U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
VOR STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.23

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

TERMINAL ROUTES

FROM	TO	COURSE AND DISTANCE	ALTITUDE
BSV VOR/DME (IF/IAF)	LLONG/BSV 14.00 DME/RADAR	127.40 / 14.00	3000

MISSED APPROACH

MAP: 5.20 MILES AFTER LLONG/BSV 14.00 DME/RADAR OR AT MAPSV/BSV 19.20 DME FIX

CLIMBING LEFT TURN TO 3000 ON BSV VOR/DME R-127 TO LLONG/BSV 14.00 DME/RADAR AND HOLD.

ADDITIONAL FLIGHT DATA:

HOLD NW, RT, 127.00 INBOUND.
CHART FAS OBST: 1493 TOWER 403548N/0810520W
FAC CROSSES MID POINT OF RWY 07-25

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT BSV VOR/DME
3. FAC 127.40 FAF LLONG/BSV 14.00 DME/RADAR DIST FAF TO MAP 5.20 THLD ____
4. MIN. ALT BSV VOR/DME 3000, LLONG 3000
8. MSA FROM: BSV VOR/DME 3100

MAG VAR: 4W EPOCH YEAR:1965

MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: N A X

CATEGORY =====>	A			B			C			D			E		
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA
CIRCLING	1940	1	777	1940	1	777		NA			NA				

NOTES:

CHART NOTE: USE AKRON-CANTON ALTIMETER SETTING; WHEN NOT RECEIVED, USE NEW PHILADELPHIA ALTIMETER SETTING AND INCREASE MDA 20 FEET.
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA.
CHART NOTE: DME OR RADAR REQUIRED
CHART PLANVIEW NOTE: DME OR RADAR REQUIRED

QUALITY CHECKED 1

CITY AND STATE	ELEVATION: 1164 TDZE: AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	
CARROLLTON, OH	CARROLL COUNTY-TOLSON	BSV	VOR-A, AMDT 1	SUP VOR OR GPS-A AMDT ORIG-B DATE 04/02/1992

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
[ ] YES [X] NO		ROUTINE

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
[ ]	[ ]	[ ]	[ ]	[X]	[X]	[X] ZOB ARTCC, CAK ATCT, AMGR

	NAME:	FIFO	DATE:
FLIGHT CHECKED BY	MICHAEL GEORGE HUSTAK	FIOG	08/06/2012
DEVELOPED BY	TERENCE D. SHARP (DAVID TEFFETELLER)	AJV-351	04/13/2012
APPROVED BY	LARRY H STROUT MANAGER	AJV-353	

CHANGES:

1.PROCEDURE NAME CHANGED FROM VOR OR GPS-A TO VOR-A
2.CHANGED INTERMEDIATE SEGMENT COURSE DISTANCE FROM 127.39/7.00NM TO 127.40/14.00NM
3.CHANGED FINAL COURSE FROM 127.39 TO 127.40
4.CHANGED DIST FAF TO MAP FROM 5.24 TO 5.20
5.REMOVED MSA SECTORS
6. CHANGED CNF MAPSV TO DME FIX.
7. REVISED REMOTE ALTIMETER NOTE TO INCLUDE NEW PHILADELPHIA AS BACK-UP.
8. CHANGED "VIA" TO "ON" IN MISSED APPROACH.
9. CHANGE "CAK ASR" TO RADAR AND ADDED DME OR RADAR REQUIRED TO BRIEFING STRIP.
10. ADDED PROCEDURE NA AT NIGHT NOTE.
11. ADDED HELICOPTER VISIBILITY NOTE.

REASONS:

1.FPT REQUEST
2 THRU 4. CORRECT TRANSCRIPTION ERRORS
5. UPDATED CONTROLLING OBSTACLE RAISING 090-330 SECTOR FROM 2800 TO 3100
6. "OR GPS" DELETED, CAN NOW BE DME ONLY FIX.
7, 8. UPDATE TO NEW CRITERIA.
9. UPDATED NOTE.
10, 11. NO SURVEY AT THE AIRPORT

08/09/2012: THIS IS AN UPDATED COPY OF A PROCEDURE DEVELOPED ON 04/13/2012: ADDED "DME OR RADAR REQUIRED" AS A PLANVIEW NOTE IN ADDITION TO THE SAME NOTE IN THE BRIEFING STRIP, AT FLIGHT INSPECTION REQUEST.

