2021 Mid-Year Accident Update
Performance at 30th June 2021

18 August 2021
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Manipulating the Interactive Report

Interactive reporting enables the reader to customize reports.

If you see an icon on the left top corner, such as the one here, it means that there are notes, move the mouse over the icon, and the notes will appear.

If you see a bar chart icon, such as the one here, it means the chart is interactive.

To run an interactive chart, follow these steps:

• Double-click on the graph icon at the top right-hand corner of the chart.
• One this file, if asked.
• Select the desired conditions in the filter box next to the chart.
• Select the range of years at top of the chart.
Manipulating the Interactive Report

This mid year analysis report allows you to focus more precisely on certain data by applying a combination of filters. Click and highlight your selection, and the data will automatically correspond to your choice. While each chart is presented in the best way for its data, you may select the options you like in any way you would like them displayed.
Observations

• This is an update of 2021 accidents classified by the Accident Classification Task Force (ACTF) on July 21st and 22nd.

• Due to the latency time between an accident occurrence and its reporting, this update may not contain all accidents that occurred in the first half of 2021.

• The rates in this presentation are based on the most accurate flight counts available to IATA at the time of production. Historical rates may have changed slightly as actual sector counts replace previous estimates. Some regions may have greater variability on the sector count as new and more up-to-date data is available. This may result in differences in the accident rates when compared to previous IATA reports.

• IATA determines the accident region based on the operator’s “home” country as specified in the operator’s Air Operator Certificate (AOC).
Executive Summary

• During HY 2021, there were a total of 12 accidents worldwide, of which three incurred fatalities.
• The one Jet fatal accident incurred 62 on board fatalities and two turboprop fatal accidents incurred 13 on board fatalities.
• IATA member airlines suffered a total of three non-fatal accidents.
• In the category ‘all accidents per million sectors’ IATA member airlines continue to trend lower than all industry at 0.43 versus 0.92 in Half Year (HY) 2021, a pattern which is also reflected in the five-year average.
• It is worth noting that the accident rate is extremely low, so any accident will create a spike.
• As more information became available, three accidents were removed from the 2020 data, due to no longer meeting IATA accident criteria, thus changing the accident rate from 1.71 to 1.58 accident per million sectors.
Executive Summary

• The number of air traffic reported in the first half of 2021 (Jan-Jun) is up by 23% compared to same period of last year (Jan-Jun 2020); and it represents 68% of the traffic in 2019 Jan-Jun
Accidents
## 2020 Half Year (HY) Accidents Overview

<table>
<thead>
<tr>
<th>Category</th>
<th>FY 2020</th>
<th>HY 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Accidents</td>
<td>35</td>
<td>12</td>
</tr>
<tr>
<td>Total Jet Hull Losses</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Total Turboprop Hull Losses</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Total Fatal Accidents</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Total Fatalities on board</td>
<td>132</td>
<td>75</td>
</tr>
<tr>
<td>Total IATA Member Accidents</td>
<td>12</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: IATA GADM

Accidents Update: as of 30th June 2021
Accident Rate (Jet and Turboprop)
All Accidents per Million Sectors 2016 to 2021 (Half Year)

