

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.  
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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
<b>PANGG (RNAV)</b>	<b>FIVE</b>	<b>PANGG.PANGG5</b>	<b>FOUR</b>	<b>04/20/2023</b>	

**TRANSITION ROUTES:**

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
BAGEL	BAGEL.PANGG5	BAGEL	BAGEL						
			PANGG	275.65	20.68	3400	2400		
FORT WAYNE	FWA.PANGG5	FWA VORTAC	FWA VORTAC						
			BAGEL	333.25	37.52	3400	2700		
			PANGG	275.65	20.68	3400	2400		
LLTCH	LLTCH.PANGG5	LLTCH	LLTCH						
			BAGEL	233.57	50.23	3400	2500		
			PANGG	275.65	20.68	3400	2400		

**ARRIVAL ROUTE DESCRIPTION:**

FROM PANGG ON TRACK 273.73/14.58 TO MEGGZ, THEN ON TRACK 273.52/8.00 TO CROSS AWSUM AT 10000, THEN ON TRACK 273.41/14.97 TO IROCK, THEN ON TRACK 273.18/11.44 TO CROSS HALIE AT 6000.

LANDING RWY 4R: FROM HALIE ON TRACK 278.27/20.13 TO CROSS OLCYK AT OR ABOVE 4000, THEN ON TRACK 278.27. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 13C: FROM HALIE ON TRACK 278.55/31.20 TO CROSS TINLY AT OR ABOVE 4000, THEN ON TRACK 278.55. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 22L: FROM HALIE ON TRACK 343.45/11.90 TO CROSS GERMN AT OR ABOVE 4000, THEN ON TRACK 343.39/3.41 TO LNANE, THEN ON TRACK 339.10/6.29 TO BOCAH, THEN ON TRACK 274.04/4.50 TO CROSS TACTT AT 3000. EXPECT RNAV (RNP/GPS) RWY 22L APPROACH OR RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 31C: FROM HALIE ON TRACK 295.43/10.76 TO CROSS HAADN AT 6000, THEN ON TRACK 295.31/7.00 TO CROSS HILLS AT 5000 AND AT 240 KIAS. EXPECT ILS OR RNAV (RNP/GPS) RWY 31C APPROACH OR RADAR VECTORS TO FINAL APPROACH COURSE.

**PBN REQUIREMENT NOTES:**

RNAV 1 - DME/DME/IRU OR GPS

**EQUIPMENT REQUIREMENT NOTES:**

RADAR REQUIRED

**PROCEDURAL DATA NOTES:**

NOTE: LANDING RWY 31C: FOR NON-RNP AIRCRAFT, EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

**FIXES AND/OR HOLDING PATTERNS:**

CHART HOLDING AT HALIE: HOLD E, LT, 273.18 INBOUND, 8 NM LEGS.

CHART HOLDING AT IROCK: HOLD E, RT, 273.41 INBOUND, 10 NM LEGS.

CHART HOLDING AT PANGG: HOLD E, LT, 273.73 INBOUND, 10 NM LEGS.

CHART HOLDING AT STASH: HOLD E, RT, 270.00 INBOUND, 10 NM LEGS.

**COMMUNICATIONS:**

CHART: CHICAGO APPROACH CONTROL.



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**AIRPORTS SERVED:**

<u>AIRPORT ID</u>	<u>CITY</u>	<u>STATE</u>
KMDW	CHICAGO	IL

**LOST COMMUNICATIONS PREFERENCES:**

RWY 22L: IF APPROACH CLEARANCE NOT RECEIVED BY TACTT, PROCEED INBOUND ON RNAV (GPS) OR RNAV (RNP) RWY 22L ROUTING.

**REMARKS:**

STASH WP IS STAND-ALONE HOLDING.

