

ARINC 424 NDB

**Draft 4 of Supplement 23
Proposal**

**Location Virtual Meeting
October 4-7, 2021**

ADD NARRATIVE TIME CONTINUATION RECORDS

V.1

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SUMMARY
This proposal aims at further harmonizing the times of operation coding, and to remove some legacy elements no longer required.

1.0 INTRODUCTION/ BACK GROUND

During the review of draft 3 and the writing of the proposal to update chapter 4, I noticed that the Enroute Airway Restriction chapter could be improved.

- 1) The newly added “Formatted Time” continuation records included gaps in the columns. The application type is in position 19, while the next field starts in 27. I moved everything up to start in position 20.
- 2) Added Narrative Times of Operation to each Formatted Time of operation.
- 3) In 4.1.21.2, positions 94 and 95 should be blank. Because the record will always be a continuation of the primary record, the exclusion indicator and the altitude unit must be the same.
- 4) The Seasonal Closure Primary Record (4.1.21B.1) should not have a cruising table field. If a cruising table replacement is applicable at the same time, a separate restriction record (4.1.21C.1) should be added.
- 5) Due to the fact that the Cruising Table replacement restriction only requires one Cruising Table Ident, I would propose to delete the previously changed 4.1.21C.2 and use it as the formatted time continuation record. In case the narrative time continuation record was approved, I would propose to change that number to 4.1.21C3. In case the numbering change is not approved, I still believe the “Enroute Airways Restriction Cruising Table Replacement Primary Continuation Records” is not required.
- 6) I would like to add the Time Code (5.131), Time Indicator (5.138) and NOTAM (5.132) to the narrative continuation records. I believe it could be beneficial, if the indication whether a time is in local time or UTC, or if it includes holidays or not, is still easier to encode in a field compared to need to write in text. This would be handed in as a separate proposal, if the group agrees.

2.0 DISCUSSION and or ACTION

Please review the proposed changes. Also, please consider if you agree that the addition of the Time Code (5.131), Time Indicator (5.138) and NOTAM (5.132) fields to the free text continuation records is beneficial.

3.0 Changes as depicted (Track Changes is Helpful)

4.1.21 Enroute Airways Restriction Records (EU)

4.1.21.1 Enroute Airways Restriction Altitude Exclusion Primary Records

Column	Field Name (Length)	Reference	Required
1	Record Type (1)	5.2	Y
2 thru 4	Customer/Area Code (3)	5.3	Y
5	Section Code (1)	5.4	Y
6	Subsection Code (1)	5.5	Y
7 thru 11	Route Identifier (5)	5.8	Y
12	Reserved (1)	Note 1	
13 thru 15	Restriction Identifier (3)	5.154	Y
16 thru 17	Restriction Type (2)	5.201	Y
18	Continuation Record No. (1)	5.16	Y
19 thru 23	Start Fix Identifier (5)	5.13	
24 thru 25	Start Fix ICAO Code (2)	5.14	
26	Start Fix Section Code (1)	5.4	
27	Start Fix Subsection Code (1)	5.5	
28 thru 32	End Fix Identifier (5)	5.13	
33 thru 34	End Fix ICAO Code (2)	5.14	
35	End Fix Section Code (1)	5.4	
36	End Fix Subsection Code (1)	5.5	
37	Blank (Spacing) (1)		
38 thru 44	Start Date (7)	5.157	
45 thru 51	End Date (7)	5.157	
52	Time Code (1)	5.131	
53 thru 93	Blank Spacing (41)		
94	Exclusion Indicator (1)	5.202	
95	Units of Altitude (1)	5.160	
96 thru 98	Restriction Altitude (3)	5.161	
99	Block Indicator (1)	5.203	
100 thru 102	Restriction Altitude (3)	5.161	
103	Block Indicator (1)	5.203	
104 thru 106	Restriction Altitude (3)	5.161	
107	Block Indicator (1)	5.203	
108 thru 110	Restriction Altitude (3)	5.161	
111	Block Indicator (1)	5.203	
112 thru 114	Restriction Altitude (3)	5.161	
115	Block Indicator (1)	5.203	
116 thru 118	Restriction Altitude (3)	5.161	
119	Block Indicator (1)	5.203	
120 thru 122	Restriction Altitude (3)	5.161	
123	Block Indicator (1)	5.203	
124 thru 128	File Record Number (5)	5.31	Y
129 thru 132	Cycle Date (4)	5.32	Y

Note 1: The standard length for the Route Identifier is five characters. Some users envisage the need for a six-character field. This reserved column will permit this usage.

