

FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated. Distances are in nautical miles (NM). Graphic depictions attached.

Arrival Name <b>RRALF (RNAV)</b>	Number <b>THREE</b>	STAR Computer Code <b>RRALF.RRALF3</b>	Superseded Number <b>TWO</b>	Dated <b>10/10/2019</b>	Effective Date <b>21 MAY 2020</b>
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TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
CLLEM	CLLEM.RRALF3	CLLEM	CLLEM						
			KILTT	104.79	37.93	8500	3000		
			RRALF	105.37	05.00	7000	2300		
OREYO	OREYO.RRALF3	OREYO	OREYO						
			IYLG0	185.86	43.64	10000	2300		
			KILTT	132.74	24.22	8500	3000		
			RRALF	105.37	05.00	7000	2300		
WEBOR	WEBOR.RRALF3	WEBOR	WEBOR						
			NIMNM	095.31	22.09	10000	2400		
			CLLEM	095.64	24.12	10000	3000		
			KILTT	104.79	37.93	8500	3000		
			RRALF	105.37	05.00	7000	2300		

ARRIVAL ROUTE DESCRIPTION:

LANDING ALL AIRPORTS: FROM RRALF ON TRACK 101.69/21.42 TO CROSS PICTR AT OR ABOVE 4000, THEN ON TRACK 085.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

PROCEDURAL DATA NOTES:

- NOTE: RADAR REQUIRED
- NOTE: RNAV 1
- NOTE: DME/DME/IRU OR GPS REQUIRED
- NOTE: CLLEM TRANSITION: DO NOT FILE, TO BE ASSIGNED BY ATC ONLY.

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT KILTT: NW, RT, 132.74 INBOUND, 10 NM LEGS.

COMMUNICATIONS:

KARB ATIS, KDET ATIS, KPTK ATIS, KMTC ATIS, KYIP ATIS, DETROIT APP CON

AIRPORTS SERVED:

- ANN ARBOR MUNI, ANN ARBOR, MI (KARB)
- COLEMAN A YOUNG MUNI, DETROIT, MI (KDET)
- CUSTER, MONROE, MI (KTTF)
- GROSSE ILE MUNI, DETROIT/GROSSE ILE, MI (KONZ)
- LIVINGSTON COUNTY SPENCER J HARDY, HOWELL, MI (KOZW)
- OAKLAND COUNTY INTL, PONTIAC, MI (KPTK)



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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
<b>RRALF2 RNAV</b>	<b>THREE</b>	<b>RRALF.RRALF3</b>	<b>TWO</b>	<b>07/17/2019</b>	<b>21 MAY 2020</b>
OAKLAND/TROY, TROY, MI (KVLL)					
SELFRIDGE ANGB, MOUNT CLEMENS, MI (KMTC)					
WILLOW RUN, DETROIT, MI (KYIP)					
WINDSOR, ONTARIO, CANADA (CYQG)					

LOST COMMUNICATIONS PROCEDURE:

REMARKS:

CHANGES TO THIS PROCEDURE MUST BE COORDINATED WITH NAVCANADA, AERONAUTICAL INFORMATION MANAGEMENT (AIM), aimdata@navcanada.ca (CURRENT POC IS CHARLES SIMARD, 613-248-3819, simacha@navcanada.ca)  
 AMENDMENT DOES NOT SATISFY PERIODIC REVIEW REQUIREMENTS

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)  
 REFERENCE MAGNETIC VARIATION = KPTK 07W/2020  
 CHART AT PICTR TERMINUS: LDG ALL AIRPORTS  
 DO NOT CHART MOCAs

FLIGHT INSPECTED BY:

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJV-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED.

Name

Organization

Date

*Digitally signed by*  
**DONALD H LANIER**  
 Jan 22, 2020

Signature

DEVELOPED BY:

DON LANIER (KEITH JONES)

Name

AJV-A431

Organization

12/30/2019

Date

*Digitally signed by*  
**DONALD H LANIER**  
 Jan 22, 2020

Signature

APPROVED BY:

GEORGE DAVIS, MANGER

Name

AJV-A430

Organization

Date

*Digitally signed by*  
**DONALD H LANIER**  
 Jan 22, 2020

Signature

CHANGES:

1. UPNUMBERED PROCEDURE.

REASONS:

1. MATCHING NAVCANADA PROCEDURE AMENDMENT NUMBER PER FPT.



FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
STAR (DATA RECORD)

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
RRALF2 RNAV	THREE	RRALF.RRALF3	TWO	07/17/2019	21 MAY 2020

  

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
<b>En Route Transition</b>									
CLLEM	423800.09N / 0850424.51W	Y		IF					CLLEM.RRALF3
KILTT	423240.09N / 0841333.85W	Y	FB	TF	097.79	37.93			
RRALF	423156.23N / 0840652.41W	Y	FB	TF	098.37	05.00			
<b>En Route Transition</b>									
OREYO	433030.80N / 0844119.85W	Y		IF					OREYO.RRALF3
IYLG0	424652.24N / 0844009.31W	Y	FB	TF	178.86	43.64			
KILTT	423240.09N / 0841333.85W	Y	FB	TF	125.74	24.22			
RRALF	423156.23N / 0840652.41W	Y	FB	TF	098.37	05.00			
<b>En Route Transition</b>									
WEBOR	423655.14N / 0860659.39W	Y		IF					WEBOR.RRALF3
NIMNM	423730.28N / 0853704.46W	Y	FB	TF	088.31	22.09			
CLLEM	423800.09N / 0850424.51W	Y	FB	TF	088.64	24.12			
KILTT	423240.09N / 0841333.85W	Y	FB	TF	097.79	37.93			
RRALF	423156.23N / 0840652.41W	Y	FB	TF	098.37	05.00			
<b>Common Route</b>									
RRALF	423156.23N / 0840652.41W	Y		IF					RRALF.RRALF3
PICTR	423007.43N / 0833800.83W	Y	FO	TF	094.69	21.42	AT/ABOVE 4000		
CYQG,KARB,KDET, KMTK,KONZ,KOZW, KPTK,KTTF,KVLL, KYIP				FM	078.00				