# Coded Instrument Flight Procedures Conversion of ARINC 424-18 to 424-15 and 424-13





## **Approach Segments (PF)**

Description	424-18	424-15	424-13	Col.
Record Type	CODE: S	Same as-18	Same as-15	1
Customer Area	Based on ARINC	Same as-18	Same as-15	2-4
	0 0 1			
Section Code		Same as-18	Same as-15	5
BLANK			Same as-15	6
Airport Identifier	ICAO Ident if published, otherwise FAA Ident	Same as-18	Same as-15	7-10
ICAO Code	Based on ICAO geographic region	Same as-18	Same as-15	11-12
Sub-Section Code	CODE: <b>F</b>	Same as-18	Same as-15	13
SIAP Identifier Per Standard. Where Multiple Approach Indicator is present but no parallel runways at airport. (i.e. RNAV (GPS) Z RWY 10 L)	CODE: (ex) R10LZ for. RNAV (GPS) Z RWY 10 L and R10-Z for RNAV (GPS) Z RWY 10	Same as-18	Same as-15: Except No dash in col. 17 if no Left, Center or Right runway. CODE: (ex) P10bZ ("b"= BLANK) for RNAV (GPS) Z RWY 10	14-19
Route Type: we are coding all procedures per industry standard.	CODE: (ex) R for RNAV (GPS), H for RNAV (RNP).	CODE: (ex) P for RNAV (GPS) and GPS	CODE: (ex) P for RNAV (GPS)	20
Transition Identifier	Based on SIAP design	Same as-18	Same as-15	21-25
BLANK	BLANK	Same as-18	Same as-15	26
Sequence Number: Sequence 10 (FACF), 20 (FAF), 30 (MAP)	Code sequence number rule "10-20-30"	Same as-18	Same as-15: Sequence 10 will still be the FACF point even though that point does not have the FACF waypoint description code	27-29
	Record Type Customer Area  Section Code BLANK Airport Identifier  ICAO Code  Sub-Section Code SIAP Identifier Per Standard. Where Multiple Approach Indicator is present but no parallel runways at airport. (i.e. RNAV (GPS) Z RWY 10 L)  Route Type: we are coding all procedures per industry standard.  Transition Identifier  BLANK Sequence Number: Sequence 10	Record Type Customer Area  Based on ARINC geographic region  Section Code BLANK Airport Identifier  ICAO Ident if published, otherwise FAA Ident ICAO Code Based on ICAO geographic region  Sub-Section Code SIAP Identifier Per Standard. Where Multiple Approach Indicator is present but no parallel runways at airport. (i.e. RNAV (GPS) Z RWY 10 L)  Route Type: we are coding all procedures per industry standard.  Route Type: we are coding all procedures per industry standard.  Transition Identifier  Based on SIAP design BLANK Sequence Number: Sequence 10 (FACF), 20 (FAF), 30 (MAP)  RODE: (CODE: (FAF), 30 (MAP)	Record Type  Customer Area  Based on ARINC geographic region  Section Code  BLANK  Airport Identifier  ICAO Ident if published, otherwise FAA Ident  ICAO Code  Based on ICAO geographic region  Sub-Section Code  Sub-Section Code  Sub-Section Code  SIAP Identifier Per Standard. Where Multiple Approach Indicator is present but no parallel runways at airport. (i.e. RNAV (GPS) Z RWY 10 L)  Route Type: we are coding all procedures per industry standard.  Route Type: we are coding all procedures per industry standard.  Route Type: we are coding all procedures per industry standard.  Route Type: we are coding all procedures per industry standard.  Route Type: we are coding all procedures per industry standard.  Route Type: we are coding all procedures per industry standard.  Route Type: we are coding all procedures per industry standard.  Route Type: we are coding all procedures per industry standard.  Route Type: we are coding all procedures per industry standard.  CODE: (ex) R for RNAV (GPS), H for RNAV (RNP).  GPS) and GPS  Transition Identifier  Based on SIAP design  BLANK  Same as-18  Code sequence number rule	Record Type  CUSTOMER Area  Based on ARINC geographic region  Section Code  CODE: P  BLANK  Airport Identifier  ICAO Ident if published, otherwise FAA Ident ICAO Code  Sub-Section Code  Sub-Section Code  SIAP Identifier Per Standard. Where Multiple Approach Indicator is present but no parallel runways at airport. (i.e. RNAV (GPS) Z RWY 10 L)  Route Type: we are coding all procedures per industry standard.  Route Type: we are coding all procedures per industry standard.  Transition Identifier  Based on SIAP design  BLANK  BLANK  BLANK  BLANK  BLANK  BLANK  BLANK  BLANK  Same as-18  Same as-15  Same as-15  Same as-15  Same as-15  Same as-15  Except No dash in col. 17 if no Left, Center or Right runway.  CODE: (ex) Pl0bZ ("b"= BLANK) for RNAV (GPS) Z RWY 10  CODE: (ex) R for RNAV  (GPS), H for RNAV  (GPS), H for RNAV  (GPS) and GPS  Transition Identifier  Based on SIAP design  BLANK  Sequence Number: Sequence 10  (FACF), 20 (FAF), 30 (MAP)  Sequence Number: Sequence 10  (FACF), 20 (FAF), 30 (MAP)

