

Part 175.D - Data Product Specification – Aeronautical Data Originators: Aerodrome Operator (Uncertified and Unregistered)

ATS-DPS-0002

Version 2

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Change summary

| Version | Date | Change Description | NRFC |
|---------|-----------------|--|-------|
| 2 | 19 October 2015 | <ul style="list-style-type: none"> Whole Document - editorial and nomenclature changes made throughout the document to improve clarity and lessen the chance of misinterpretation. 4.7 Attribute definitions - editorial and nomenclature changes to improve clarity. Appendix A - nomenclature corrections and changes to improve clarity. | 30407 |

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1 Background

Airservices Australia (Airservices) Aeronautical Information Management business unit, under *the Air Services Act 1995*, provides aeronautical data/information necessary for the safety, regularity and efficiency of air navigation, giving effect to Australia's obligation under *the Chicago Convention on International Civil Aviation*.

Civil Aviation Safety Regulation (CASR) Part 175 under the *Civil Aviation Act 1988* establishes standards and requirements for the quality and integrity of data and information used in air navigation, in particular as published in the Aeronautical Information Publication (AIP), on aeronautical charts and contained within aeronautical navigation databases.

Under CASR Part 175 Airservices must provide an aeronautical data originator (airport owner) with a Data Product Specification (DPS), so that aeronautical data can be obtained through a quality controlled process.

2 Purpose

The purpose of this document is to prescribe the information exchange protocols for the submission, modification and withdrawal of aeronautical data or information which may be published in the Integrated Aeronautical Information Publication (IAIP), or Aeronautical Datasets.

3 Terms and conditions

The term of this DPS starts on the Commencement Date and continues until replaced or revoked, in writing, by Airservices.

4 Data Specification requirements

4.1 Notification date

Information or data can be provided or submitted to Airservices at any time throughout the year. However, the data must be submitted by specific cut-off dates in order to be published in the next available amendment, as detailed in the publication calendar:

<http://www.airservicesaustralia.com/publications/document-amendment-calendar/>

Note:

- 1) Airservices Aeronautical Database is updated in line with the Aeronautical Information Regulation and Control (AIRAC) date; incorporating the new data into our publications every three to six months.
- 2) The AIRAC Effective Date is the internationally agreed date at which time-critical aeronautical documentation, the IAIP, becomes effective. Consequently, CASR Part 175 has regulatory obligations for the AIS Provider and for the Data originator in respect of the AIRAC timing and change management processes.
- 3) Aeronautical Data should be supplied to Airservices for publication in the IAIP and on Aeronautical Charts in alignment with the Aeronautical Information Regulation and Control (AIRAC) list of Effective Dates.

4.2 Data requirements

Data entry format for aeronautical information used in AIP Products is defined in [Appendix A](#). Incomplete information may be returned to the proponent for clarification purposes.

4.3 Electronic format

The authenticated electronic means by which aeronautical information and data is supplied to Airservices is by email. The common method to ensure that Airservices can readily identify any changes from existing published data or information is to use “mark-up” format to indicate where changes are required or to provide complete new text.

4.4 Data alterations and error tracking

Requests for alterations to the aeronautical data are to be communicated to Airservices by email request, in the format as specified in [Appendix A](#), to docs.amend@airservicesaustralia.com

Airservices should be advised of any new, amended, or deleted information.

Airservices should be notified when an error has occurred in the data or information.

Errors detected in the data must also be notified to:

docs.amend@airservicesaustralia.com

4.5 Data verification

Data Originators must nominate to Airservices, persons who have the knowledge and competence to carry out the responsibilities of an “AIP responsible person”. A registration form is available for this purpose and can be requested from Airservices via email: dpsadmin@airservicesaustralia.com

Note: this form is also used for registration of NOTAM authorised person – refer to information on the registration form.

4.6 Data integrity

Source data can only be accepted from the registered Data Originator i.e. aerodrome operator. The aerodrome operator has an enduring responsibility for the accuracy levels of the data or information, and must ensure that the data is reviewed at least annually and immediately inform Airservices of any changes to the data.

