


US Department of Transportation Federal Aviation Administration		STAR - Standard Terminal Arrival			1. Bearings, headings, courses and radials are listed to the nearest hundredth (e.g. 360.00) 2. Distances are in nautical miles to nearest hundredth (e.g. 00.00) 3. Altitudes are minimum altitudes unless otherwise indicated			
<b>(1) Transition Routes 1. SAGINAW 2. BADGER 3. GRAND RAPIDS 4. GREEN BAY 5. MUSKEGON</b>								
(a) Transition Name	(b) Transition Computer Codes	(c) From RNAV WP/ FIX/NAVAID	(d) To RNAV WP/ FIX/NAVAID	(e) Mag Course/ Distance	(f) MEA	(g) MOCA	(h) MAA	(i) Crossing Altitudes / Fixes
SAGINAW	MBS.POLAR4	MBS VOR/DME	AAMMO INT POLAR INT/DXO 40.86 DME	164.16/34.85 162.52/9.44 (DXO R-343)	4000 4000*			
BADGER	BAE.POLAR4	BAE VORTAC	ZIPPE/BAE 52.00 DME PURNY/BAE 102.15 DME MUNKY/FNT 67.14 DME BUTRR INT AAMMO POLAR	078.21/52.00 078.21/50.15 (BAE R-078) 111.04/34.17 (FNT R-291) 111.04/28.41 (FNT R-291) 111.04/35.33 (FNT R-291) 162.52/9.44 (DXO R-343)	11000 11000 11000 6000 4000 4000*			
GRAND RAPIDS	GRR.POLAR4	GRR VOR/DME	BUTRR AAMMO POLAR	066.13/44.66 111.04/35.33 (FNT R-291) 162.52/9.44 (DXO R-343)	6000 4000 4000*			
GREEN BAY	GRB.POLAR4	GRB VORTAC	KKAYY/GRB 57.00 DME NOBAC/GRB 87.00 DME PURNY/GRB 118.84 DME MUNKY BUTRR AAMMO POLAR	124.49/57.00 124.49/30.00 (GRB R-124) 124.49/31.84 (GRB R-124) 111.04/34.17 (FNT R-291) 111.04/28.41 (FNT R-291) 111.04/35.33 (FNT R-291) 162.52/9.44 (DXO R-343)	15000 15000 15000 11000 6000 4000 4000*			
MUSKEGON	MKG.POLAR4	MKG VORTAC	MUNKY BUTRR AAMMO POLAR	083.21/36.01 111.04/28.41 (FNT R-291) 111.04/35.33 (FNT R-291) 162.52/9.44 (DXO R-343)	6000 6000 4000 4000*			
<b>(2) Arrival Route Description:</b> FROM OVER POLAR INT/40.86 DME: VIA DXO R-342.52 TO SCUBI/31.00 DME (MEA 4000). THENCE... LANDING RUNWAY 3L/R OR 4R: VIA DXO R-342.52 TO TRAML/10.00 DME (MEA 3000). EXPECT RADAR VECTORS TO FINAL APPROACH COURSE. LANDING RUNWAY 21L/R OR 22L: EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.								
<b>(3) Procedural Data Notes:</b> MUNKY VERTICAL NAVIGATION PLANNING INFORMATION: EXPECT TO CROSS AT FL230. POLAR VERTICAL NAVIGATION PLANNING INFORMATION: TURBOJETS: EXPECT TO CROSS AT 12,000 FEET. TURBOPROPS: EXPECT TO CROSS AT 11,000 FEET. *BELOW 5000 DME UNUSABLE, RADAR REQUIRED. DME REQUIRED.								
<b>(4) Fixes and/or Holding Patterns:</b> CHART HOLDING AT MUNKY, HOLD W, LT, 111.04 INBOUND. CHART HOLDING AT POLAR, HOLD N, RT, 162.52 INBOUND.								
<b>(5) Communications:</b> DETROIT APP CON AND KDTW ATIS								
<b>(6) Arrival Name</b> POLAR	<b>(7) Number</b> FOUR	<b>(8) STAR Computer Code</b> POLAR.POLAR4	<b>(9) Superseded Nr.</b> THREE	<b>(10) Dated</b> 11/20/2008	<b>(11) Effective Date</b> 24 JUL 2014			