4.1.21.2 Enroute Airways Restriction Altitude Exclusion Primary Extension Continuation Records

Column	Field Name (Length)	Reference	Required
1 thru 17	Fields as on Primary Records		Y
18	Continuation Record No. (1)	5.16	Y
19	Application Type (1) E—Primary Record Extension	5.91	Y
20 thru 93 95	Reserved (Expansion) (74 76)		
94	Exclusion Indicator (1)	5.202	
95	Units of Altitude (1)	5.160	
96 thru 98	Restriction Altitude (3)	5.161	
99	Block Indicator (1)	5.203	
100 thru 102	Restriction Altitude (3)	5.161	
103	Block Indicator (1)	5.203	
104 thru 106	Restriction Altitude (3)	5.161	
107	Block Indicator (1)	5.203	
108 thru 110	Restriction Altitude (3)	5.161	
111	Block Indicator (1)	5.203	
112 thru 114	Restriction Altitude (3)	5.161	
115	Block Indicator (1)	5.203	
116 thru 118	Restriction Altitude (3)	5.161	
119	Block Indicator (1)	5.203	
120 thru 122	Restriction Altitude (3)	5.161	
123	Block Indicator (1)	5.203	
124 thru 128	File Record No. (5)	5.31	Y
129 thru 132	Cycle Date (4)	5.32	Y

4.1.21.3 Enroute Airways Restriction Altitude Exclusion Formatted Time Continuation Records

Column	Field Name (Length)	Reference	Required
1 thru 17	Fields as on Primary Records		Y
18	Continuation Record Number (1)	5.16	Y
19	Application Type (1) T – Formatted Time Data	5.91	Y
20	Time Code (1)	5.131	
21	Time Indicator (1)	5.138	
22	Blank (Spacing) (1)		
23 thru 32	Time of Operations (10)	5.195	
33 thru 42	Time of Operations (10)	5.195	
43 thru 52	Time of Operations (10)	5.195	
53 thru 62	Time of Operations (10)	5.195	
63 thru 72	Time of Operations (10)	5.195	
73 thru 82	Time of Operations (10)	5.195	
83 thru 92	Time of Operations (10)	5.195	
93 thru 95	Time Zone (3)	5.178	
96 thru 123	Blank (28)		
124 thru 128	File Record Number (5)	5.31	Y
129 thru 132	Cycle Date (4)	5.32	Y

4.1.21.4 Enroute Airways Restriction Altitude Exclusion Narrative Time Continuation Records

Column	Field Name (Length)	Reference	Required
1 thru 17	Fields as on Primary Records		Y
18	Continuation Record Number (1)	5.16	Y
19	Application Type (1) U – Narrative Time Data	5.91	Y
20 thru 22	Reserved (Expansion) (3)		
23 thru 119	Narrative Time (97)	5.285	
120 thru 123	Reserved (Expansion) (4)		
124 thru 128	File Record Number (5)	5.31	Y
129 thru 132	Cycle Date (4)	5.32	Y