Source: IATA GADM

Accidents Update: as of 30th June 2021
Accident Rate per Region of Operator

All Accident Rates per Region of Operator as 30th June 2021

<table>
<thead>
<tr>
<th>Region</th>
<th>2021</th>
<th>2020</th>
<th>2016-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>0.92</td>
<td>1.58</td>
<td>1.35</td>
</tr>
<tr>
<td>IATA Members</td>
<td>0.43</td>
<td>0.77</td>
<td>0.94</td>
</tr>
<tr>
<td>NAM</td>
<td>0.27</td>
<td>1.81</td>
<td>1.11</td>
</tr>
<tr>
<td>EUR</td>
<td>0.53</td>
<td>1.31</td>
<td>0.88</td>
</tr>
<tr>
<td>CIS</td>
<td>0.00</td>
<td>4.86</td>
<td>4.74</td>
</tr>
<tr>
<td>EUR-2016-2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASIA</td>
<td>0.34</td>
<td>0.00</td>
<td>0.13</td>
</tr>
<tr>
<td>MENA</td>
<td>1.78</td>
<td>1.01</td>
<td>1.75</td>
</tr>
<tr>
<td>AFI</td>
<td>2.22</td>
<td>1.43</td>
<td>1.59</td>
</tr>
<tr>
<td>MENA-2016-2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASPAC</td>
<td>5.55</td>
<td>8.22</td>
<td>5.48</td>
</tr>
</tbody>
</table>

Source: IATA GADM

Accidents Update: as of 30th June 2021
Fatality Risk
Industry Fatality Risk

Fatality Risk (Full-Loss Equivalents per Million Sectors)

Source: IATA GADM

Accidents Update: as of 30th June 2021
Jet Fatality Risk

Jet Fatality Risk (Full-Loss Equivalents per Million Sectors)

Fatality Risk Rate - Jet

Source: IATA GADM

Accidents Update: as of 30th June 2021
Jet Fatality Risk per Region of Operator as at June 30th 2021

<table>
<thead>
<tr>
<th>Region</th>
<th>2021</th>
<th>2020</th>
<th>2016-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>0.09</td>
<td>0.06</td>
<td>0.07</td>
</tr>
<tr>
<td>IATA Members</td>
<td>0.00</td>
<td>0.07</td>
<td>0.05</td>
</tr>
</tbody>
</table>

HY 2021 vs FY 2020 accident rate

Source: IATA GADM
Turboprop Fatality Risk

Turboprop Fatality Risk (Full-Loss Equivalents per Million Sectors)

![Fatality Risk Rate - Turboprop Graph]

Source: IATA GADM

Accidents Update: as of 30th June 2021

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Fatality Risk by Accident Category

Fatality Risk by Accident Category  2021 HY

Note: (1) The area of the bubble indicates the number of fatalities associated with the particular accident category, the value is displayed
(2) Fatality Risk: number of full-loss equivalents per 1 million flights
(3) Accidents not involving fatalities are displayed on this graph as black circles

Source: IATA GADM

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Fatality Risk by Accident Category

Fatality Risk by Accident Category from 2016-2021 HY

Three accidents that contributed to 31 fatalities could not be classified due to insufficient information.

Runway / Taxiway Excursion, 79
Hard Landing, 41
In-flight Damage, 106
Loss of Control In-flight, 773
Undershoot, 5
Other End State, 76
Controlled Flight Into Terrain (CFIT), 76

Note:
(1) The area of the bubble indicates the number of fatalities associated with the particular accident category, the value is displayed.
(2) Fatality Risk: number of full-loss equivalents per 1 million flights.
(3) Accidents not involving fatalities are displayed on this graph as black circles.

Source: IATA GADM

Accidents Update: as of 30th June 2021
Accident Category: Percentage

Accident Category 2021

Source: IATA GADM

Accidents Update: as of 30th June 2021
Accident Category: Percentage

Accident Category from 2016 – 2021 HY

- RWY/TWY EXC: 26%
- G UP/ LGD/ QPSE: 15%
- IN-F DAMAGE: 13%
- TAIL STRIKE: 11%
- HARD LGD: 8%
- GND DAMAGE: 8%
- LOC-I: 8%
- UNDERSHOOT: 3%
- CFIT: 2%
- RWY COLL: 2%
- OTHER: 2%
- OFF ARP LGD: 0%
- MID-AIR COLL: 0%

Three accidents could not be classified due to insufficient information.

