

ARINC 424 NDB

**Draft 1 of Supplement 23
Discussion/Proposal**

**Location Gdansk, Poland
October 9-11, 2018**

MISCELLANEOUS CLARIFICATIONS / CORRECTIONS

V.1

Kevin Wells

SUMMARY
Minor clarification and corrections in various sections of the ARINC 424 specification.

1.0 INTRODUCTION/ BACK GROUND

These changes are minor clarifications and corrections in various sections of the ARINC 424 specification.

2.0 DISCUSSION and or ACTION

These changes are minor clarifications and corrections in various sections of the ARINC 424 specification.

3 Changes as depicted (Track Changes is Helpful)

5.249 ~~Longest~~ Runway Surface Code (LRSC)

Definition/Description: On Airport Records, the Longest Runway Surface Code field is used to define whether or not there is a hard surface runway at the airport, the length of which is indicated in the Longest Runway field.

On Runways Continuation ~~records~~Records, the Runway Surface Code field is used to define whether ~~or not~~ the runway described in the record is a hard surface, **soft surface, or water** runway.

On Helipad ~~records~~Records, the Helipad Surface Code field is used to define whether ~~or not~~ the helipad described in the record is a hard surface, **soft surface, or water** helipad.

Source/Content: The content will be selected from the table below.

Field Content	Description
.H	Hard Surface, for example, asphalt or concrete
S	Soft Surface, for example, gravel, grass or soil
W	Water Runway
U	Undefined, surface material not provided in source

Used On: Airport Records, Runway Continuation Records, Airport, and Heliport Helipad Records

Length: 1 character

Character Type: Alpha

4.2.5.2 Heliport Communications **Primary Extension** Continuation Records

5.287 Type Recognized By (TRB)

Definition/Description: The Type Recognized By field is used to provide an indication of the provider of a given Communications Type (5.101).

Source/Content: ^{c-4} The field content will be derived from the official government source used to establish the Communications Type and will be selected from the table below:

Field Content	Description
I	The Communications Type is found in government source provided in accordance with ICAO standards.
F	The Communications Type is found in government source provided in accordance with US FAA standards.
B	The Communications Type is found in government source provided in accordance with both ICAO and US FAA standards.
C	The Communications type is found in government source provided by the country in which the communications is used.
Q	The Communications type is found in government source provided by the country in which the communications is used.
S	The Communications Type has been established by the data supplier.

Used On: Communications Type Translation Table Records
 Length: 1 character
 Character: Alpha
 Type:

4.1.5.1 Holding Pattern Primary Records

Column	Field Name (Length)	Reference
1	Record Type (1)	5.2
2 thru 4	Customer/Area Code (3)	5.3
5	Section Code (1)	5.4
6	Subsection Code (1)	5.5
7 thru 10	Region Code (4)	5.41 Note 1
11 thru 12	ICAO Code (2)	5.14 Note 1
13 thru 27	Blank (Spacing) (15)	
28 thru 29	Duplicate Identifier -Indicator (2)	5.114

5.114 Duplicate Indicator (DUP IND)

Definition/Description: The Duplicate ~~Identifier~~-Indicator field is used to further define holding patterns when official government source has designated more than one Holding Pattern on a Navaid or Waypoint.

Source/Content: Holding Patterns are derived from official government sources documents. That documentation will normally specify the airspace structure in which the holding is to be used. That documentation may also designate more than one Holding Pattern for a single Navaid or Waypoint. This field will contain details on airspace structure and multiple designations. More than one holding is designated on a single fix when one or more of the following elements are different for holdings within the same airspace structure. Inbound Holding Course, Turn Direction, Altitude, Leg Length or Leg Time, and Holding Speed.

4.1.33.1

Special Activity Area Primary Record

Column	Field Name (Length)	Reference
1	Record Type (1)	5.2
2 thru 4	Customer /Area Code (3)	5.3
5	Section Code (1)	5.4
6	Subsection Code (1)	5.5
7	SAA Type (1)	5.278
8 thru 13	SAA Identifier (6)	5.279
14 thru 15	ICAO Code (2)	5.14
16 thru 19	Airport Identifier (4)	5.6
20 thru 21	ICAO Code (2)	5.14
22	Continuation Record No. (1)	5.16
23	Blank (Spacing) (1)	
24 thru 32	Latitude (9)	5.36
33 thru 42	Longitude (10)	5.37
43 thru 45	SAA Size (3)	5.280
46 thru 51	Upper Limit (5)	5.121
52	Unit Indicator (1)	5.133
53	SAA Volume (1)	5.281
54 thru 56	Operating Times (3)	5.282
57	Public or Military (1)	5.177
58	Blank (Spacing) (1)	
59 thru 83	Controlling Agency (25)	5.140
84 thru 86	Communication Type (3)	5.101
87 thru 93	Communication Frequency (7)	5.103
94 thru 123	Special Activity Area Name (30)	5.126
124 thru 128	File Record No. (5)	5.31
129 thru 132	Cycle Date (4)	5.32

5.0 Navigation data – field definitions

5.1 General

Section sets forth definitions/descriptions and content for each type of field employed in the records discussed in Chapter 4. The following information is presented for each field:

- a. Field Name (section heading)
- b. Abbreviation used in proportional record layouts (Chapter 4) when different than Field Name (follows section heading)
- c. Field Definition/Description
- d. Source/Content of each field
- e. Length of field, expressed in number of characters
- f. Type of character allowed in each field, alpha or numeric or alpha/numeric
- g. Examples of field content when appropriate and/or necessary

The following general rules apply to the format of all the fields:

- a. All numeric fields and the numeric parts of latitude, longitude, magnetic variation, negative elevation, and station declination fields will be right justified and filled with leading zeros.

b. All alpha and alpha/numeric fields will be left justified.

~~c. — Allowable field content of blank is defined as alpha/numeric content.~~

[Note: in the current specification, most fields specified as “alpha/numeric” require numbers in some use cases. For those fields specified as “alpha/numeric” that do not require numeric characters, the specification could be changed to “alpha.” I could not find an example.]

4.1.32.4 TACAN-Only NAVAID Flight Planning Continuation Records

This Continuation Record is used to indicate the FIR and UIR within which the VHF NAVAID defined in the Primary Record is located ~~and the Start/End validity dates/times of the Primary Record.~~

Column	Field Name (Length)	Reference
1 thru 21	Fields as on Primary Records	
22	Continuation Record No. (1)	5.16
23	Application Type (1)	5.91
24 thru 27	FIR Identifier (4)	5.116
28 thru 31	UIR Identifier (4)	5.116
32	Start/End Indicator (1)	5.152
33-32 thru 43	Blank (Spacing) (11 12)	
44 thru 123	Reserved (Expansion) (80)	
124 thru 128	File Record No. (5)	5.31
129 thru 132	Cycle Date (4)	5.32