## ICAO Engine Emissions Databank Record of Changes

<table>
<thead>
<tr>
<th>Issue</th>
<th>Date of publication</th>
<th>Detail of Changes</th>
</tr>
</thead>
</table>
| 26    | 20-Sep-2019         | **Issue 26B implemented on website**  
Corrections of "Superseded by UID" information for engines 6RR042, 13GE158, 18CM084-18CM087  
Current Engine Status updated for engines 6AL013, 6AL016, 6AL020, 13AL017, 11RR049-11RR054, 12RR055-12RR069, 18RR082  
Corrected colour codes for some engines  
Corrected and harmonised data formats in a number of cells, including for UIDs 1RR011, 1KK005, 6AL019, 8GE115-8GE119, 17CM083  
EEDB optionally presented in new format to facilitate filtering and database operations |
| 27-May 2019 | **Issue 26A implemented on website**  
Minor updates of references and test dates in the datasets of PW1500, PW1900 and LEAP-1B |
| 24-May 2019 | **Issue 26 implemented on website**  
New (and or revised) engine data added:  
RRD: BR 700-710D5-21  
CFMI: LEAP-1A  
24, 24E1, 26, 26E1, 26CJ, 29, 29CJ, 35A, 33, 33B2, 32, 30  
LEAP-1B  
21, 23, 25, 27, 28, 28B2, 28B1, 28B3, 28B2C, 28BBJ1, 28BBJ2  
P&W: PW1500  
1519G, 1521G, 1521GA, 1524G, 1525G  
PW1900  
Record UID 14IA018 (V2531-E5) was reset to in-production (no colour code) |
| 25 | 30-May-2018 | **Issue 25A implemented on website**  
Data correction on Trent 1000-TEN and Trent 7000  
Column [CQ] changed |
| 29-May-2018 | **Issue 25 implemented on Website**  
New (revised) engine data added:  
P&W: PW814GA, PW815GA  
R-R: Trent 7000-72, Trent 7000-72C  
Addition H/C ration information on various IA and P&W engines  
PW6122A and PW6124A marked out of production  
Changes in manufacturer names |
<table>
<thead>
<tr>
<th>Issue</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
</table>
| 24    | 17-Nov-2017| **Issue 24 implemented on the website**
New (revised) engine data added:
- CFM: LEAP 1B25; LEAP 1B27; LEAP 1B28; LEAP 1B28/B2
- RR: Trent XWB-75, -79, -79B, -84, and -97; Trent 970, 970B, 972, 972E
- Honeywell: HTF7700L (AS907-2-1s)

Formatting corrections of superseded data |
| 23    | 01-Jun-2017| **Issue 23C implemented on website**
Formatting corrections of some UID fields for consistency |
|       | 07-Apr-2017| **Issue 23B implemented on website**
New (revised) engine data added:
- CFM: LEAP 1A26/26E1; LEAP 1A35A / 33 / 33B2 / 32 / 30
- GE: revised SN data for Genx-1B/P2 engines and GEnx2B67/P |
| 18-Nov-2016 | **Issue 23 implemented on website**
New (revised) engine data added:
- GE: Genx-1B76/P2, Genx-1B76A/P2

Formatting corrections and "out of production" status update |
| 22    | 05-Feb-2016| **Issue 22 implemented on website**
New (revised) engine data added:
- P&W: PW1127G, PW1127G1, PW1130G, PW1133G, PW133G1, PW307D

UID 14IA018: Engine Identification corrected to read V2531-E5
Formatting corrections of some "test date" entries |
| 21    | 10-Feb-2015| **Issue 21B implemented on website**
New (revised) engine data added:
- P&W: PW308C Build Standard 1289 |
|       | 31-Jan-2015| **Issue 21A implemented on website**
New (revised) engine data added:
- Honeywell: HTF7500E (AS907-3-1E-A1); HTF7500E (AS907-3-1E-A2); HTF7500E (AS907-3-1E-A3); HTF7350 (AS907-2-1A)
- IAE: V2531-E5 SelectOne™
- RR plc: Trent 768; Trent 772; Trent XWB-75; Trent XWB-79; Trent XWB-79B; Trent XWB-84

Superseded data: 11HN002 by 11HN003, 11HN004 by 11HN005
Formatting corrections on UID 13GE157, 13GE158;
Issue 20 B implemented on Website

New (revised) engine data added:

- RR Corp.: AE 3007/C2

Record for Genx-1B78/P2 removed; this engine never went into production

UID number correction (UID 13GE156 --> 13GE157; UID GE13GE157 --> 13GE158)

Formatting corrections in Field [Eng Type] correction of misprinted values in dataset 13AA008