QUALITY 1 CHECKED

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
INTERMEDIATE	BSV VOR/DME	LLONG/BSV 14.00	1. TOWER (39-000212)	404017.00N/0812358.00W	1608 (4D)	500	XP892	3000
	(IF/IAF)	DME/RADAR	2. TERRAIN	404424.00N/0811827.00W	1287 (1300)		AS1500	2800
FINAL	LLONG/BSV 14.00	5.20 MILES AFTER	3. TOWER (39-002339)	403548.00N/0810520.00W	1493 (5E)	250	RA71 AC125	1940
	DME/RADAR	LLONG/BSV 14.00						
		DME/RADAR OR AT						
		MAPSV/BSV 19.20						
		DME FIX						
2. PROCEDURE TURN	NA							
3. MISSED APPROACH MAP:	5.20 MILES AFTER	LLONG/BSV 14.00				ASC		3000
	LLONG/BSV 14.00	DME	5. TOWER (39-003397)	403720.00N/0810355.00W	1608 (5E)	1000		2700
ELEV:	1619		6. TERRAIN	403436.00N/0810148.00W	1352 (1400)		AS1500	2900
7. TOWER (39-000902)	403441.00N/0810530.00W	1382 (4D)	300	SI	1940			
8. T-L TWR (39-001083)	403206.00N/0810441.00W	1392 (4D)	300	SI	1940			

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL
CATEGORY A	1.3 NM	350	777
CATEGORY B	1.5 NM	450	777
CATEGORY C	1.7 NM	450	
CATEGORY D	2.3 NM	550	
CATEGORY E	4.5 NM	550	

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: BSV VOR/DME

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	TWR (39-000439)	044/ 11.6	2049 (4D)	3100					

QUALITY 9 CHECKED

CITY AND STATE	ELEVATION: 1164 AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
CARROLLTON, OH	CARROLL COUNTY-TOLSON	BSV	VOR-A, AMDT 1	AGL

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE		3. ALTIMETER SETTING
ZOB ARTCC	N W S	OTHER:	SOURCE: KCAK / KPHD
	F A A		DISTANCE: 26.96 / 16.58
SATISFACTORY ON:	A / C		HOURS REMOTE OPERATION: 24
X V H F X U H F H F	LOCATION:		ADJUSTMENT: 71 / 0

4. MONITOR STATUS		
PRIMARY NAVAID:	BSV VOR/DME	
MONITOR POINT:	MOCC	
HRS OPTN:	CAT 1	24
	CAT 3	

5. APPROACH & RUNWAY LIGHTING	
	ALS
	(S) SALS
	MALS
	HIRL
X	MIRL 25 (PCL), 07 (PCL)
X	REIL 25 (PCL), 07 (PCL)
	TDZ
	C/LINE
X	OTHER (SPECIFY) PAPI-2L 25, 07

6. RUNWAY MARKINGS	
BASIC	
ALL WEATHER	
INSTRUMENT	NPI-F 25, 07

7. RUNWAY VISUAL RANGE	
APPROACH	
MIDFIELD	
ROLL OUT	

8. GLIDE PATH		
GP ANGLE:	ELEV RWY THRESHOLD:	
DISTANCE FROM RWY:	ELEV GP ANTENNA:	
	THRESHOLD CROSSING HEIGHT:	

9. FINAL APPROACH COURSE AIMING			
		RUNWAY THRESHOLD	FT. FROM THRESHOLD
		ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS: NONE

PART D - PREPARED BY:	DATE:
TERENCE D. SHARP (DAVID TEFFETELLER)	04/13/2012
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-351

PART C - REMARKS:

VDP NOT ESTABLISHED - REMOTE ALTIMETER/CIRCLING ONLY.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

BLOCK 3:
KCAK/PKHD
DIST: 26.96/16.58
HRS: 24/24
ADJUST: 71FT/76FT
SERVICE A: Y/Y

RASS PRESSURE PATTERNS SAME
KTSO 1163.10, KCAK 1225.40
RA = 70.74FT (71).
NO ADDITIONAL AIRSPACE REQUIRED.

