ECONOMIC DEVELOPMENT

OCT 2021: Air Transport Monthly Monitor

World Results and Analyses for AUG 2021. Total scheduled services (domestic and international).

GLOBAL KEY FIGURES

<table>
<thead>
<tr>
<th>GLOBAL KEY FIGURES</th>
<th>AUG 2021 (versus AUG 2019)</th>
<th>OUTLOOK* - SEP 2021 (versus SEP 2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPK</td>
<td>▼-56.0%</td>
<td>▼-43.2%</td>
</tr>
<tr>
<td>ASK</td>
<td>▼-46.2%</td>
<td></td>
</tr>
<tr>
<td>FTK</td>
<td>▲7.7%</td>
<td></td>
</tr>
<tr>
<td>LF: 70.0%</td>
<td>▼-15.7%</td>
<td></td>
</tr>
<tr>
<td>ASK</td>
<td>▼-63.0%</td>
<td>* Source OAG</td>
</tr>
</tbody>
</table>

*UNWTO Definition

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

World passenger traffic fell by -56.0% in August 2021 (compared to 2019), 2.9 percentage points down from the decline in the previous month. This deterioration was mainly attributed to the weakening in domestic markets, particularly the Chinese domestic travel which plunged dramatically due to the new outbreaks and the more stringent travel restrictions. Some other major domestic markets also worsened. International travel, however, continued to improve in most of the regions, except for Asia/Pacific, where restrictions remain stricter than others.

INTERNATIONAL PASSENGER NUMBERS

-80%
-70%
-60%
-50%
-40%
-30%
-20%
-10%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
110%
120%

(Source: ICAO, IATA, OAG)

CAPACITY

Available Seat-Kilometres - ASK

Capacity worldwide fell by -46.2% in August 2021 (compared to 2019), -1.0 percentage point down from the decline in the previous month (-45.2%). With signs of travel rebound towards the end of August, capacity is expected to increase moderately in September 2021 to -43.2% down from the 2019 levels.

LOAD FACTOR

The passenger Load Factor reached 70.0% in August 2021, -3.1 percentage points lower than the previous month. The worsened domestic travel also resulted in a lower domestic load factor.

As the recovery of capacity was faster than travel demand recovery, the August LF remained significantly below 2019 levels at -15.7 percentage points lower.

OUTLOOK: SEP 2021

(FOR AUG 2021)

EASED TRAVEL

Passengers vs. Tourist Arrivals

-57.5% down from the 2019 levels.

RPK (change vs 2019) - percentage points by 58.0% - 70.0%

SEP 2021 - International Air Transport Association; +7.7% in 2021 (compared to 2019) to improve in most of the regions, except for Africa continued to outperform other regions, surpassing the 2019 levels at over +30%, albeit with the smallest share of world cargo traffic. North America and Middle East also rose double-digitally, while growth for Europe and Asia/Pacific airlines remained moderate. Latin America/Caribbean, the region with the second smallest share of world air cargo traffic, continued to be the only region posting contraction from 2019 levels.

Outlook: SEP 2021

(FOR AUG 2021)

World freight traffic reported a growth of +7.7% in August 2021 (compared to 2019), -0.9 percentage point lower than the growth in the previous month. The softening in air cargo growth reflected the slower expansion in export and manufacturing production. Nevertheless, the global demand for goods is expected to be supportive for air cargo growth in the coming months. Africa continued to outperform other regions, surpassing the 2019 levels at over +30%, albeit with the smallest share of world cargo traffic. North America and Middle East also rose double-digitally, while growth for Europe and Asia/Pacific airlines remained moderate. Latin America/Caribbean, the region with the second smallest share of world air cargo traffic, continued to be the only region posting contraction from 2019 levels.

ACRONYMS:

- ICAO: International Civil Aviation Organization
- OAG: Official Airline Guide
- RPK: Revenue Passenger-Kilometres
- ASK: Available Seat-Kilometres
- FTK: Freight Tonne-Kilometres
- LF: Passenger Load Factor
- UNWTO: World Tourism Organization
- YoY: Year-on-year
- YTD: Year-to-date

*Source: ICAO, IATA, OAG

http://www.icao.int/sustainability/Pages/Air-Traffic-Monitor.aspx

Air Transport Bureau
E-mail: ecd@icao.int

Image 15x-54 to 140x15

Image 15x694 to 139x779

Image 18x37 to 601x43
TOP 15 AIRPORTS ( Ranked by aircraft departures, passengers and volume of freight)

AUG 21: -11.9%, -28.0%, and +12.4% (vs. 2019) in terms of aircraft departures, passengers and freight for the Top 15

