

General Navigation Data Information

Issue 01a/2022

22 February 2022

SID: First leg coding IF-TF and necessary conversions

The purpose of this document is to forward information about future provision of SIDs where the initial legs are coded using a IF-TF leg combination.

For straight out SIDs to a waypoint not tracking a navaid, LSY coding policy is to code IF-TF:

Example: SPZO TAUJA3 SID

Published Source:

Cusco, Peru (SPZO)								
SPZO - TAUJA 3								
Transition Name	Path Term.	Waypoint	RF Arc Center	Waypoint Coordinates		Arc Center Coordinates		Flyover
				Latitude	Longitude	Latitude	Longitude	
RW10	IF	RW10		513-32-02.89	W071-57-15.80			N
RW10	TF	Z0536		513-32-22.14	W071-54-06.25			N
RW10	RF	Z0540	RZ018	513-32-45.21	W071-52-43.76	513-36-21.71	W071-54-31.65	N
RW10	TF	Z0544		513-33-02.71	W071-52-07.07			N
RW10	RF	Z0548	RZ062	513-33-19.04	W071-51-27.00	513-27-37.65	W071-49-25.23	N
RW10	TF	Z0552		513-33-52.72	W071-49-48.37			N
RW10	RF	Z0556	RZ017	513-34-09.35	W071-49-03.24	513-49-04.13	W071-55-13.98	N
RW10	TF	Z0560		513-34-46.24	W071-47-30.08			N



LSY Coding policy:

Seq	Fix	Ctry	Type	D	E	S	C	PT	RNP	T	MagTrack	Dist	CtrFix	Ctry__	Type__	Radius
10	RW10	SP	PG	G				IF								
20	ZO536	SP	PC	E				TF	0.3		100.9	3.1				
30	ZO540	SP	PC	E				RF	0.3	R	121.0	001.4	RZO18	SP	PC	4.000
40	ZO544	SP	PC	E				TF	0.3		121.0	.7				
50	ZO548	SP	PC	E				RF	0.3	L	114.0	000.7	RZO62	SP	PC	6.000
60	ZO552	SP	PC	E				TF	0.3		114.2	1.7				
70	ZO556	SP	PC	E				RF	0.3	R	117.0	000.8	RZO17	SP	PC	16.000
80	ZO560	SP	PC	E	E			TF	0.3		117.0	1.6				

Current Situation:

- Some avionics do not support IF-TF coding
- Currently LSY converts the coding for each processor in order to meet their needs (e.g. converting to DF)
- Still, some systems do not support initial leg in some SID, then a tailoring is required.

Upcoming change for cycle 2202:

The same conversion is applied to all files delivered to the following processors:

- Honeywell
- GE Aviation
- CMC Electronics

This solution is compatible with A424 rules and these processors and should reduce specific solutions for every processor. Exceptions are still possible, e.g. handling of a DF-RF combination, that might result after conversion.

IF-TF distance is smaller than 15nm:

IF-TF is converted to a CF leg. The CF requires however a recommended navaid. The closest suitable and valid navaid in terms of type, declination and distance to the airport is selected.

IF-TF distance is greater than 15nm:

IF-TF is converted to a CA-DF leg combination. The altitude for the CA leg will be 400ft AAL.

Please contact us in case of any questions or comments.

Lufthansa Systems
 FMS Customer Support
 Friday, 22nd February 2022