100FT VEGETATION HEIGHT PER FPT

9. FAC CROSSED MID POINT RWY 07/25.

INTERMEDIATE XP = MAINTAIN PREVIOUSLY PUBLISHED ALTITUDE

QUALITY CHECKED 9

RADIO FIX AND HOLDING DATA RECORD

NAME: LLONG **STATE:** OH **COUNTRY:** US

LATITUDE/LONGITUDE: 403642.81N/0811034.78W **TYPE:** RADAR, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	BRIGGS	BSV	VOR/DME	L	127.40	123.40	14.00	14.00	85065	3000	10000

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	NW	BSV	VOR/DME	127.40	127.40	R	1		3000	10000	6	9

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	TOWER (39-003786)	403417.00N/0811050.00W	1652	4D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED
FLIGHT CHECK 4D ACCURACY CODE APPLIED TO PAT1 CONTROLLING OBSTACLE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	VOR-A	1	1	KTSO	CARROLLTON	OH (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED FAC1 TRUE BRG FROM 123.39 TO 123.40
ADDED FAC1 DIST FROM FAC 14NM/85065FT
REMOVED FAC2
UPDATED PAT1 CONTROLLING OBSTACLES
CHANGED PAT1 MIN/MAX TEMPLATE FROM 4/9 TO 6/9
UPDATED FIX USE
ADDED PRECIPITOUS TERRAIN EVALUATION COMPLETED TO REMARKS
MOVED HOLDING LIMITED TO ESTABLISHED PATTERN FROM REMARKS TO HOLDING RESTRICTION

DEVELOPED BY: **DATE:** 04/13/2012 **OFFICE:** AJV-351 **NAME:** TERENCE SHARP (DAVID TEFFETELLER)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZOB
ATC FACILITY:
OTHER: CAK ATCT

QUALITY 9 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: MAPSV **STATE:** OH **COUNTRY:** US

LATITUDE/LONGITUDE: 403350.05N/0810453.66W **TYPE:** DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	BRIGGS	BSV	VOR/DME	L	127.40	123.40	19.20	19.20		1840	10000

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
CHANGED FROM CNF TO DME FIX

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	VOR-A	1		KTSO	CARROLLTON	OH (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
DELETED "OR GPS" FIX REQUIRED TO BE DME FIX

DEVELOPED BY: **DATE:** 06/08/2012 **OFFICE:** AJV-351 **NAME:** TIMOTHY MCHENRY

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZOB
ATC FACILITY: CAK ATCT
OTHER:

QUALITY 9 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: BRIGGS VOR/DME **STATE:** OH **COUNTRY:** US

LATITUDE/LONGITUDE: 404426.41N/0812555.72W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	BRIGGS	BSV	VOR/DME	L							17500

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	N	BSV	VOR/DME	001.99	181.99	R	1		3000	6000	4	5
2	S	BSV	VOR/DME	188.00	008.00	R	1		3000	6000	4	5
3	SE	BSV	VOR/DME	116.00	296.00	R	1		2800	6000	4	5
4	SE	BSV	VOR/DME	141.00	321.00	R	1		3000	6000	4	5
5	SE	BSV	VOR/DME	155.00	335.00	R	1		3000	6000	4	5
6	S	BSV	VOR/DME	191.00	011.00	R	1		3000	6000	4	5
7	S		WP	191.00	011.00	R		4	3000	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (39-000849)	404643.00N/0812704.00W	1518	5D
2	200	TOWER (39-000212)	404017.00N/0812358.00W	1608	4D
3	200	TOWER (39-000212)	404017.00N/0812358.00W	1608	4D
4	200	TOWER (39-000212)	404017.00N/0812358.00W	1608	4D
5	200	TOWER (39-000212)	404017.00N/0812358.00W	1608	4D
6	200	TOWER (39-000212)	404017.00N/0812358.00W	1608	4D
7	200	TOWER (39-000212)	404017.00N/0812358.00W	1608	4D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