4.7 Attribute definitions

Note: Certain elements below have been greyed out to indicate that they are optional and/or not required. They are retained however to demonstrate the scope of information required for elevation to Certified and Registered aerodromes status.

| Attribute | Description |
|---|---|
| Name of Owner/Person Responsible | Name of Owner, Operator or Person Responsible required for traceability |
| Owner/Operator Contact Details | Contact Details of Owner, Operator or Person Responsible |
| ARO | Aerodrome Reporting Officer – Authorised contact person to update or amend information for Aerodrome |
| Landing site ID / 'Y' location code | Aerodrome identification 'Y' code |
| Landing site name | Name of Landing site |
| Landing site Type | ALA (Aircraft landing area), AD (Aerodrome) and HLS (Helicopter landing site) |
| Aerodrome Reference Point (ARP) | The geographic coordinates of the aerodrome reference point must be notified in degrees, minutes, seconds, and 100 th of an arc second; based on the World Geodetic System-1984 (WGS-84). The ARP should be located at or near the centroid of the aerodrome. – Accuracy – 30M surveyed/calculated |
| Status | Uncertified, Registered, or Certified |
| State | State in which the Aerodrome is located |
| Country | Country in which the Aerodrome is located |
| ARP Latitude/Longitude | Geographical position, to be provided in decimal degrees or a hundredth of an arc second. – WGS-84 – Accuracy – 30M surveyed calculated |
| Aerodrome Highest Known Elevation | AD ELEV is shown in FT. When the ELEV is sea level, it will be indicated as 00. When the ELEV is BLW sea level, a minus sign will precede the figure. This figure is the ELEV of the highest point of the landing area AMSL. – Accuracy – 0.5M surveyed |
| Aerodrome Diagram | An aerodrome diagram must be provided to illustrate layout of runways, taxiways, aprons etc. |
| Approach and Runway Lighting | (a) type, length and intensity of approach lighting system; (b) runway threshold lights, colour and wing bars; (c) type of visual approach slope indicator system; (d) length of runway touchdown zone lights; (e) length, spacing, colour and intensity of runway centreline lights; (f) length, spacing, colour and intensity of runway edge lights; (g) colour of runway end lights and wing bars; (h) length and colour of stopway lights; (i) operational specifications |
| Other Lighting and Secondary Power Supply | (a) location, characteristics and hours of operation of aerodrome beacon (if any); (b) lighting systems for taxiways; (c) any other lighting systems; (d) secondary power supply including switch-over time; (e) operational specifications |
| Navigation Aids | Where the aerodrome operator provides a navigation aid (VOR, DME, NDB), the location coordinates and operating frequency must be provided. The location co-ordinates must be notified in degrees, minutes, seconds, and 100 th of an arc second, based on the World Geodetic System – 1984 (WGS-84). – Located at the AD – Accuracy 3M surveyed |
| Collected Data | Method the data was collected – Survey |
| Remarks | Generic remarks regarding: AD charges, Prior Approval, Security Controlled etc. |

| Attribute | Description |
|--|--|
| Ground Services / Handling Services and Facilities | (a) fuel suppliers and their contact details, including after hours; (b) automatic weather information broadcast if provided by aerodrome operator; (c) ground to air communication systems such as Unicom, aerodrome frequency response unit (AFRU) or approved air ground operator service provided by the aerodrome operator, and (d) any other services available to pilots. |
| Special Procedures | Special procedures unique to the aerodrome, which pilots need to be advised; in cases where the flying procedure is generated by the aerodrome operator. |
| Notices | Include important cautionary or administrative information relating to the use of the aerodrome. |
| Meteorological Information | Meteorological Information available |
| Operating Hours | Hours of operation are shown where possible, usually displayed in Remarks. |
| Universal Time Coordinated | UTC – Time conversion-universal time coordinated (UTC) plus local time difference |
| Rescue and fire-fighting services | The category of aerodrome-based rescue and fire-fighting services provided by Airservices Australia or the aerodrome operator and operating hours. |
| Runway Designation | RWY are normally numbered in relation to their magnetic direction rounded off to the nearest 10 degrees. Single runways are shown with the lower number on the left side. Parallel runways designated Left/Right are shown with the left runway listed first. Multiple runways are shown in ascending order from top to bottom. |
| Runway Dimensions | The RWY length is generally the TKOF run (physical length) AVBL for both RWY directions. Runway lengths are shown as multiples of 100 FT. (e.g. Lengths of 6950 FT to 7049 FT are shown as 70, lengths of 7050 FT to 7149 FT are shown as 71.) – RWY Length Accuracy – 1M surveyed The RWY width is the width FM side to side which contains the RWY, the graded and ungraded portions of the RWS, shown in metres only. The GRADED portion of the RWS is defined by boundary markers and is graded to alleviate damage to an ACFT in the event that it runs off the RWY. The UNGRADED portion of the RWS is free of upstanding objects but may contain depressions, trenches, etc. |
| Runway Surface | a or A asphalt or bitumen; b or B concrete; c or C other surfaces (always to be qualified by a note). |
| Pavement Strengths | The ICAO standard method of reporting pavement strength known as Aircraft Classification Number/Pavement Classification Number (ACN/PCN) has been incorporated. |
| Aerodrome Reference Code – Code Number(CN) | A reference code number is provided for each RWY listed in the RDS (in brackets after each RWY designation number). This code number indicates the maximum field length of the aeroplane that the RWY is designed for (based on the performance of the aircraft) |