<table>
<thead>
<tr>
<th>Airports</th>
<th>Departures (ranked by number of departures)</th>
<th>vs. 2019</th>
<th>Airports</th>
<th>Passengers* (ranked by number of passengers)</th>
<th>vs. 2019</th>
<th>Airports</th>
<th>Freight** (ranked by tonnes of freight)</th>
<th>vs. 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago IL, US (ORD)</td>
<td>34,518</td>
<td>-16.8%</td>
<td>Atlanta GA, US (ATL)</td>
<td>3,780,962</td>
<td>-23.5%</td>
<td>Hong Kong SAR, CN (HKG)</td>
<td>426,000</td>
<td>12.6%</td>
</tr>
<tr>
<td>Atlanta GA, US (ATL)</td>
<td>33,664</td>
<td>-16.9%</td>
<td>Denver CO, US (DEN)</td>
<td>2,971,337</td>
<td>-7.9%</td>
<td>Memphis TN, US (MEM)</td>
<td>366,964</td>
<td>0.8%</td>
</tr>
<tr>
<td>Dallas/Fort Worth TX, US (DFW)</td>
<td>29,346</td>
<td>-11.1%</td>
<td>Chicago IL, US (ORD)</td>
<td>2,946,368</td>
<td>-26.2%</td>
<td>Anchorage AK, US (ANC)</td>
<td>321,543</td>
<td>41.8%</td>
</tr>
<tr>
<td>Denver CO, US (DEN)</td>
<td>27,614</td>
<td>-5.3%</td>
<td>Dallas/Fort Worth TX, US (DFW)</td>
<td>2,885,071</td>
<td>-16.0%</td>
<td>Shanghai, CN (PVG)</td>
<td>293,363</td>
<td>0.4%</td>
</tr>
<tr>
<td>Los Angeles CA, US (LAX)</td>
<td>24,855</td>
<td>-19.6%</td>
<td>Los Angeles CA, US (LAX)</td>
<td>2,567,605</td>
<td>-36.9%</td>
<td>Incheon, KR (ICN)</td>
<td>268,438</td>
<td>22.2%</td>
</tr>
<tr>
<td>Charlotte NC, US (CLT)</td>
<td>23,172</td>
<td>-6.2%</td>
<td>Istanbul, TR (IST)</td>
<td>2,272,413</td>
<td>-32.6%</td>
<td>Taipei, CN (TPE)</td>
<td>239,737</td>
<td>31.1%</td>
</tr>
<tr>
<td>Houston TX, US (IAH)</td>
<td>19,429</td>
<td>-4.7%</td>
<td>Antalya, TR (IATA)</td>
<td>2,154,734</td>
<td>-23.3%</td>
<td>Louisville KY, US (LOF)</td>
<td>227,469</td>
<td>-2.6%</td>
</tr>
<tr>
<td>Seattle WA, US (SEA)</td>
<td>18,550</td>
<td>-14.2%</td>
<td>Seattle WA, US (SEA)</td>
<td>2,059,163</td>
<td>-22.0%</td>
<td>Los Angeles CA, US (LAX)</td>
<td>214,618</td>
<td>26.9%</td>
</tr>
<tr>
<td>Phoenix AZ, US (PHX)</td>
<td>18,166</td>
<td>2.9%</td>
<td>Moscow, RU (SVO)</td>
<td>2,006,595</td>
<td>-23.9%</td>
<td>Doha, QA (DOH)</td>
<td>206,265</td>
<td>18.5%</td>
</tr>
<tr>
<td>Las Vegas NV, US (LAS)</td>
<td>17,531</td>
<td>-14.1%</td>
<td>Charlotte NC, US (CLT)</td>
<td>1,967,621</td>
<td>-8.7%</td>
<td>Miami FL, US (MIA)</td>
<td>200,803</td>
<td>22.4%</td>
</tr>
<tr>
<td>Anchorage AK, US (ANC)</td>
<td>17,191</td>
<td>2.3%</td>
<td>Las Vegas NV, US (LAS)</td>
<td>1,905,106</td>
<td>-14.2%</td>
<td>Dubai, AE (DXB)</td>
<td>189,981</td>
<td>-6.4%</td>
</tr>
<tr>
<td>Amsterdam, NL (AMS)</td>
<td>16,776</td>
<td>-28.1%</td>
<td>Amsterdam, NL (AMS)</td>
<td>1,893,608</td>
<td>-44.4%</td>
<td>Chicago IL, US (ORD)</td>
<td>184,549</td>
<td>26.3%</td>
</tr>
<tr>
<td>Miami FL, US (MIA)</td>
<td>16,097</td>
<td>-5.1%</td>
<td>Paris, FR (CDG)</td>
<td>1,775,519</td>
<td>-52.5%</td>
<td>Frankfurt, DE (FRA)</td>
<td>174,288</td>
<td>7.1%</td>
</tr>
<tr>
<td>Istanbul, TR (IST)</td>
<td>15,749</td>
<td>-22.5%</td>
<td>Istanbul, TR (MIA)</td>
<td>1,690,513</td>
<td>-11.7%</td>
<td>Singapore, SG (SIN)</td>
<td>165,500</td>
<td>-2.1%</td>
</tr>
<tr>
<td>Salt Lake City UT, US (SLC)</td>
<td>15,730</td>
<td>1.5%</td>
<td>Frankfurt, DE (FRA)</td>
<td>1,684,194</td>
<td>-51.3%</td>
<td>Guangzhou, CN (CAN)</td>
<td>161,189</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

