AERONAUTICAL CHARTING MEETING
Charting Group
Meeting 18-01 – April 25 - 26, 2018

RECOMMENDATION DOCUMENT

FAA Control # 18-01-324

Subject: Magnetic variation not shown on IAP's

Background/Discussion:

MAG VAR for IAP's published by the FAA currently reside in various locations. The TL's/8260 forms and within the Navigation Aids on eNASR.

US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.29

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
CIRRU INT/ALB 16.00 DME (IAF)	MUJIK/I-DEJ 12.50 DME/RADAR (NOPT)	296.00 / 4.66 (HDG) & 011.17 / 2.65 (I-DEJ)	2600
MUJIK/I-DEJ 12.50 DME/RADAR (IF/IAF)	FLEIG/I-DEJ 6.47 DME/RADAR	011.17 / 6.03 (I-DEJ)	1900

MISSED APPROACH

ILS: DA
LOC: 4.90 MILES AFTER FLEIG/DEJ 6.47 DME/RADAR OR AT I-DEJ 1.57 DME FIX

CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 5000 AND ON CAM VOR/DME R-251 TO CAM VOR/DME AND HOLD, OR AS DIRECTED BY ATC.

ALTERNATE MA: CLIMB TO 2000 THEN CLIMBING LEFT TURN TO 4000 ON ALB VORTAC R-299 TO MARIA/ALB 19.00 DME AND HOLD (DME REQUIRED).

ADDITIONAL FLIGHT DATA:
HOLD N, RT, 160.19 INBOUND.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW MARIA/ALB 19.00 DME, RT, 119.05 INBOUND.
FAS OBST: 470 AAO 424042N/0734749W
CHART VDP AT 2.77 DME*.
DISTANCE VDP TO THLD 1.20 MILES.
*LOC ONLY.
CHART (IYIYO) AT INTERSECTION OF DR LEG AND INTERMEDIATE COURSE.
CHART IN PLANVIEW: MARIA/ALB 19.00 DME.

1. PT ___ SIDE OF COURSE ___ OUTBOUND FT WITHIN ___ MILES OF ___ (IAF)
2. HOLD S MUJIK, RT, 011.17 INBOUND, 2600 FT. IN LIEU OF PT (IAF)
3. FAC: 011.17 FAF: FLEIG/I-DEJ 6.47 DME/RADAR DIST FAF TO MAP: 4.90 THLD: 4.90
4. MIN. ALT: MUJIK 2600, FLEIG 1900
5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: 834 GS ANT: 1113
6. MIN GS INCPT: 1900 GS ALT AT: FLEIG 1900 OM: - MM: - IM: -
7. GS ANGLE: 3.00 TCH: 55.9
8. MSA FROM: ALB VORTAC 090-180 4700, 180-090 3600

MAG VAR: 13W EPOCH YEAR: 1980

MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT ALTERNATE: N A ILS: STANDARD LOC: STANDARD

CATEGORY ====>	A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
S-ILS 1	484	1800	200	484	1800	200	484	1800	200	484	1800	200			
S-LOC 1	720	2400	436	720	2400	436	720	4000	436	720	4000	436			
CIRCLING	820	1	535	820	1	535	820	1 1/2	535	840	2	555			

NOTES:
SA CATEGORY II ILS SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED S-ILS 1: CAT A, B, C, D, RA 100, RVR 1200, HATh 100, DA 384 MSL.
CHART PLANVIEW NOTE: DME OR RADAR REQUIRED.
CHART PROFILE NOTE: USE I-DEJ DME WHEN ON THE LOCALIZER COURSE.
(SEE FORM 8260-10)

QUALITY 5 CHECKED

CITY AND STATE	ELEVATION: 285 THRE: 284 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
ALBANY, NY	ALBANY INTL	I-DEJ	ILS OR LOC RWY 1, AMDT 11 ILS RWY 1, (SA CAT II) 25 AUG 2011	AMDT: 10B DATED 07/31/2008

FAA FORM 8260 - 3 / April 2006 (computer generated) PAGE 1 OF 2 PAGES

Magnetic Variation	
Variation:	11
Direction:	E
Source:	FAA
Year:	1990

It would be extremely helpful if the magnetic variation was published on each IAP. This would conform with other State publications and the ICAO recommendation.

Excerpt from ICAO Annex 4: Ref: chapter 11 Instrument Approach Procedures 11.8.1

11.8 Magnetic variation

11.8.1 **Recommendation.**— *The magnetic variation should be shown.*

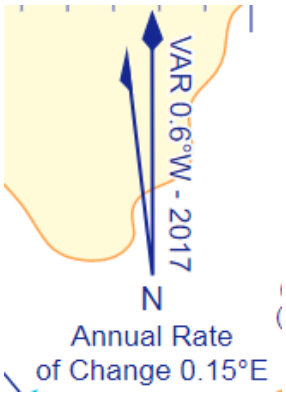
11.8.2 When shown, the value of the variation, indicated to the nearest degree, shall agree with that used in determining magnetic bearings, tracks and radials.

Recommendations:

To show the magnetic variation on each IAP as either:

1) A basic symbol:

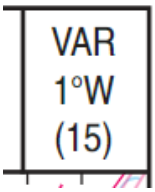
2) A basic symbol with further information such as the Year and annual rate of change:



3) A note:

VAR 3° E

including the year:



Comments:

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Date: 03 April 2018

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Jessica Head, NavBlue, presented the issue. Jessica stated that currently, magnetic variation values for Instrument Approach Procedures (IAPs) are published in various locations including FAA Form 8260-3 and in NAVAID records in the National Airspace System Resource (NASR) database. She is recommending that the magnetic variation also be published on each IAP chart. She said that this would align with what other States are doing and would conform to the International Civil Aviation Organizations (ICAO) charting recommendation. Jessica then presented a few proposed depictions for magnetic variation on IAPs.

Valerie Watson, FAA/AJV-553, pointed out that bearings on RNAV IAPs are predicated on the magnetic variation of record for the airport served, so publishing these could conceivably be possible. Bearings on ground-based IAPs, however, are predicated on the magnetic variation of record for the various NAVAIDs used in the procedure. There is not a single controlling NAVAID, so no single magnetic variation value could be shown on these charts.

Tony Lawson, FAA/AJV-553, agreed with Valerie and emphasized that it is not uncommon for there to be several different magnetic variations used on a single procedure.

John Bordy FAA/AFS-420, added that the FAA takes exception to the ICAO recommendation. He said the FAA only indicates magnetic variation in locations where there is compass instability.

Rich Boll, NBAA, asked why NavBlue requests the addition of magnetic variation to IAPs. Jessica replied that their customers have asked for it and that they see value in having it on the charts. Rich then asked the pilot audience if they saw value in having it on the charts. No pilot support for adding magnetic variation to IAP charts was voiced. Ted Thompson, Jeppesen, commented customers outside of the U.S. are used to seeing magnetic variation on IAP charts. Jeppesen at one point provided magnetic variation information on U.S. charts, but as it was found to cause too much confusion, Jeppesen decided to remove the information from the charts.

Valerie concluded as there did not seem to be support from the audience for this proposal, and because the U.S. has taken exception to this ICAO standard recommended practice and has no intent to revise this position, this recommendation document will not be pursued.

STATUS: CLOSED