4.1.21A.1 Enroute Airways Restriction Note Restriction Primary Records

Column	Field Name (Length)	Reference	Required
1	Record Type (1)	5.2	Y
2 thru 4	Customer/Area Code (3)	5.3	Y
5	Section Code (1)	5.4	Y
6	Subsection Code (1)	5.5	Y
7 thru 11	Route Identifier (5)	5.8	Y
12	Reserved (1)	Note 1	
13 thru 15	Restriction Identifier (3)	5.154	Y
16 thru 17	Restriction Type (2)	5.201	Y
18	Continuation Record No. (1)	5.16	Y
19 thru 23	Start Fix Identifier (5)	5.13	
24 thru 25	Start Fix ICAO Code (2)	5.14	
26	Start Fix Section Code (1)	5.4	
27	Start Fix Subsection Code (1)	5.5	
28 thru 32	End Fix Identifier (5)	5.13	
33 thru 34	End Fix ICAO Code (2)	5.14	
35	End Fix Section Code (1)	5.4	
36	End Fix Subsection Code (1)	5.5	
37	Blank (Spacing) (1)		
38 thru 44	Start Date (7)	5.157	
45 thru 51	End Date (7)	5.157	
52 thru 120	Restriction Notes (69)	5.163	
121 thru 123	Blank (Spacing) (3)		
124 thru 128	File Record Number (5)	5.31	Y
129 thru 132	Cycle Date (4)	5.21	Y

Note 1: The standard length for the Route Identifier is five characters. Some users envisage the need for a six-character field. This reserved column will permit this usage.

4.1.21A.2 Enroute Airways Restriction Note Restriction Continuation Records

Column	Field Name (Length)	Reference	Required
1 thru 17	Fields as on Primary Records		Y
18	Continuation Record No. (1)	5.16	Y
19	Application Type (1)	5.91	Y
20 thru 51	Reserved (Expansion) (32)		
52 thru 120	Restriction Notes (69)	5.163	
121 thru 123	Blank (Spacing) (3)		
124 thru 128	File Record Number (5)	5.31	Y
129 thru 132	Cycle Date (4)	5.32	Y

4.1.21B.1 Enroute Airways Restriction Seasonal Closure Primary Records

Column	Field Name (Length)	Reference	Required
1	Record Type (1)	5.2	Y
2 thru 4	Customer/Area Code (3)	5.3	Y
5	Section Code (1)	5.4	Y
6	Subsection Code (1)	5.5	Y
7 thru 11	Route Identifier (5)	5.8	Y
12	Reserved (1)	Note 1	
13 thru 15	Restriction Identifier (3)	5.154	Y
16 thru 17	Restriction Type (2)	5.201	Y
18	Continuation Record No. (1)	5.16	Y
19 thru 23	Start Fix Identifier (5)	5.13	
24 thru 25	Start Fix ICAO Code (2)	5.14	
26	Start Fix Section Code (1)	5.4	
27	Start Fix Subsection Code (1)	5.5	
28 thru 32	End Fix Identifier (5)	5.13	
33 thru 34	End Fix ICAO Code (2)	5.14	
35	End Fix Section Code (1)	5.4	
36	End Fix Subsection Code (1)	5.5	
37	Blank (Spacing) (1)		
38 thru 44	Start Date (7)	5.157	
45 thru 51	End Date (7)	5.157	
52	Time Code (1)	5.131	
53 thru 93	Blank (Spacing) (41)		
94 thru 95	Cruise Table Ident (2)	5.134	
96-53 thru 123	Blank (Spacing) (28 71)		
124 thru 128	File Record Number (5)	5.31	Y
129 thru 132	Cycle Date (4)	5.32	Y

Note 1: The standard length for the Route Identifier is five characters. Some users envisage the need for a six-character field. This reserved column will permit this usage.

4.1.21B.2 Enroute Airways Restriction Seasonal Closure Formatted Time Continuation Records

Column	Field Name (Length)	Reference	Required
1 thru 17	Fields as on Primary Records		Y
18	Continuation Record Number (1)	5.16	Y
19	Application Type (1) T – Formatted Time Data	5.91	Y
20	Time Code (1)	5.131	
21	Time Indicator (1)	5.138	
22	Blank (Spacing) (1)		
23 thru 32	Time of Operations (10)	5.195	
33 thru 42	Time of Operations (10)	5.195	
43 thru 52	Time of Operations (10)	5.195	
53 thru 62	Time of Operations (10)	5.195	
63 thru 72	Time of Operations (10)	5.195	
73 thru 82	Time of Operations (10)	5.195	
83 thru 92	Time of Operations (10)	5.195	
93 thru 95	Time Zone (3)	5.178	
96 thru 123	Blank (28)		
124 thru 128	File Record Number (5)	5.31	Y
129 thru 132	Cycle Date (4)	5.32	Y