Note: Total scheduled and non-scheduled services

In terms of aircraft departures, the Top 15 airports reported a combined fall of -11.9%, compared to 2019. The Top 15 list remained dominated by US airports. Three airports, Phoenix, Anchorage and Salt Lake city, posted increases compared to 2019, albeit at a modest rate. Chicago remained 1st with a decline of -16.8%. Amsterdam and Istanbul also ranked within the Top 15.

In terms of passengers, the Top 15 airports posted a total fall of -28.0%, compared to 2019. Unlike the previous months, the list is dominated by US and European airports. For the first time, both Istanbul and Antalya in Turkey ranked within Top 15. Amsterdam, Paris and Frankfurt, also reappeared in Top 15 after over a year. Atlanta remained at 1st with a decline of -23.5%.

In terms of freight, the Top 15 airports reported an increase of +12.4%, compared to 2019. Hong Kong retained the 1st position with a solid growth of +12.6%. Several airports grew double-digitically, with Anchorage and Taipei recording the strongest increase by +41.8% and +31.1%, respectively. Dubai continued to post the largest contraction at -6.4%.

TOP 15 AIRLINE GROUPS (Ranked by RPK)

AUG 21: -47.0% (vs. 2019) in terms of RPK for the Top 15

In terms of RPK, the Top 15 airline groups accounted for 53.4% of the world’s total RPK in August 2021 and declined by -47.0% compared to 2019. This decline was 6.1 percentage points smaller than the fall in world’s average RPK.

Two major factors affected significantly the August rankings. On one side, the Chinese domestic travel fell drastically impacted by the renewed outbreaks; on the other side, the international travel in Europe picked up rapidly.

US airlines retained the Top 4 positions with American ranked 1st followed by Delta, United and Southwest. Jetblue Airways also ranked in the Top 15 supported by the solid domestic demand. Among all Top 15 airlines, Southwest posted the smallest decline compared to 2019 levels.

Chinese domestic travel demand worsened again with far worse deterioration than the previous ones, and all Chinese airlines experienced drastic fall in traffic. As a result, only China Southern and Air China ranked within Top 15, albeit 12th and 15th.

Supported by the pick up of intra-European travel, airlines in Europe moved up their rankings after the US airlines from 5th to 10th. Lufthansa and AF-KLM improved 4 and 2 positions to 5th and 6th, respectively.

Qatar Airways and Emirates ranked 11th and 14th, with the latter recording the largest contraction from 2019 levels.

CAPACITY BY REGION (ICAO Statistical Regions)

AUG 21: -46.2% (vs. 2019) in terms of World ASK

<table>
<thead>
<tr>
<th>% Share of Capacity by Region</th>
<th>% Share of Capacity by Region</th>
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<th>% Share of Capacity by Region</th>
<th>% Share of Capacity by Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>2.6%</td>
<td>Asia/Pacific</td>
<td>19.8%</td>
<td>North America</td>
</tr>
<tr>
<td>Asia/Pacific</td>
<td>19.8%</td>
<td>Europe</td>
<td>31.3%</td>
<td>Latin America/Caribbean</td>
</tr>
<tr>
<td>Europe</td>
<td>31.3%</td>
<td>Middle East</td>
<td>33.1%</td>
<td>Middle East</td>
</tr>
<tr>
<td>Latin America/Caribbean</td>
<td>8.0%</td>
<td>Middle East</td>
<td>33.1%</td>
<td>North America</td>
</tr>
</tbody>
</table>
| Worldwide capacity contracted by -46.2% in August 2021, compared to 2019. This indicated a slight deterioration from July, due to the capacity cut in Asia/Pacific, mainly in Chinese domestic market.
All other regions posted smaller fall in capacity, with the strongest improvements in Europe the Middle East, mostly owing to the expansion in international capacity. |