Source: IATA GADM
Jet Hull Losses
Jet Hull Loss

Jet Hull Loss Rate per Million Sectors

Source: IATA GADM

Accidents Update: as of 30th June 2021
Jet Hull Loss Accident Rate per Region of Operators

Jet Hull Loss Rate per Region of Operator as at 30th June 2020

<table>
<thead>
<tr>
<th>Region</th>
<th>2021</th>
<th>2020</th>
<th>2016-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAM</td>
<td>0.00</td>
<td>0.00</td>
<td>0.10</td>
</tr>
<tr>
<td>LATAM/CAR</td>
<td>0.00</td>
<td>0.00</td>
<td>0.39</td>
</tr>
<tr>
<td>EUR</td>
<td>0.63</td>
<td>0.31</td>
<td>0.14</td>
</tr>
<tr>
<td>CIS</td>
<td>0.00</td>
<td>0.00</td>
<td>0.92</td>
</tr>
<tr>
<td>MENA</td>
<td>0.00</td>
<td>0.00</td>
<td>0.34</td>
</tr>
<tr>
<td>NASIA</td>
<td>0.00</td>
<td>0.00</td>
<td>0.03</td>
</tr>
<tr>
<td>AFI</td>
<td>0.00</td>
<td>0.00</td>
<td>0.57</td>
</tr>
<tr>
<td>ASPAC</td>
<td>0.57</td>
<td>0.30</td>
<td>0.00</td>
</tr>
<tr>
<td>World</td>
<td>0.17</td>
<td>0.16</td>
<td>0.19</td>
</tr>
<tr>
<td>IATA Members</td>
<td>0.00</td>
<td>0.14</td>
<td>0.15</td>
</tr>
</tbody>
</table>

Source: IATA GADM

Accidents Update: as of 30th June 2021
Turboprop Hull Losses

Turbo-Prop Hull Losses per Million Sectors

Source: IATA GADM

Accidents Update: as of 30th June 2021
# Turboprop Hull Loss Rate by Region of Operator

## Turboprop Hull Loss Rate per Region of Operator as at 30th June 2021

<table>
<thead>
<tr>
<th>Region</th>
<th>2021</th>
<th>2020</th>
<th>2016-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>1.35</td>
<td>1.59</td>
<td>1.07</td>
</tr>
<tr>
<td>IATA Members</td>
<td>0.00</td>
<td>0.00</td>
<td>0.49</td>
</tr>
</tbody>
</table>

## HY 2021 vs FY 2020 Accident Rate

- **NAM**
  - 2021: 0.00
  - 2020: 1.74
  - 2016-2020: 0.00

- **LATAM/CAR**
  - 2021: 0.00
  - 2020: 2.35
  - 2016-2020: 1.44

- **EUR**
  - 2021: 0.00
  - 2020: 0.00
  - 2016-2020: 13.75

- **CIS**
  - 2021: 0.00
  - 2020: 0.00
  - 2016-2020: 13.75

- **MENA**
  - 2021: 0.00
  - 2020: 0.00
  - 2016-2020: 1.44

- **NASIA**
  - 2021: 0.00
  - 2020: 0.00
  - 2016-2020: 0.00

- **AFI**
  - 2021: 0.00
  - 2020: 0.00
  - 2016-2020: 4.27

- **ASPAC**
  - 2021: 0.00
  - 2020: 0.00
  - 2016-2020: 0.58

**Source:** IATA GADM

Accidents Update: as of 30th June 2021
IOSA Vs. Non-IOSA Accidents
IOSA Vs. Non-IOSA Carriers

All Accident Rate (Jet & Turboprop) for IOSA Operators vs. Non-IOSA, HY 2021

IOSA vs. Non-IOSA Registered - All Accident Rate - Jet&Turboprop

Regional Sector Count Distribution (Percentage)

Source: IATA GADM

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IOSA Vs. Non-IOSA Carriers

All Accident Rate (Jet & Turboprop) for IOSA Operators vs. Non-IOSA, 2016-2021 HY

Source: IATA GADM
10-year Regional Accident Overview
10-year Accident Overview by Region of Operators