**ADDITIONAL FLIGHT DATA:**

DME/DME ASSESSMENT: SAT (RNP 2.0)  
MAG VAR = KMDW 04W/2015  
CHART AT TINLY TERMINUS: KMDW LDG RWY 13C  
CHART AT OLCYK TERMINUS: KMDW LDG RWY 4R  
CHART AT TACTT TERMINUS: KMDW LDG RWY 22L  
CHART AT HILLS TERMINUS: KMDW LDG RWY 31C

**FLIGHT INSPECTED BY:**

JAMES ONIEAL

**ORGANIZATION:**

FPO

**DATE:**

05/26/2023

Flight Inspected Signature:

*Digitally signed by*

**ALLAN WILL**

May 26, 2023

**DEVELOPED BY:**

LAWRENCE DARLING, AIRSPACE/PROCEDURES  
MANAGER

CHICAGO ARTCC 04/24/2023

Developed By Signature:

*Digitally signed by*

**RAKE MCGRAW**

May 08, 2023

**APPROVED BY:**

ALLAN WILL, MANAGER

AJV-A423

Approved By Signature:

*Digitally signed by*

**RAKE MCGRAW**

May 08, 2023

**CHANGES:**

1. ARRIVAL ROUTE 4R: REMOVED EXPECT RNAV (RNP) Y RWY 4R APPROACH, ADDED FM LEG, AND ADDED EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.
2. ARRIVAL ROUTE 13C: REMOVED OLCYK.