				Add to end 02 previous	
5.13	Fix Identifier	Based on SIAP design	Same as -18	Same as -15	30-34
5.14	ICAO Code	Based on ICAO geographic region	Same as -18	Same as -15	35-36
5.4	Section Code	CODE per fix type ( <b>E</b> , <b>D</b> , <b>P</b> )	Same as -18	Same as -15	37
5.5	Sub-Section Code	CODE per fix type	Same as -18	Same as -15	38
5.16	Continuation Record	If Route Qual 1= W or J and Route Qual 2 = S, then CODE 1 and CODE ARINC 4.1. 9.5 Record	Does not exist in this version. CODE 0. Remove 4.1.9.5 record	Does not exist in this version. CODE 0. Remove 4.1.9.5 record	39
5.17	Waypoint Description (col. 40)	CODE: A, E, G, H, N,	Same as -18	Same as -15: Except for "H" indicating Heliport. Any STAR or SIAP requiring a heliport to be used as a point cannot be coded.	40
5.17	Waypoint Description (col. 41)	Can be coded as a "B" or "Y" to indicated flyover. We are coding "Y" for flyover.  Code "E" for end of route type ( 'transition' to another route type)  CODE: E or Y	Same as -18	Same as -15	41
5.17	Waypoint Description (col. 42) First leg of missed approach and step down fly	CODE: M or S	Same as -18	Col 42 should be blank for Named Step Down Fix.	42

5.17	Waypoint Description (col. 43) -Missed Approach Point (MAP)	CODE: M	Same as-18	Same as -15:	43
5.17	Waypoint Description (col. 43) -Final Approach Course Fix (FACF)	CODE: I	Same as-18	Same as -15:	43
5.20	Turn Direction	CODE: L or R	Same as-18	Same as -15	44
5.211	RNP value	Code based on SIAP design	Same as-18	Does not exist in this version.	45-47
5.21	Path Terminator (Leg Type)	Code based on SIAP design source or per ARINC Specification	Same as-18	Same as -15	48-49
5.22	Turn Direction Valid (TDV)	CODE: Y if turn Direction populated	Same as-18	Same as -15	50
5.23	Recommended Navaid	Code appropriate navaid when required	Same as-18	Same as -15	51-54
5.14	ICAO Code of Recommended Navaid	Based on ICAO geographic region	Same as-18	Same as -15	55-56
5.204	Arc Radius	Code on RF legs	Same as-18	Same as -15	57-62
5.24	Theta	Code based on SIAP design	Same as-18	Same as -15	63-66
5.25	Rho	Code based on SIAP design	Same as-18	Same as -15	67-70
5.26	Magnetic Course	Code based on SIAP design	Same as-18	Same as -15	71-74