ASPAC

LATAM

Accidents Update: as of 30th June 2021

Source: IATA GADM
List of Accidents in HY 2021
## Accident List in HY 2021

<table>
<thead>
<tr>
<th>Date</th>
<th>Month</th>
<th>Region</th>
<th>Operator</th>
<th>Aircraft Type</th>
<th>Propulsion</th>
<th>Severity</th>
<th>Fatalities on Board</th>
<th>IATA</th>
<th>IOSA</th>
<th>Accident Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021-01-09</td>
<td>January</td>
<td>ASPAC</td>
<td>Sriwijaya Air</td>
<td>B737-500</td>
<td>Jet</td>
<td>Hull Loss</td>
<td>62</td>
<td>No</td>
<td>No</td>
<td>Loss of Control In-flight</td>
</tr>
<tr>
<td>2021-01-19</td>
<td>January</td>
<td>EUR</td>
<td>West Atlantic</td>
<td>B737-400</td>
<td>Jet</td>
<td>Hull loss</td>
<td></td>
<td>No</td>
<td>No</td>
<td>Hard Landing</td>
</tr>
<tr>
<td>2021-02-01</td>
<td>February</td>
<td>ASPAC</td>
<td>Nippon Cargo Airlines</td>
<td>B747-8</td>
<td>Jet</td>
<td>Substantial Damage</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Tailstrike</td>
</tr>
<tr>
<td>2021-03-01</td>
<td>March</td>
<td>MENA</td>
<td>Air Algerie</td>
<td>ATR 72</td>
<td>Turboprop</td>
<td>Substantial Damage</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Gear-up Landing / Gear Collapse</td>
</tr>
<tr>
<td>2021-03-02</td>
<td>March</td>
<td>AFI</td>
<td>South Sudan Supreme Airlines</td>
<td>Let L-410</td>
<td>Turboprop</td>
<td>Hull Loss</td>
<td>10</td>
<td>No</td>
<td>No</td>
<td>Loss of Control In-flight</td>
</tr>
<tr>
<td>2021-03-18</td>
<td>March</td>
<td>LATAM</td>
<td>VivaAerobus</td>
<td>A320</td>
<td>Jet</td>
<td>Substantial Damage</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Gear-up Landing / Gear Collapse</td>
</tr>
<tr>
<td>2021-03-20</td>
<td>March</td>
<td>ASPAC</td>
<td>Trigana Air</td>
<td>B737-400</td>
<td>Jet</td>
<td>Substantial Damage</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>RWY Excursion Lateral</td>
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<tr>
<td>2021-04-25</td>
<td>April</td>
<td>ASPAC</td>
<td>Air Falcon</td>
<td>B737-300</td>
<td>Jet</td>
<td>Substantial Damage</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>In-flight Damage</td>
</tr>
<tr>
<td>2021-05-10</td>
<td>May</td>
<td>NASIA</td>
<td>UNI Air</td>
<td>ATR 72</td>
<td>Turboprop</td>
<td>Substantial Damage</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Undershoot</td>
</tr>
<tr>
<td>2021-06-02</td>
<td>June</td>
<td>NAM</td>
<td>Alpine Aviation</td>
<td>B1900</td>
<td>Turboprop</td>
<td>Substantial Damage</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Gear-up Landing / Gear Collapse</td>
</tr>
<tr>
<td>2021-06-14</td>
<td>June</td>
<td>ASPAC</td>
<td>IndiGo</td>
<td>ATR 72</td>
<td>Turboprop</td>
<td>Substantial Damage</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Hard Landing</td>
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<td>2021-06-16</td>
<td>June</td>
<td>AFI</td>
<td>Kin Avia</td>
<td>Let L-410</td>
<td>Turboprop</td>
<td>Hull Loss</td>
<td>3</td>
<td>No</td>
<td>No</td>
<td>Loss of Control In-flight</td>
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</tbody>
</table>