<b>(12) Airports Served</b>					
Airport Name		DETROIT METROPOLITAN WAYNE COUNTY		City/State	DETROIT, MI.
Airport Name				City/State	
Airport Name				City/State	
Airport Name				City/State	
Airport Name				City/State	
Airport Name				City/State	
<b>(13) Lost Communications Procedure:</b>					
<b>(14) Remarks:</b>					
<b>(15) Additional Flight Data:</b>					
CHART CHANGEOVER POINT AT PURNY (BAE R-078.21/102.15 & FNT R-291.04/101.31).					
CHART: DME FROM FNT VORTAC AT AAMMO, BUTRR, PURNY. DME FROM DXO VOR/DME AT TRAML, SCUBI, AAMMO. DME FRM GRB VORTAC AT KKAYY, NOBAC.					
CHART: LAN R-085 AT POLAR.					
<div style="text-align: right;"></div>					
<b>(6) Arrival Name</b>	<b>(7) Number</b>	<b>(8) STAR Computer Code</b>	<b>(9) Superseded Nr.</b>	<b>(10) Dated</b>	<b>(11) Effective Date</b>
POLAR	FOUR	POLAR.POLAR4	THREE	11/20/2008	24 JUL 2014

**(16) Continuation:****(17) Changes:**

1. ADD KKAYY AND NOBAC DME FIXE'S ON THE GRB VORTAC TRANSITION.
2. COURSE GRB VORTAC TO PURNY CHANGED FROM 124.50 TO 124.49.

**(18) Reasons for Changes:**

1. REQUIRED TO PROVIDE METERING AND INCREASE EFFICIENCY FOR THE DETROIT METROPOLITAN ARRIVALS.
2. CORRECT COURSE.

3/31/2014: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 12/17/2012.

CHANGED GRR VORTAC TO GRR VOR/DME. CHANGED BAR TO BAE IN TRANSITION ROUTES, COLUMN E.

4/11/2014: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 12/17/2013.

CHANGED THE MEA ON THE GRB TRANSITION THROUGH PURNY FROM 11000 TO 15000 AS RESULT OF FLIGHT CHECK.

<b>(6) Arrival Name</b> POLAR	<b>(7) Number</b> FOUR	<b>(8) STAR Computer Code</b> POLAR.POLAR4	<b>(9) Superseded Nr.</b> THREE	<b>(10) Dated</b> 11/20/2008	<b>(11) Effective Date</b> 24 JUL 2014
----------------------------------	---------------------------	---	------------------------------------	---------------------------------	---

### STAR (Data Record)

ARINC PACKET - 424-18 - STAR

[illegible]

QUALITY  
1  
CHECKED

<b>(11)</b> <b>Arrival Name</b> POLAR	<b>(12)</b> <b>Number</b> FOUR	<b>(13)</b> <b>STAR Computer Code</b> POLAR.POLAR4	<b>(14)</b> <b>Superseded Nr.</b> THREE	<b>(15)</b> <b>Dated</b> 11/20/2008	<b>(16)</b> <b>Effective Date</b> 24 JUL 2014
---	--------------------------------------	--	---	---	---

