





Eleventh Meeting of the ICAO/MIDANPIRG AIM Sub-Group (AIM SG/11)

Amman, Jordan, 22-23 January 2025

The two Elements of Aerodrome Reference Code (ARC)

Code: Number and Letter

The Aerodrome Reference Code consists of two components:

- Number (1 to 4): This number corresponds to the Aeroplane with the highest reference field length for which the airport is designed.
- Letter (A to F): This letter indicates the greatest wingspan of the Aeroplanes for which the facility is intended.



The two Elements of Aerodrome Reference Code (ARC)

Code: Number and Letter

Element 1: Code Number (Based on Runway Length)

- Code 1: Less than 800m
- Code 2: 800m to <1,200m
- Code 3: 1,200m to <1,800m
- Code 4: 1,800m and over

Element 2: Code Letter (Based on Wingspan)

- Code A: Up to <15m
- Code B: 15m to <24m
- Code C: 24m to <36m</p>
- Code D: 36m to <52m
- Code E: 52m to <65m
- Code F: 65m to <80m</p>

Note: This letter is also used in many AIS publications to specify aircraft usage restrictions (such as "TWY used only for code C aircraft" or "Aircraft code F are subject to a special permission", etc.)



Aerodrome Reference Code (ARC) in ICAO PANS-AIM

ARC in aerodrome data catalogue

PANS-AIM (ICAO DOC 10066), paragraph 5.3.3.1AIP data set

Minimum data items:

g) Runway (designator, nominal length, nominal width, surface type, strength)



Aerodrome Reference Code (ARC) in ICAO PANS-AIM appendix 1

ARC in aerodrome data catalogue

The airport reference code is specified in the PANS-AIM (ICAO DOC 10066) aeronautical data catalogue, located in the Aerodrome-Heliport section, as a property of a runway subject. This code is an additional data item (optional) that may be required for the AIP dataset of specific interest.

Table A1-1 Aerodrome/Heliport data

- Rows 51, 52 and 53
- Subject: Runway

Propriety: Reference Code

	Reference Code			The intent of the reference code is to provide a simple method for interrelating the numerous
				specifications concerning the characteristics of aerodromes so as to provide a series of
				aerodrome facilities that are suitable for the aeroplanes that are intended to operate at the
				aerodrome
		Number	Code list	A number based on the aeroplane reference field length
		Letter	Code list	A letter based on the aeroplane wingspan and outer main gear wheel span



Aerodrome Reference Code (ARC) in AIP

Publication of ARC

- The airport reference code is not mandated by ICAO to be published in the AIP.
- Some states include this information in their AIP, providing details for each runway separately.



Aerodrome Reference Code (ARC) and AIXM

AIXM 5.2 Improvements

- To facilitate the publication of the airport reference code, two new attributes are required in the Runway feature, each representing one component of the reference code.
- To ensure alignment with the ICAO list, a change proposal (AIXM-398) for the upcoming AIXM 5.2 version has been approved by the AIXM Change Control Board.
- These two new attributes will be added to the Runway feature to designate the Aerodrome Reference Code, as specified in ICAO Annex 14, Volume 1, item 1.6.



Aerodrome Reference Code (ARC) and AIXM

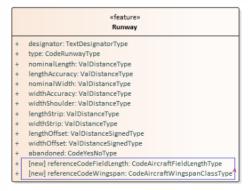
AIXM 5.2 Improvements

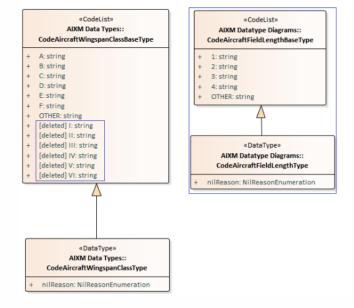
Change proposal for the upcoming AIXM 5.2 version:

New:

referenceCodeFieldLength

referenceCodeWingspan







Aerodrome Reference Code (ARC) publication need

ARC essential for publication

The Airport Reference Code (ARC) has become essential for publication in the AIP for the following reasons:

- Compliance with ICAO PANS-AIM: It provides information as outlined in ICAO PANS-AIM Appendix 1
 (aeronautical data catalogue).
- User Facilitation: It helps facilitate access to critical information for pilots and users.
- **Support for AIXM 5.2 Coding:** It supports the implementation of AIXM 5.2 coding standards.



Action by the meeting

The meeting is invited to:

- Acknowledgment: Take note of this working paper
- Encourage the States to recommend the publication of the Aerodrome Reference Code (ARC) in the AIP as follows:
 - Phase 1: publication of ARC as text in the remarks of AD 2.2
 - Phase 2 : publication of ARC in the AIP data set.



Thank You



