                       | 16         | 9                    |
| Other  | 8         | 7         | 9                    | 141                     | 124        | 113                  |

Data extracted January 18, 2016

Reportable accidents and incidents are reported in accordance with the TSB's regulations for mandatory reporting of occurrences.

Breakdowns may not add up to totals. For example, in the total "Number of accidents by aircraft type", when an occurrence involves an airplane and a helicopter, the occurrence is counted in each category, but only once in the total.

\*Only "Number of aircraft involved in accidents" are aircraft counts, all other data are accident counts.

a. The commercial service type is not available for foreign-registered aircraft.

b. Other: contains, but is not limited to, organizations that rent aircraft (i.e., flying schools, flying clubs, etc.).

c. Includes balloons, gyroplanes, gliders, dirigibles, hang gliders, unmanned aerial vehicles (UAV) and similar aircraft types.

New TSB regulations came into effect on July 1, 2014, changing some reporting requirements.

\*\*Under new reporting requirements aviation incidents include: a) aircraft having a maximum certificated take-off weight greater than 2 250 kg (formerly 5700 kg); b) aircraft being operated under an air operator certificate issued under CARS Part VII.

Table 2

## Occurrences Involving Canadian-Registered Aircraft

|  | December  |           |                      | Year to Date (December) |            |                      |
|--|-----------|-----------|----------------------|-------------------------|------------|----------------------|
|  | 2015      | 2014      | 2010-2014<br>Average | 2015                    | 2014       | 2010-2014<br>Average |
| <b>Number of accidents by aircraft and operator type</b>       | <b>7</b>  | <b>5</b>  | <b>9</b>             | <b>226</b>              | <b>212</b> | <b>234</b>           |
| Aeroplane accidents  | 6         | 4         | 6                    | 188                     | 170        | 193                  |
| Commercial   | 2         | 2         | 2                    | 50                      | 39         | 46                   |
| Airliner (705)   | 0         | 0         | 0                    | 8                       | 4          | 5                    |
| Commuter (704)   | 0         | 0         | 1                    | 3                       | 1          | 4                    |
| Air taxi (703)   | 1         | 0         | 1                    | 12                      | 19         | 22                   |
| Aerial work (702)  | 0         | 0         | 0                    | 10                      | 8          | 13                   |
| Other  | 1         | 2         | 0                    | 17                      | 7          | 2                    |
| State  | 0         | 0         | 0                    | 1                       | 3          | 2                    |
| Corporate  | 0         | 0         | 0                    | 0                       | 2          | 3                    |
| Private/Other (a)  | 4         | 2         | 4                    | 138                     | 127        | 142                  |
| Helicopter accidents   | 1         | 1         | 2                    | 33                      | 34         | 33                   |
| Commercial   | 1         | 1         | 2                    | 24                      | 25         | 26                   |
| State  | 0         | 0         | 0                    | 0                       | 1          | 1                    |
| Corporate  | 0         | 0         | 0                    | 0                       | 0          | 0                    |
| Private/Other (a)  | 0         | 0         | 0                    | 9                       | 8          | 6                    |
| Other aircraft accidents (b)                                   | 0         | 0         | 0                    | 7                       | 8          | 7                    |
| <b>Number of fatal accidents by aircraft and operator type</b> | <b>2</b>  | <b>0</b>  | <b>1</b>             | <b>23</b>               | <b>10</b>  | <b>27</b>            |
| Aeroplane accidents  | 2         | 0         | 1                    | 18                      | 10         | 22                   |
| Commercial   | 1         | 0         | 0                    | 6                       | 2          | 8                    |
| Airliner (705)   | 0         | 0         | 0                    | 0                       | 0          | 0                    |
| Commuter (704)   | 0         | 0         | 0                    | 0                       | 0          | 1                    |
| Air taxi (703)   | 1         | 0         | 0                    | 3                       | 1          | 4                    |
| Aerial work (702)  | 0         | 0         | 0                    | 2                       | 1          | 2                    |
| Other  | 0         | 0         | 0                    | 1                       | 0          | 0                    |
| State  | 0         | 0         | 0                    | 0                       | 0          | 0                    |
| Corporate  | 0         | 0         | 0                    | 0                       | 0          | 0                    |
| Private/Other  | 1         | 0         | 1                    | 13                      | 8          | 14                   |
| Helicopter accidents   | 0         | 0         | 0                    | 5                       | 0          | 5                    |
| Other aircraft accidents (b)                                   | 0         | 0         | 0                    | 0                       | 0          | 1                    |
| <b>Accident fatalities</b>                                     | <b>2</b>  | <b>0</b>  | <b>2</b>             | <b>40</b>               | <b>15</b>  | <b>51</b>            |
| <b>Accident serious injuries</b>                               | <b>2</b>  | <b>1</b>  | <b>1</b>             | <b>28</b>               | <b>29</b>  | <b>32</b>            |
| <b>Number of incidents by type*</b>                            | <b>47</b> | <b>50</b> | <b>47</b>            | <b>707</b>              | <b>654</b> | <b>601</b>           |
| Risk of collision/Loss of separation                           | 7         | 4         | 4                    | 100                     | 84         | 113                  |
| Declared emergency   | 24        | 24        | 22                   | 288                     | 277        | 234                  |
| Engine failure   | 4         | 11        | 8                    | 100                     | 94         | 79                   |
| Smoke/Fire   | 4         | 5         | 5                    | 79                      | 76         | 65                   |
| Collision  | 0         | 0         | 0                    | 7                       | 15         | 9                    |
| Other  | 8         | 6         | 8                    | 133                     | 108        | 101                  |
| <b>Number of accidents involving ultralight aircraft</b>       | <b>0</b>  | <b>1</b>  | <b>0</b>             | <b>16</b>               | <b>31</b>  | <b>27</b>            |
| Fatal accidents  | 0         | 0         | 0                    | 3                       | 2          | 4                    |
| Fatalities   | 0         | 0         | 0                    | 3                       | 2          | 4                    |
| Serious injuries   | 0         | 0         | 0                    | 3                       | 6          | 5                    |

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a. Other: contains, but is not limited to, organizations that rent aircraft (i.e., flying schools, flying clubs, etc.).

b. Includes balloons, gyroplanes, gliders, dirigibles, hang gliders, unmanned aerial vehicles (UAV) and similar aircraft types.