**US Department of Transportation  
Federal Aviation Administration**

### STAR (Data Record)

SUSAP	KDTWK5EPOLAR41BAE	050BUTRRK5PC0E	TF				
SUSAP	KDTWK5EPOLAR41BAE	060AAMMOK5PC0E	TF				
SUSAP	KDTWK5EPOLAR41BAE	070POLARK5EA0EE H	TF				
SUSAP	KDTWK5EPOLAR41GRB	010GRB K5D 0V	IF				18000
SUSAP	KDTWK5EPOLAR41GRB	020KKAYYK5PC0E	TF				
SUSAP	KDTWK5EPOLAR41GRB	030NOBACK5PC0E	TF				
SUSAP	KDTWK5EPOLAR41GRB	040PURNYK5PC0E	TF				
SUSAP	KDTWK5EPOLAR41GRB	050MUNKYK5PC0E H	TF				
SUSAP	KDTWK5EPOLAR41GRB	060BUTRRK5PC0E	TF				
SUSAP	KDTWK5EPOLAR41GRB	070AAMMOK5PC0E	TF				
SUSAP	KDTWK5EPOLAR41GRB	080POLARK5EA0EE H	TF				
SUSAP	KDTWK5EPOLAR41GRR	010GRR K5D 0V	IF				18000
SUSAP	KDTWK5EPOLAR41GRR	020BUTRRK5PC0E	TF				
SUSAP	KDTWK5EPOLAR41GRR	030AAMMOK5PC0E	TF				
SUSAP	KDTWK5EPOLAR41GRR	040POLARK5EA0EE H	TF				
SUSAP	KDTWK5EPOLAR41MBS	010MBS K5D 0V	IF				18000
SUSAP	KDTWK5EPOLAR41MBS	020AAMMOK5PC0E	TF				
SUSAP	KDTWK5EPOLAR41MBS	030POLARK5EA0EE H	TF				
SUSAP	KDTWK5EPOLAR41MKG	010MKG K5D 0V	IF				18000
SUSAP	KDTWK5EPOLAR41MKG	020MUNKYK5PC0E H	TF				
SUSAP	KDTWK5EPOLAR41MKG	030BUTRRK5PC0E	TF				
SUSAP	KDTWK5EPOLAR41MKG	040AAMMOK5PC0E	TF				
SUSAP	KDTWK5EPOLAR41MKG	050POLARK5EA0EE H	TF				
SUSAP	KDTWK5EPOLAR42	010POLARK5EA0E H	IF				18000
SUSAP	KDTWK5EPOLAR42	020SCUBIK5PC0EE	TF				
SUSAP	KDTWK5EPOLAR43RW03B	010SCUBIK5PC0E	IF				18000
SUSAP	KDTWK5EPOLAR43RW03B	020TRAMLK5PC0EY	TF				
SUSAP	KDTWK5EPOLAR43RW03B	030TRAMLK5PC0EE	FM DXO K5	342501001625	D		
SUSAP	KDTWK5EPOLAR43RW04R	010SCUBIK5PC0E	IF				18000
SUSAP	KDTWK5EPOLAR43RW04R	020TRAMLK5PC0EY	TF				
SUSAP	KDTWK5EPOLAR43RW04R	030TRAMLK5PC0EE	FM DXO K5	342501001625	D		
SUSAP	KDTWK5EPOLAR43RW21B	010SCUBIK5PC0E	IF				18000
SUSAP	KDTWK5EPOLAR43RW21B	020SCUBIK5PC0EE	FM DXO K5	342503101625	D		
SUSAP	KDTWK5EPOLAR43RW22L	010SCUBIK5PC0E	IF				18000
SUSAP	KDTWK5EPOLAR43RW22L	020SCUBIK5PC0EE	FM DXO K5	342503101625	D		

[illegible]

(11) <b>Arrival Name</b> POLAR	(12) <b>Number</b> FOUR	(13) <b>STAR Computer Code</b> POLAR.POLAR4	(14) <b>Superseded Nr.</b> THREE	(15) <b>Dated</b> 11/20/2008	(16) <b>Effective Date</b> 24 JUL 2014
--------------------------------------	-------------------------------	---	--	------------------------------------	--

**US Department of Transportation  
Federal Aviation Administration****STAR (Data Record)**

SUSAP KDTWK5GRW21R 0085012147 N42134185W083201012+0100 +0158000632000056200V  
SUSAP KDTWK5GRW22L 0120032147 N42135237W083205997+0000 +0159300636000054200IIDWC1