Issue 20 A implemented on Website

New (revised) engine data added:

- Aviadgatel: PS-90A; PS-90A1; PS-90A2
- ZMBK: D36 series 4A; D-439-148 F1; D-436-148-F2
- GE:
  - GEnx-1B54/P2; GEnx-1B58/P2; GEnx-1B64/P2; GEnx-1B67/P2; GEnx-1B70/72/P2; GEnx-1B70/75/P2
  - GEnx-1B70/P2; GEnx-1B74/75/P2; GEnx-1B75/P2; GEnx-1B78/P2; GEnx-2B67B; GEnx-2B67/P

- Minor amendment to correct data or data format (e.g. addition of Fuel mass for LTO cycle on UID11BR011)

Issue 19 implemented on Website

New (revised) engine data added:

- GE: GEnx-1B54/P1; GEnx-1B58/P1; GEnx-1B64/P1; GEnx-1B67/P1; GEnx-1B70/72/P1; GEnx-1B70/75/P1; GEnx-1B74/75/P1; GEnx-1B75/P1
- P&W: PW4060; PW4062
- RRD: BR700-725A1-12 revised datasheet
- RR: Trent 1000-A; -C; D; E; -G; -H (revised data for Package B engines)
- RR: Trent 1000-A2; -C2; D2; E2; -G2; -H2; -J2; -K2; L2 (Package C1 engines)
- Minor amendment to correct entries (originally wrongly entered in reverse) for 'significant numbers' and 'number of tests' for some 11 series UID engines [no consequence for calculation of characteristic values]
- Addition of new columns [CY], [CZ], [DA] to indicate NOx compliance paragraph for in-production engines

Addition of certificated NOx compliance paragraph for all in-production engines in the [Remarks] field to show compliance with the CAEP/6 NOx production rule
18 31-Jan-2012 **Issue 18 A implemented on Website**
New engine data added:
- CFM: CFM56-7B20E; -7B22E/B1; -7B24E; -7B2E/B1; CFM56-7B26E; -7B26E/B1; -7B26E/F; -7B26E/B2; CFM56-7B27E; -7B27E/b1; -7B27E; -7B27E/B3; -7B27E; -7B27AE; CFM56-7B27E; -7B27E/F; -7B27E; -7B27E/B1F
- GE: Genx-1B54; -1B58; -1B64; -1B67; -1B70; GE9x-2B67
- GE: CF34-10A16; -10A18; -10E5; 10E6; -10E6A1; -10E7; CF34-10E7-B
- Honeywell: AS907-1A; AS907-2A
- P&W: PW307A
- PowerJet: SaM146-1S17; -1S18
- RR: BR700-725A1-12
- RR: Trent 1000; -C; -D; -E; -G; -H
- RR: TAY611-C

17 10-Dec-2010 **Issue 17A implemented on Website**
New engine data added:
- GE: CF34-10E5; -1E5A1; -E6; -E6A1 and -E7 (with Block 2 engine modifications)
- IAE: V2522-A5; V2524-A5; V2527-A5; -A5E & -A5M; V2730-A5; V2533-A5 (all with SelectOne upgrade package)
- PW: PW4074D; 4077D; 4084D and 4090 (all with Floatwall combustor)
- RR-NA :AE3007A2 (with Type 3 combustor)
- Incorporation of margins to ICAO CAEP/8 NOx standard
- Updates to out-of-production status

16 05-Feb-2009 **Issue 16A implemented on Website**
New engine data added:
- EA: GP7270;
- GE: GE90-76; -77; -85 & -90 (all with 2D turbomachinery & Performance Enhanced Combustor (PEC))
- GE: GE90-76; -77; -85; -90 & -94 (all with 3D turbomachinery and Performance Enhanced Combustor (PEC))
- PW: PW4164-1D; PW4168-1D; PW4168A-1D; PW4170 with Talon II combustor
- RR: Trent 972-84 with Phase 5 tiled combustor
- Addition of Smoke Number individual mode data (where available)
- Minor editorial corrections

15 07-Apr-2008
08-Oct-2007
16-July-2007 **Issue 15-C implemented on Website.**
Addition of new column [BJ] to indicate margin to CAEP/6 NOx standard for existing engine entries. No new engine entries
- Issue 15-B implemented on Website. Minor amendment to correct entries (originally wrongly entered in reverse) for 'number of engines' and 'number of tests' for 8 series new engines; [no consequence for calculation of characteristic values]
- Issue 15-A implemented on website. Many new engine datasets and some corrections to existing entries. See Databank for details