| Attribute | Description |
|---------------------------|--|
| Runway Declared Distances | <p>TORA (TAKE-OFF RUN AVAILABLE) The length of RWY declared available and suitable for the ground run of an ACFT taking off. (In most cases, this corresponds to the physical length of the RWY pavement.) (excluding clearway and stopway) – Accuracy 1M surveyed</p> <p>TODA (TAKE-OFF DISTANCE AVAILABLE) The length of TKOF run available plus the length of any clearway (CWY) available. – Accuracy 1M surveyed</p> <p>ASDA (ACCELERATE-STOP DISTANCE AVAILABLE) The length of TKOF run available, plus the length of the stopway (SWY), if provided. (Any SWY length included shall be adequate for use by all ACFT which comply with the RWY strength rating.) – Accuracy 1M surveyed</p> <p>LDA (LANDING DISTANCE AVAILABLE) The length of RWY declared available and suitable for the ground run of an ACFT landing (LDG). (In most cases, this corresponds to the physical length of the RWY pavement, THR to RWY end, excluding any displacement of threshold, stopway and clearway) – Accuracy 1M surveyed</p> <p style="text-align: center;"><i>Note.— All declared distances are illustrated for operations from left to right.</i></p> |

5 Definitions

Within this document, the following definitions apply:

| Term | Definition |
|--------|--|
| AIP | Aeronautical Information Publication |
| AIRAC | Aeronautical Information Regulation and Control |
| AMSL | Above Mean Sea Level |
| CASA | Civil Aviation Safety Authority |
| CASR | Civil Aviation Safety Regulation |
| DPS | Data Product Specification |
| IAIP | Integrated Aeronautical Information Package (including AIP charts) |
| UOM | Unit of Measurement |
| WGS-84 | World Geographic System 1984 |

6 References

| Title |
|---|
| ICAO Annex 4: Aeronautical Charts |
| ICAO Annex 14: Aerodromes |
| ICAO Annex 15: Aeronautical Information Services |
| ICAO Doc 8126: Aeronautical Information Services Manual |
| ICAO Doc 8168: Flight procedures |
| CASR Part 139: Aerodromes |
| CASR Part 173: Instrument Flight Procedure Design |
| CASR Part 175: Aeronautical Information Management |
| ISO 9000:2008 Quality Management |
| MOS Part 139: Aerodromes |
| NOTAM Originators Manual http://www.airservicesaustralia.com/wp-content/uploads/NOTAM-Originators-Manual-V1.1.pdf |

Appendix A

A.1 Aerodrome data format prototype

Note: Certain elements below have been greyed out to indicate that they are optional and/or not required. They are retained however to demonstrate the scope of information required for elevation to Certified and Registered aerodromes status.

| REQUIRED INFORMATION | FORMAT | REQUIRED | ACCEPTED CODE LIST | EXAMPLE |
|--------------------------------------|-----------|--------------|--|---|
| Name of Owner/Operator | [CHAR] | Required | Eric Johnston | Sam Smith |
| Owner/Operator Contact Details | [CHAR] | Required | Xx xxxx Xxxxx 02 6494 9733 | Address: 123 Aerodrome Lane, Suburb ACT 2601 Ph: 02 6200 0000 Email: smith@email.com.au |
| Aerodrome Reporting Officer(s) (ARO) | [CHAR] | Not Required | | Sam Smith, John Smith and Sally Smith |
| Aerodrome Name | [CHAR] | Required | Frogs Hollow Bega | Aerodrome Hills |
| Aerodrome 'Y' code | [CHAR] | Required | YFGS | YXXX |
| Aerodrome Type | [CHAR] | Required | ALA | ALA, AD, HLS |
| Collected Data | [CHAR] | Required | Surveyed Declared Calculated | Surveyed |
| Aerodrome Usage Classification | | | CERT Certified Aerodrome PUBLIC AVBL all classes of OPS PVT (PRIVATE) – PPR from Facility Operator REG Registered Aerodrome MIL (MILITARY) – PPR for civil OPS class UNCR Uncertified or Unregistered JOINT Civil/Military Aerodrome OTHR Certain Other | |
| State | [CHAR] | Optional | NSW – New South Wales | ACT |
| Country | [CHAR] | Optional | AUS – AUSTRALIA | AUS |
| Horizontal Datum | [CHAR] | Not Required | WGS-84 | WGS-84 |
| ARP Latitude | [LAT] | Required | [S]36 45 35.00 | S34 17 41.20 |
| ARP Longitude | [LONG] | Required | [E]149 48 15.00 | E148 51 34.60 |
| Aerodrome Highest Known Elevation | [Integer] | Required | AMSL UOM = FT - Feet | 444 FT |
| Operating Hours | [CHAR] | Not Required | | Aerodrome Operating Hours 2200-1300 MON-THU, 2200-0430 FRI |
| UTC Time | [CHAR] | Not Required | Time conversion-universal time coordinated (UTC) plus local time difference | NSW –UTC+10 |