64411  
1  
CUTTER

**(11)  
Arrival Name**  
POLAR

**(12)  
Number**  
FOUR

**(13)  
STAR Computer Code**  
POLAR.POLAR4

**(14)  
Superseded Nr.**  
THREE

**(15)  
Dated**  
11/20/2008

**(16)  
Effective Date**  
24 JUL 2014

**US Department of Transportation  
Federal Aviation Administration**
**STAR (Data Record)**

ARINC SUMMARY - 424-18 - STAR

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	BAE	BAE	010		IF		FB					
	BAE	ZIPPE	020		TF		FB					
	BAE	PURNY	030		TF		FB					
	BAE	MUNKY	040		TF		FB					
	BAE	BUTRR	050		TF		FB					
	BAE	AAMMO	060		TF		FB					
	BAE	POLAR	070		TF		FB					
	GRB	GRB	010		IF		FB					
	GRB	KKAYY	020		TF		FB					
	GRB	NOBAC	030		TF		FB					
	GRB	PURNY	040		TF		FB					
	GRB	MUNKY	050		TF		FB					
	GRB	BUTRR	060		TF		FB					
	GRB	AAMMO	070		TF		FB					
	GRB	POLAR	080		TF		FB					
	GRR	GRR	010		IF		FB					
	GRR	BUTRR	020		TF		FB					
	GRR	AAMMO	030		TF		FB					
	GRR	POLAR	040		TF		FB					
	MBS	MBS	010		IF		FB					
	MBS	AAMMO	020		TF		FB					
	MBS	POLAR	030		TF		FB					
	MKG	MKG	010		IF		FB					
	MKG	MUNKY	020		TF		FB					
	MKG	BUTRR	030		TF		FB					
	MKG	AAMMO	040		TF		FB					
	MKG	POLAR	050		TF		FB					
		POLAR	010		IF		FB					
		SCUBI	020		TF		FB					
	RW03B	SCUBI	010		IF		FB					
	RW03B	TRAML	020		TF		FO					
	RW03B	TRAML	030		FM		FB		162.5()			
	RW04R	SCUBI	010		IF		FB					
	RW04R	TRAML	020		TF		FO					
	RW04R	TRAML	030		FM		FB		162.5()			
	RW21B	SCUBI	010		IF		FB					
	RW21B	SCUBI	020		FM		FB		162.5()			
	RW22L	SCUBI	010		IF		FB					

(11)  
Arrival Name  
POLAR

(12)  
Number  
FOUR

(13)  
STAR Computer Code  
POLAR.POLAR4

(14)  
Superseded Nr.  
THREE

(15)  
Dated  
11/20/2008

(16)  
Effective Date  
24 JUL 2014

**US Department of Transportation  
Federal Aviation Administration**
**STAR (Data Record)**

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	BAE	N430700.67	W0881703.64	N4307.011	W08817.061
	DXO	N421247.29	W0832159.99	N4212.788	W08322.000
	GRB	N443318.58	W0881141.48	N4433.310	W08811.691
	GRR	N424712.18	W0852949.45	N4247.203	W08529.824
	MBS	N433153.95	W0840438.28	N4331.899	W08404.638
	MKG	N431009.31	W0860221.76	N4310.155	W08602.363
	POLAR	N425014.67	W0834407.58	N4250.245	W08344.126
	AAMMO	N425853.38	W0834918.30	N4258.890	W08349.305
	BUTRR	N430752.39	W0843554.68	N4307.873	W08435.911
	KKAYY	N435954.58	W0870723.86	N4359.910	W08707.398
	MUNKY	N431451.92	W0851332.74	N4314.865	W08513.546
	NOBAC	N434205.42	W0863402.58	N4342.090	W08634.043
	PURNY	N432300.00	W0855900.00	N4323.000	W08559.000
	SCUBI	N424112.82	W0833844.84	N4241.214	W08338.747
	TRAML	N422157.83	W0832722.62	N4221.964	W08327.377
	ZIPPE	N431529.83	W0870655.98	N4315.497	W08706.933
	RW03L	N421228.21	W0832104.39	N4212.470	W08321.073
	RW03R	N421144.21	W0832106.49	N4211.737	W08321.108
	RW04R	N421208.37	W0832216.57	N4212.140	W08322.276
	RW21L	N421310.86	W0832002.65	N4213.181	W08320.044
	RW21R	N421341.85	W0832010.12	N4213.698	W08320.169
	RW22L	N421352.37	W0832059.97	N4213.873	W08321.000

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW03L	00636	58
	RW03R	00633	55
	RW04R	00637	54
	RW21L	00632	55
	RW21R	00632	56
	RW22L	00636	54

QUALITY  
1  
CHECKED

(11)  
Arrival Name  
POLAR

(12)  
Number  
FOUR

(13)  
STAR Computer Code  
POLAR.POLAR4

(14)  
Superseded Nr.  
THREE

(15)  
Dated  
11/20/2008

(16)  
Effective Date  
24 JUL 2014