New TSB regulations came into effect on July 1, 2014, changing some reporting requirements.

\*Under new reporting requirements aviation incidents include: a) aircraft having a maximum certificated take-off weight greater than 2 250 kg (formerly 5700 kg); b) aircraft being operated under an air operator certificate issued under CARS Part VII.

Table 3

## Accidents Involving Canadian-Registered Fixed Wing and Rotary Wing Aircraft By Type of Operation

|  | December |          |                      | Year to Date (December) |            |                      |
|--|----------|----------|----------------------|-------------------------|------------|----------------------|
|  | 2015     | 2014     | 2010-2014<br>Average | 2015                    | 2014       | 2010-2014<br>Average |
| <b>Number of accidents by operation type</b>       | <b>7</b> | <b>5</b> | <b>9</b>             | <b>221</b>              | <b>204</b> | <b>226</b>           |
| Aeroplane accidents                                | 6        | 4        | 6                    | 188                     | 170        | 193                  |
| Training   | 1        | 2        | 1                    | 16                      | 27         | 27                   |
| Pleasure/Travel                                    | 4        | 2        | 3                    | 124                     | 96         | 108                  |
| Business   | 0        | 0        | 0                    | 1                       | 9          | 6                    |
| Forest fire management                             | 0        | 0        | 0                    | 2                       | 2          | 2                    |
| Test/Demonstration/Ferry                           | 0        | 0        | 0                    | 2                       | 5          | 5                    |
| Aerial application                                 | 0        | 0        | 0                    | 5                       | 4          | 6                    |
| Inspection   | 0        | 0        | 0                    | 1                       | 0          | 1                    |
| Air transport                                      | 1        | 0        | 1                    | 21                      | 22         | 30                   |
| Air ambulance                                      | 0        | 0        | 0                    | 0                       | 1          | 1                    |
| Sightseeing  | 0        | 0        | 0                    | 1                       | 1          | 2                    |
| Other/Unknown                                      | 0        | 0        | 0                    | 16                      | 4          | 8                    |
| Helicopter accidents                               | 1        | 1        | 2                    | 33                      | 34         | 33                   |
| Training   | 0        | 0        | 0                    | 5                       | 2          | 1                    |
| Pleasure/Travel                                    | 0        | 0        | 0                    | 8                       | 7          | 6                    |
| Business   | 0        | 0        | 0                    | 1                       | 0          | 1                    |
| Forest fire management                             | 0        | 0        | 0                    | 2                       | 0          | 1                    |
| Test/Demonstration/Ferry                           | 0        | 0        | 0                    | 0                       | 0          | 1                    |
| Aerial application                                 | 0        | 0        | 0                    | 2                       | 1          | 2                    |
| Inspection   | 0        | 1        | 0                    | 0                       | 3          | 2                    |
| Air transport                                      | 1        | 0        | 1                    | 10                      | 18         | 13                   |
| Air ambulance                                      | 0        | 0        | 0                    | 0                       | 0          | 1                    |
| Sightseeing  | 0        | 0        | 0                    | 0                       | 1          | 0                    |
| Other/Unknown                                      | 0        | 0        | 1                    | 5                       | 2          | 6                    |
| <b>Number of fatal accidents by operation type</b> | <b>2</b> | <b>0</b> | <b>1</b>             | <b>23</b>               | <b>10</b>  | <b>26</b>            |
| Training   | 0        | 0        | 0                    | 1                       | 1          | 2                    |
| Pleasure/Travel                                    | 1        | 0        | 1                    | 12                      | 7          | 12                   |
| Business   | 0        | 0        | 0                    | 1                       | 1          | 1                    |
| Forest fire management                             | 0        | 0        | 0                    | 1                       | 0          | 1                    |
| Test/Demonstration/Ferry                           | 0        | 0        | 0                    | 0                       | 0          | 1                    |
| Aerial application                                 | 0        | 0        | 0                    | 1                       | 0          | 0                    |
| Inspection   | 0        | 0        | 0                    | 0                       | 0          | 0                    |
| Air transport                                      | 1        | 0        | 0                    | 5                       | 1          | 6                    |
| Air ambulance                                      | 0        | 0        | 0                    | 0                       | 0          | 0                    |
| Sightseeing  | 0        | 0        | 0                    | 1                       | 0          | 0                    |
| Other/Unknown                                      | 0        | 0        | 0                    | 2                       | 0          | 3                    |
| <b>Fatalities</b>                                  | <b>2</b> | <b>0</b> | <b>2</b>             | <b>40</b>               | <b>15</b>  | <b>50</b>            |
| <b>Serious injuries</b>                            | <b>2</b> | <b>1</b> | <b>1</b>             | <b>28</b>               | <b>28</b>  | <b>31</b>            |

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Canadian-registered aircraft, excluding ultralights, balloons, gyroplanes, gliders, dirigibles, hang gliders and similar aircraft types

New TSB regulations came into effect on July 1, 2014, changing some reporting requirements.