5.27	Route Distance Hold Distance/Time	Code based on SIAP design	Same as-18	Same as -15	75- 78
5.4	Section Code	CODE per fix type ( <b>E</b> , <b>D</b> , <b>P</b> )	Same as-18	Same as -15	79
5.5	Sub-Section Code	CODE per fix type	Same as-18	Same as -15	80
	BLANK	BLANK	Same as-18	Same as -15	81- 82
5.29	Altitude Description	CODE:+, -, blank, B, V	Same as-18	Replace "V" with a "+"	83
5.81	ATC Indicator	CODE A or BLANK	Same as-18	Same as -15	84
5.30	Altitude 1	Code based on SIAP design source	Same as-18	Same as -15	85- 89
5.30	Altitude 2	CODE based on SIAP design source or per ARINC Specification (Calculated Glideslope Intercept)	Same as-18	Same as -15	90- 94
5.53	Transition Altitude	CODE on First Leg of Route	Same as-18	Same as -15	95- 99
5.72	Speed Limit	CODE based on SIAP design source	BLANK	Same as -15	100- 102
5.70	Vertical Angle	Code based on SIAP design source	Same as-18	Same as -15	103- 106
5.144	MSA Center Fix	Code based on SIAP design	Same as-18	Same as -15	107- 111
5.130	Multiple Code (for MSA Centers)	CODE: A, B, C etc	Same as-18	Same as -15	112
5.14	ICAO Code of MSA Center Fix	Based on ICAO geographic region	Same as-18	Same as -15	113- 114
5.4	Section Code	CODE per fix type ( <b>E</b> , <b>D</b> , <b>P</b> )	Same as-18	Same as -15	115
5.5	Sub-Section Code	CODE per fix type	Same as-18	Same as -15	116
5.222	GPS/FMS Indicator	CODE P for GPS. CODE A for RNAV (GPS)	CODE P for GPS and G for RNAV (GPS).	Does not exist in this version.	117

		Authorized for vertical guidance. CODE B for RNAV (GPS) Not Authorized for vertical guidance. CODE 3 for GPS overlays	CODE 3 for GPS overlays		
5.261 5.7	Speed Limit Descriptor Route Qualifier 1	CODE +, -, blank CODE P for GPS, CODE W for RNAV (GPS) with LPV minima, CODE J for RNAV (GPS) CODE F for RNAV (RNP). CODE per ARINC Specification for overlays.	BLANK CODE BLANK for GPS, RNAV (GPS) and RNAV (RNP). Code per ARINC Specification for overlays.	Same as -15  Does not exist in this version.	118
5.7	Route Qualifier 2	CODE: S, C, H	Same as -18	Does not exist in this version	120

## Airport Records (PA)

Section	Description	424-18	424-15	424-13	Col.
5.249	Longest Runway Surface	CODE: H, S, W	CODE: H, S, W	Does not exist in this	32
		and U	and U	version.	

## Helicopter Records (HD/E/F)

Section	Description	424-18	424-15	424-13	Col.
5.4	Section Code	CODE: <b>H</b>	CODE: <b>H</b>	Helicopter procedures are	5
				not supported in this	13
5.5	Sub-Section Code	CODE: D, E and F	CODE: <b>D</b> , <b>E</b>	version.	
			and F		

## Helicopter Minimum Safe Altitude Records (HS)

Section	Description	424-18	424-15	424-13	Col.
5.4	Section Code	CODE: H	CODE: H	Helicopter procedures are not supported in this	5
5.5	Sub-Section Code	CODE: S	CODE: S	version.	

Runway Records (PG)

Section	Description	424-18	424-15	424-13	Col
5.270	TCH Indicator	CODE Heirarchy,	Does not exist in	Does not exist in this	81
		I, R, V and D	this version.	version.	
			Remove record		

#### Path Point Records (PP)

Section	Description	424-18	424-15	424-13
4.1.28	Path Point	CODE Per source	Does not exist in this	Does not exist in this version.
			version.	
			Remove record	

#### MSA Records (PS)

Section	Description	424-18	424-15	424-13
4.1.20s	MSA Record	CODE Per ARINC-18	CODE Per ARINC-15	Does not exist in this version.
		Per Source	Per Source	