4.1.21B.3 Enroute Airways Restriction Seasonal Closure Narrative Time Continuation Records

Column	Field Name (Length)	Reference	Required
1 thru 17	Fields as on Primary Records		Y
18	Continuation Record Number (1)	5.16	Y
19	Application Type (1) U – Narrative Time Data	5.91	Y
20 thru 22	Reserved (Expansion) (3)		
23 thru 119	Narrative Time (97)	5.285	
120 thru 123	Reserved (Expansion) (4)		
124 thru 128	File Record Number (5)	5.31	Y
129 thru 132	Cycle Date (4)	5.32	Y

4.1.21C.1 Enroute Airways Restriction Cruising Table Replacement Primary Records

Column	Field Name (Length)	Reference	Required
1	Record Type (1)	5.2	Y
2 thru 4	Customer/Area Code (3)	5.3	Y
5	Section Code (1)	5.4	Y
6	Subsection Code (1)	5.5	Y
7 thru 11	Route Identifier (5)	5.8	Y
12	Reserved (1)	Note 1	
13 thru 15	Restriction Identifier (3)	5.154	Y
16 thru 17	Restriction Type (2)	5.201	Y
18	Continuation Record No. (1)	5.16	Y
19 thru 23	Start Fix Identifier (5)	5.13	
24 thru 25	Start Fix ICAO Code (2)	5.14	
26	Start Fix Section Code (1)	5.4	
27	Start Fix Subsection Code (1)	5.5	
28 thru 32	End Fix Identifier (5)	5.13	
33 thru 34	End Fix ICAO Code (2)	5.14	
35	End Fix Section Code (1)	5.4	
36	End Fix Subsection Code (1)	5.5	
37	Blank (Spacing) (1)		
38 thru 44	Start Date (7)	5.157	
45 thru 51	End Date (7)	5.157	
52	Time Code (1)	5.131	
53 thru 93	Blank Spacing (41)		
94 thru 95	Cruise Table Ident (2)	5.134	
96 thru 123	Blank (Spacing) (28)		
124 thru 128	File Record Number (5)	5.31	Y
129 thru 132	Cycle Date (4)	5.32	Y

Note 1: The standard length for the Route Identifier is five characters. Some users envisage the need for a six-character field. This reserved column will permit this usage.

4.1.21C.2 Enroute Airways Restriction Cruising Table Replacement Primary Formatted Time Continuation Records

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1 thru 17	Fields as on Primary Records		Y
18	Continuation Record Number (1)	5.16	Y
19	Application Type (1) T – Formatted Time Data	5.91	Y
20	Time Code (1)	5.131	
21	Time Indicator (1)	5.138	
22	Blank (Spacing) (1)		
23 thru 32	Time of Operations (10)	5.195	
33 thru 42	Time of Operations (10)	5.195	
43 thru 52	Time of Operations (10)	5.195	
53 thru 62	Time of Operations (10)	5.195	
63 thru 72	Time of Operations (10)	5.195	
73 thru 82	Time of Operations (10)	5.195	
83 thru 92	Time of Operations (10)	5.195	
93 thru 95	Time Zone (3)	5.178	
96 thru 123	Blank (28)		
124 thru 128	File Record Number (5)	5.31	Y
129 thru 132	Cycle Date (4)	5.32	Y

4.1.21C.3 Enroute Airways Restriction Cruising Table Replacement Narrative Time Continuation Records

Column	Field Name (Length)	Reference	Required
1 thru 17	Fields as on Primary Records		Y
18	Continuation Record Number (1)	5.16	Y
19	Application Type (1) U – Narrative Time Data	5.91	Y
20 thru 22	Reserved (Expansion) (3)		
23 thru 119	Narrative Time (97)	5.285	
120 thru 123	Reserved (Expansion) (4)		
124 thru 128	File Record Number (5)	5.31	Y
129 thru 132	Cycle Date (4)	5.32	Y