INFORMATION ONLY

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ADDED PAT 6 FOR WP HOLDING OVER FACILITY.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	ALLEGHENY			KAGC	PITTSBURGH	PA (US)
DP	PITTSBURGH			KPIT	PITTSBURGH	PA (US)
EN ROUTE	V210					(US)
EN ROUTE	V40					(US)
EN ROUTE	V43					(US)
EN ROUTE	V59					(US)
EN ROUTE	V75					(US)
EN ROUTE	V8					(US)
IAP	LOC RWY 25			KAKR	AKRON	OH (US)
IAP	NDB OR GPS RWY 25			KAKR	AKRON	OH (US)
IAP	ILR OR LOC RWY 1		5	KCAK	AKRON	OH (US)
IAP	ILS OR LOC RWY 19		2	KCAK	AKRON	OH (US)
IAP	ILS OR LOC RWY 23		2	KCAK	AKRON	OH (US)
IAP	ILS OR LOC RWY 5		2	KCAK	AKRON	OH (US)
IAP	RADAR 1		2	KCAK	AKRON	OH (US)
IAP	RNAV (GPS) RWY 19		7	KCAK	AKRON	OH (US)
IAP	RNAV (GPS) RWY 23		7	KCAK	AKRON	OH (US)
IAP	RNAV (GPS) RWY 5			KCAK	AKRON	OH (US)
IAP	VOR RWY 23		2	KCAK	AKRON	OH (US)
IAP	VOR RWY 5			KCAK	AKRON	OH (US)
IAP	VOR OR GPS-A			K4G3	ALLIANCE	OH (US)
IAP	VOR OR GPS-A			KTSO	CARROLLTON	OH (US)
IAP	LDA PRM RWY 24L			KCLE	CLEVELAND	OH (US)
IAP	LDA PRM RWY 6R			KCLE	CLEVELAND	OH (US)
IAP	LDA/DME RWY 24L			KCLE	CLEVELAND	OH (US)
IAP	RNAV (GPS) RWY 27			K1G5	MEDINA	OH (US)
IAP	VOR RWY 27			K1G5	MEDINA	OH (US)
IAP	VOR-A		1	KPHD	NEW PHILADELPHIA	OH (US)
IAP	VOR OR GPS RWY 17			K3G6	SEBRING	OH (US)
IAP	VOR/DME-A		4	K3G3	WADSWORTH	OH (US)
IAP	VOR RWY 10		3	KBJJ	WOOSTER	OH (US)
IAP	VOR RWY 28		3	KBJJ	WOOSTER	OH (US)
STAR	KNOX			KORD	CHICAGO	IL (US)
STAR	KEATN			KBKL	CLEVELAND	OH (US)
STAR	KEATN			KCGF	CLEVELAND	OH (US)
STAR	KEATN			KCLE	CLEVELAND	OH (US)
STAR	CUTTA			K02G	EAST LIVERPOOL	OH (US)
STAR	KEATN			K1G1	ELYRIA	OH (US)
STAR	KEATN			KLPR	LORAIN/ELYRIA	OH (US)

QUALITY CHECKED 9

STAR	KEATN	K1G5	MEDINA	OH (US)
STAR	KEATN	K7G8	MIDDLEFIELD	OH (US)
STAR	KEATN	K2G1	PAINESVILLE	OH (US)
STAR	KEATN	KLNN	WILLOUGHBY	OH (US)
STAR	CUTTA	KBVI	BEAVER FALLS	PA (US)
STAR	CUTTA	KBTP	BUTLER	PA (US)
STAR	JESEY RNAV	KBTP	BUTLER	PA (US)
STAR	CUTTA	KPIT	PITTSBURGH	PA (US)
STAR	JESEY RNAV	KPIT	PITTSBURGH	PA (US)

REQUIRED CHARTING: STAR, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 16 **DATE OF REVISION:** 01/13/2011

REASON FOR REVISION:
ADDED HOLDING PAT 6 AND ASSOCIATED DATA.
ADDED HOLDING PAT 7 AND ASSOCIATED DATA.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 06/23/2010 **OFFICE:** AVN-120 **NAME:** LARRY STROUT (SCOTT CORY)

APPROVED BY: **DATE:** 11/17/2010 **OFFICE:** AVN-120 **NAME:** GREGORY YAMAMOTO

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZOB
ATC FACILITY: CAK ATCT, YNG ATCT
OTHER: CLE APP CON

INFORMATION ONLY

QUALITY 9 CHECKED