| REQUIRED INFORMATION | FORMAT | REQUIRED | ACCEPTED CODE LIST | EXAMPLE |
|-----------------------------------|--------|--------------|--|---|
| Aerodrome Obstacle | [CHAR] | Optional | | OBST BLDG HGT 591FT AMSL BRG 055DEG M 8,355M FM SOT RWY 05. Lit. |
| Aerodrome Obstacle Lighting | [CHAR] | Not Required | HIOL High Intensity Obstacle Lights (flashing white) MIOL Medium intensity obstacle lights (flashing red) LIOL Low intensity obstacle lights (steady red). | |
| Landing Charges | [CHAR] | Optional | | All ACFT |
| Rescue and Fire fighting Services | [CHAR] | Optional | CAT 1-10 | CAT 2 |
| Aerodrome and Approach Lighting | [CHAR] | Not Required | SDBY PWR AVBL Standby power available ABN Aerodrome Beacon AFRU + PAL (FREQ) Aerodrome Frequency Response Unit plus PAL AL Approach Lights (other than high intensity approach lights) AT-VASIS Abbreviated (Singed Sided) T pattern Visual Approach Slope Indicator System FDL Fixed Distance Lighting HIAL-CAT I High Intensity Approach Lights – CAT I HIAL-CAT II or III High Intensity Approach Lights – CAT II or III HIRL High Intensity Runway Lights (5 or 6 stages of intensity) HSL Hold Short Lights used in conjunction with Land and Hold Short Operations (LAHSO) LIRL Low Intensity Runway Lights (single stage of intensity) MIRL Medium Intensity Runway Lights (three stages of intensity) PAL (FREQ) Pilot Activated Aerodrome Lighting (with dedicated frequency) PAPI PAPI Visual Approach Slope Indicator System PAPI# PAPI commissioned by ground survey (not available to RPT jets). Report any anomalies to AD OPR. PTBL Portable or temporary lights (flares or battery) RCGL Runway Circling Guidance Lights RCLL Runway Centre Line Lights REDL Runway Edge Lights RGL Runway Guard Lights (Alternating Flashing Yellow) RLLS Runway Lead-in Lighting RTIL Runway Threshold Identification Lights (flashing white) RTZL Runway Touchdown Zone Lights SALS Simple Approach Lighting System SFL Sequenced Flashing Lights STWL Stopway Light(s) T –VASIS T pattern Visual Approach | RWY 08/26 PTBL – by prior arrangement RWY edge light spacing: 17/35: 60M; 12/30: 90M. RWY edge light colour: RWY 35 Edge LGT – Red BTN beginning of RWY pavement and DTHR; White BTN DTHR and 600M FM RWY end; Yellow for last 600M. |

| REQUIRED INFORMATION | FORMAT | REQUIRED | ACCEPTED CODE LIST | EXAMPLE |
|-----------------------------------|--------|----------|--|--|
| | | | Slope Indicator System Taxiways Centreline lights are green and edge lights are blue | |
| Remarks | [CHAR] | Optional | | This AD is a Security Controlled Airport |
| Ground Services | [CHAR] | Optional | | AIRPORT FUEL FACILITY: Phone 02 6200 0000, FAX 6200 0000, Managing Agent Caltex. Caltex – JET A1, Shell – JET A1, Aero Refuellers – AVGAS via bowser only. AVGAS self serve (accepts Aero Refuel Card, V and MC – unsuitable for fixed wing aircraft with wing span greater than 12M). |
| Additional Information | [CHAR] | Optional | | Possibility of Kangaroos on movement area. |
| Radio Navigation and Landing Aids | [CHAR] | Optional | | 1. VOR CB 116.7 S35 16.9 E149 11.7 2. DME CB 116.7/114X S35 16.9 E149 11.8 3. Outside TWR HR all NAVAIDS are Pilot Monitored. The location coordinates must be notified in degrees, minutes, seconds, and 100 th of an arc second. Coordinates will only be published in degrees, minutes, and 10 th of a minute. |
| Local Traffic Regulations | [CHAR] | Optional | | 1. High terrain in CCT area. All CCTs left hand. 2. All aircraft must provide their parked position/gate number to ATC on acknowledgement of airways clearance. All right hand CCT operations must be approved by CASA. |
| Flight Procedures | [CHAR] | Required | | Low Visibility Operations For CASA APV operators, all RWYs are capable of supporting low VIS take-offs without limit, however only: a. RWY 16 and 27 are normally used for low VIS departures; and b. RWY 16 is capable of supporting localiser guided take-offs. |