14 06-Jun-2005 **Issue 14 implemented on website.**
New datasheets added: 7PW083-PW6122A; 7PW084 - PW6124A; 7GE097-GE90-110B1; 7GE098 - GE90-113B; 7GE099 - GE90-115B
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-Mar-04</td>
<td><strong>Issue 12 implemented on Website.</strong></td>
</tr>
<tr>
<td>09-Mar-04</td>
<td>New engine data added - CFM56 5C2/P, 5C3/P, 5C4/P, 5B8/P, 5B9/P, 5B9/2P</td>
</tr>
<tr>
<td></td>
<td>1CM006 engine identification changed from CFM56-3C (rerated) to CFM56-3C-1 (rerated)</td>
</tr>
<tr>
<td></td>
<td>1CM004, 005, 006 - additional note, number 4, added.</td>
</tr>
<tr>
<td>23-Dec-03</td>
<td>New engine data added - BR700-710-C4-11</td>
</tr>
<tr>
<td>28-Nov-03</td>
<td><strong>Issue 11 implemented on Website.</strong></td>
</tr>
<tr>
<td>27-Nov-03</td>
<td>New engine data added - Tay 611-8C</td>
</tr>
<tr>
<td>02-Sep-03</td>
<td>Correction to engine identifier for UID 1RR001, M54H corrected to M45H</td>
</tr>
<tr>
<td></td>
<td>Correction to data for engines UID's 3GE067 to 3GE079 to include note showing idle data calculated at normal idle setting rather than 7%.</td>
</tr>
<tr>
<td>01-Sep-03</td>
<td>New engine data added - CF34-8C1 Block 1</td>
</tr>
<tr>
<td>19-May-03</td>
<td><strong>Issue 10 implemented on Website.</strong> No new data at this time.</td>
</tr>
<tr>
<td>12-Feb-03</td>
<td>Data in columns CR and CS changed to date format (previously a mixture of date and text formats).</td>
</tr>
<tr>
<td>04-Feb-03</td>
<td>New engine data added - CF34-8C5, -8E2, -8E5, -8E5A1</td>
</tr>
<tr>
<td></td>
<td>New engine data added - CFM56-5B7/P</td>
</tr>
<tr>
<td></td>
<td>CF6-80E series UID No's 2GE050, 2GE051 and 4GE081 not currently produced with low emissions combustor (1862M39), marked as out of production.</td>
</tr>
<tr>
<td>28-Nov-02</td>
<td>New engine data added - AE3007 family, 20 new entries.</td>
</tr>
<tr>
<td>31-Jul-02</td>
<td>New engine data added - Trent 556-61 with Phase 5 tiled combustor</td>
</tr>
<tr>
<td>17-Jul-02</td>
<td>New engine data added - GE90-76B, -77B, -85B, -90B, -94B with turbomachinery incorporating 3D aero</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
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<tr>
<td>02-Jul-02</td>
<td>Further format changes. No new data at this time.</td>
</tr>
<tr>
<td>27-Mar-02</td>
<td>Rolls-Royce Corporation AE3007C1 added</td>
</tr>
<tr>
<td>8</td>
<td>19-Dec-01 New engine data added - GE90-76B</td>
</tr>
<tr>
<td>27-Nov-01</td>
<td>New engine data added - CF34-3B, CF34-8C1, CF6-80E1A3 Changes to background notes, column descriptions and data base format (data requirements and associated data)</td>
</tr>
<tr>
<td>7</td>
<td>14-Nov-00 New engine data added - PW4098</td>
</tr>
<tr>
<td>27-Oct-00</td>
<td>New engine data added - PW4168 with TALON II combustor.</td>
</tr>
<tr>
<td>6</td>
<td>02-May-00 New engine data added - PW4X58 with TALON II combustor.</td>
</tr>
<tr>
<td>5</td>
<td>29-Feb-00 New engine data added - Trent 895 New engine data added - RB211-535E4 and -535E4B with phase 5 combustor</td>
</tr>
<tr>
<td>2</td>
<td>08-Feb-99 Engine UID 2PW062, CO idle EI and Dp/Foo average were reversed. This has been corrected. New engine data added. Spey 555, standard fuel pump. RB211-524G-T and -524 H-T, BR700-715A1-30, -715B1-30 and -715C1-30 New engine data added. CFM56-5A4, -5A5. CFM56-5B2/2P, -5B3/2P CFM56-7B20/2, -7B22/2, -7B24/2, -7B26/2, -7B27/2. CF6-80E1A4 standard combustor, CF6-80E1A4 low emissions combustor PW4168A</td>
</tr>
<tr>
<td>1</td>
<td>10-Mar-98 First full issue of the databank on the internet</td>
</tr>
</tbody>
</table>