**REASONS:**

1. PER ATC REQUEST.
2. OLCYK REMOVED TO AVOID VIOLATING 8260.58B 2-2-1.A.(2).

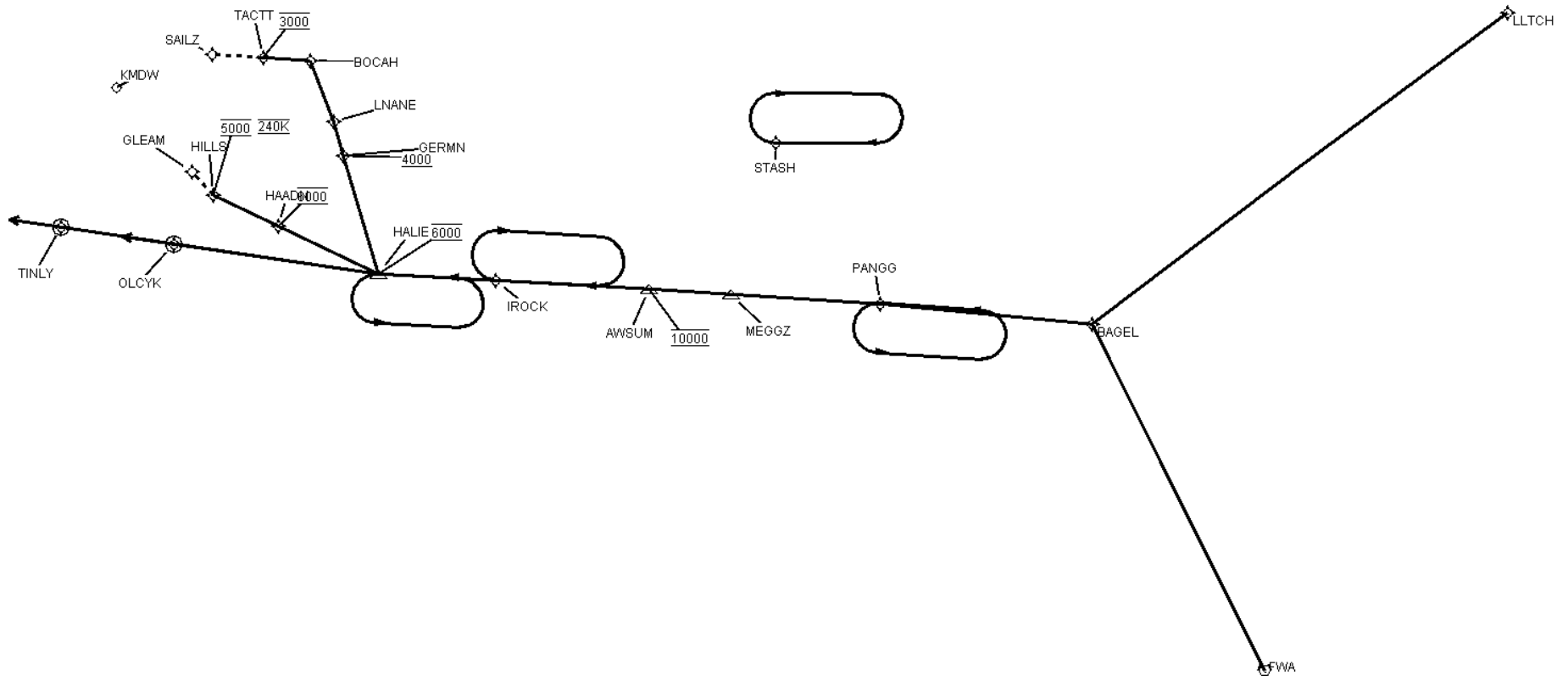


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Graphic Depiction 1



**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
STAR (DATA RECORD)**

Arrival Name PANGG (RNAV)	Number FIVE		STAR Computer Code PANGG.PANGG5		Superseded Number FOUR		Dated 04/20/2023		Effective Date
<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>
En Route Transition									
BAGEL	413057.51N / 0853649.28W	Y		IF					BAGEL.PANGG5
PANGG	413130.03N / 0860420.39W	Y	FB	TF	271.65	20.68			
En Route Transition									
FWA VORTAC	405844.63N / 0851117.01W	Y		IF					FWA.PANGG5
BAGEL	413057.51N / 0853649.28W	Y	FB	TF	329.25	37.52			
PANGG	413130.03N / 0860420.39W	Y	FB	TF	271.65	20.68			
En Route Transition									
LLTCH	420344.18N / 0844555.71W	Y		IF					LLTCH.PANGG5
BAGEL	413057.51N / 0853649.28W	Y	FB	TF	229.57	50.23			
PANGG	413130.03N / 0860420.39W	Y	FB	TF	271.65	20.68			
Common Route									
PANGG	413130.03N / 0860420.39W	Y		IF					PANGG.PANGG5
MEGGZ	413124.28N / 0862344.65W	Y	FB	TF	269.73	14.58			
AWSUM	413119.74N / 0863423.35W	Y	FB	TF	269.52	08.00	AT 10000		
IROCK	413108.73N / 0865418.71W	Y	FB	TF	269.41	14.97			
HALIE	413057.85N / 0870931.95W	Y	FB	TF	269.18	11.44	AT 6000		
Runway Transition									
HALIE	413057.85N / 0870931.95W	Y		IF			AT 6000		
OLCYK	413224.69N / 0873616.06W	Y	FO	TF	274.27	20.13	AT/ABOVE 4000		
KMDW:RWY 4R				FM	274.27				



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<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>
Runway Transition									
HALIE	413057.85N / 0870931.95W	Y		IF			AT 6000		
TINLY	413319.08N / 0875057.56W	Y	FO	TF	274.55	31.20	AT/ABOVE 4000		
KMDW:RWY 13C				FM	274.55				
Runway Transition									
HALIE	413057.85N / 0870931.95W	Y		IF			AT 6000		
GERMN	414206.60N / 0871506.58W	Y	FB	TF	339.45	11.90	AT/ABOVE 4000		
LNANE	414518.38N / 0871642.92W	Y	FB	TF	339.39	03.41			
BOCAH	415100.78N / 0872015.49W	Y	FB	TF	335.10	06.29			
TACTT	415100.82N / 0872616.77W	Y	FB	TF	270.04	04.50	AT 3000		
KMDW:RWY 22L									
Runway Transition									
HALIE	413057.85N / 0870931.95W	Y		IF			AT 6000		
HAADN	413453.03N / 0872252.46W	Y	FB	TF	291.43	10.76	AT 6000		
HILLS	413725.40N / 0873134.18W	Y	FB	TF	291.31	07.00	AT 5000	AT 240K	
KMDW:RWY 31C									