| REQUIRED INFORMATION | FORMAT | REQUIRED | ACCEPTED CODE LIST | EXAMPLE |
|---|--------|----------|--------------------|---|
| Charts Related to Aerodrome (Type A/B Charts and DAP/WAC) | [CHAR] | Required | | Aerodrome Obstruction Chart Type A: RWY 12 Edition 3 (November 2008). RWY 30 Edition 5 (March 2012) |

A.2 Runway

| REQUIRED INFORMATION | FORMAT | REQUIRED | ACCEPTED CODE LIST | EXAMPLE |
|---|-----------|--------------|--|-----------|
| RWY Designation (ID) | [CHAR] | Required | | 01/19 |
| RWY Surface | [CHAR] | Not Required | | A |
| Pavement Type for ACN-PCN Determination | [CHAR] | Not Required | Pavement type Code Rigid pavement R Flexible pavement F | F |
| Subgrade Strength Category | [CHAR] | Not Required | Subgrade strength category Code High strength A Medium strength B Low strength C Ultra low strength D | B |
| Maximum Tyre Pressure | [Integer] | Not Required | <i>UOM – Kpa – Kilopascals</i> | 1,750 Kpa |
| RWY Length | [Integer] | Not Required | <i>UOM – M – Metres</i> | 2,530M |
| RWY Width | [Integer] | Not Required | <i>UOM – M – Metres</i> | 45M |
| RWY Strip Graded Width | [Integer] | Not Required | <i>UOM – M – Metres</i> | 150M |
| RWY Strip Width | [Integer] | Not Required | <i>UOM – M – Metres</i> | 300M |

A.3 Runway direction

| | | | | |
|---|-----------|--------------|---|---|
| RWY Direction Designation (ID) | [CHAR] | Required | | 01 |
| Threshold / Helipad Latitude | [LAT] | Not Required | [S]DD MM SS.SS | S35 17 25.22 |
| Threshold / Helipad Longitude | [LONG] | Not Required | [E]DDD MM SS.SS | E149 11 40.01 |
| Displaced Threshold Latitude | [LAT] | Not Required | [S]DD MM SS.SS | S35 17 25.22 |
| Displaced Threshold Longitude | [LONG] | Not Required | [E]DDD MM SS.SS | E149 11 40.01 |
| RWY End Latitude | [LAT] | Not Required | [S]DD MM SS.SS | S35 17 25.22 |
| RWY End Longitude | [LONG] | Not Required | [E]DDD MM SS.SS | E149 11 40.01 |
| Threshold Elevation | [Integer] | Not Required | UOM; FT – Feet | 16.00 FT |
| RWY Slope | [CHAR] | Not Required | | RWY 12/30 - 0.7% down to NW |
| Aerodrome Reference Code – Code Number (CN) | [Integer] | Not Required | 1 - Field length of less than 800M 2 - Field length of 800M up to, but not including, 1200M 3 - Field length of 1200M up to but not including 1800M. 4 - Field length of 1800M and over. | 2 |
| TORA (Take-Off run available) | [Integer] | Not Required | UOM - M - Metres | 2,530M |
| TODA (Take-Off distance available) | [Integer] | Not Required | UOM - M - Metres | 2,620M |
| TODA Gradient | [Integer] | Not Required | | 4.85% |
| ASDA (Accelerate-Stop distance available) | [Integer] | Not Required | UOM - M - Metres | 2,560M |
| LDA (Landing distance available) | [Integer] | Not Required | UOM - M - Metres | 2,530M |
| STODA – (Supplementary Take-Off distance available) | [Integer] | Not Required | 1.6 1.9 2.2 2.5 3.3 5.0 UOM - M - Metres | RWY 05 - 2389(7838)(1.6%) 2547(8356)(1.9%) |

Copies of AIP, ERSA, DAP and DAH are available for review:

<http://www.airservicesaustralia.com/publications/aeronautical-information-package-aip/>