ERRATA SHEET

SUBJECT: Aeronautical Information Manual (AIM), Effective February 9, 2012.

This errata sheet transmits revised pages for AIM Basic edition, effective February 9, 2012.

REMOVE PAGES	DATED	INSERT PAGES	DATED
E of Chg−1	2/9/12	E of Chg−1	2/9/12
7−1−43 through 7−1−46	2/9/12	7−1−43 through 7−1−46	2/9/12

Note−
Due to a printer error the AIM Basic edition was bound. AIM Change 1 will reissue the entire manual in loose−leaf format.

Attachment

Explanation of Changes

Basic

Effective: February 9, 2012

a. 2−1−6. Runway Status Light (RWSL) System

This change make minor editorial and system updates

b. 2−1−7. Stand−Alone Final Approach Runway Occupancy Signal (FAROS)

This new paragraph explains the Stand−Alone Final Approach Runway Occupancy Signal (FAROS) system.

c. 4−1−20. Transponder Operation

This change explains that transponders should be turned on prior to moving on the airport surface - as opposed to ”as soon as possible”.

d. 4−3−23. Use of Aircraft Lights

This change aligns the AIM guidance on the use of aircraft lights with AC 120-74A.

e. 4−4−3. Clearance Items

This change adds language to inform pilots of what to expect from controllers concerning clearance limits and associated phraseology.

f. Chapter 4 Air Traffic Control, Section 7. Operational Policy/Procedures for the Gulf of Mexico 50 NM Lateral Separation Initiative

This new section describes the Operational Policy/Procedures for the Gulf of Mexico 50 NM Lateral Separation Initiative.

g. 5−3−7. Minimum Turning Altitude (MTA)

This new paragraph explains to pilots that the published minimum enroute altitude (MEA) may not be sufficient for obstacle clearance when a turn is required over a fix, NAVAID, or waypoint, and that they need to use MTAs when indicated.

h. 5−5−16. RNAV and RNP Operations

This change provides guidance for the definition of “established” for RNAV and RNP operations.

i. 7−1−8. Telephone Information Briefing Service (TIBS)

“Continuous” was deleted from the first sentence since TIBS recordings have never been continuous. The recording is always heard from the beginning, not joined in progress. Content was consolidated among sub−paragraphs and changes made due to the way TIBS are produced and a consolidation of FSS facilities outside Alaska. Expanded information was added to indicate where specific TIBS telephone numbers may be located.

j. 7−1−10. Inflight Weather Broadcasts

This change adds additional notes to concerning HIWAS in relation to Weather Advisory Broadcasts by ARTCC’s and terminal facilities and a statement to sub−paragraph b advising pilots to contact FSS with questions about weather different than forecasted or apparent errors in the HIWAS broadcast. Editorial changes were also made for clarification.

k. Entire publication.

In compliance with FAA Order 1000.36, FAA Writing Standards, as a word of requirement, “must” is replacing the word “shall.”

l. Entire publication.

Now that Flight Service Stations (FSS) nationwide are using modern automated operational systems, there is no longer a need for identifying certain sites as “automated.” Therefore, the term has been removed from the publication.

m. Entire publication.

Editorial/format changes were made where necessary, to include recent organization name changes. Revision bars were not used when changes are insignificant in nature.

7−1−19. Estimating Intensity of Snow or Drizzle (Based on Visibility)

a. Light. Visibility more than $^1/_2$ statute mile.

b. Moderate. Visibility from more than $^1/_4$ statute mile to $^1/_2$ statute mile.

c. Heavy. Visibility $^1/_4$ statute mile or less.

7−1−20. Pilot Weather Reports (PIREPs)

a. FAA air traffic facilities are required to solicit PIREPs when the following conditions are reported or forecast: ceilings at or below 5,000 feet; visibility at or below 5 miles (surface or aloft); thunderstorms and related phenomena; icing of light degree or greater; turbulence of moderate degree or greater; wind shear and reported or forecast volcanic ash clouds.

b. Pilots are urged to cooperate and promptly volunteer reports of these conditions and other atmospheric data such as: cloud bases, tops and layers; flight visibility; precipitation; visibility restrictions such as haze, smoke and dust; wind at altitude; and temperature aloft.

c. PIREPs should be given to the ground facility with which communications are established; i.e., EFAS, FSS, ARTCC, or terminal ATC. One of the primary duties of EFAS facilities, radio call "FLIGHT WATCH," is to serve as a collection point for the exchange of PIREPs with en route aircraft.

d. If pilots are not able to make PIREPs by radio, reporting upon landing of the inflight conditions encountered to the nearest FSS or Weather Forecast Office will be helpful. Some of the uses made of the reports are:

1. The ATCT uses the reports to expedite the flow of air traffic in the vicinity of the field and for hazardous weather avoidance procedures.

2. The FSS uses the reports to brief other pilots, to provide inflight advisories, and weather avoidance information to en route aircraft.

3. The ARTCC uses the reports to expedite the flow of en route traffic, to determine most favorable altitudes, and to issue hazardous weather information within the center's area.

4. The NWS uses the reports to verify or amend conditions contained in aviation forecast and advisories. In some cases, pilot reports of hazardous conditions are the triggering mechanism for the issuance of advisories. They also use the reports for pilot weather briefings.

5. The NWS, other government organizations, the military, and private industry groups use PIREPs for research activities in the study of meteorological phenomena.

6. All air traffic facilities and the NWS forward the reports received from pilots into the weather distribution system to assure the information is made available to all pilots and other interested parties.

e. The FAA, NWS, and other organizations that enter PIREPs into the weather reporting system use the format listed in TBL 7−1−6. Items 1 through 6 are included in all transmitted PIREPs along with one or more of items 7 through 13. Although the PIREP should be as complete and concise as possible, pilots should not be overly concerned with strict format or phraseology. The important thing is that the information is relayed so other pilots may benefit from your observation. If a portion of the report needs clarification, the ground station will request the information. Completed PIREPs will be transmitted to weather circuits as in the following examples:

TBL 7−1−6
PIREP Element Code Chart

	PIREP ELEMENT	PIREP CODE	CONTENTS
1.	3−letter station identifier	XXX	Nearest weather reporting location to the reported phenomenon
2.	Report type	UA or UUA	Routine or Urgent PIREP
3.	Location	/OV	In relation to a VOR
4.	Time	/TM	Coordinated Universal Time
5.	Altitude	/FL	Essential for turbulence and icing reports
6.	Type Aircraft	/TP	Essential for turbulence and icing reports
7.	Sky cover	/SK	Cloud height and coverage (sky clear, few, scattered, broken, or overcast)
8.	Weather	/WX	Flight visibility, precipitation, restrictions to visibility, etc.
9.	Temperature	/TA	Degrees Celsius
10.	Wind	/WV	Direction in degrees magnetic north and speed in knots
11.	Turbulence	/TB	See AIM paragraph 7−1−23
12.	Icing	/IC	See AIM paragraph NO TAG
13.	Remarks	/RM	For reporting elements not included or to clarify previously reported items

EXAMPLE−
1. *KCMH UA /OV APE 230010/TM 1516/FL085/TP BE20/SK BKN065/WX FV03SM HZ FU/TA 20/TB LGT*

NOTE−
1. *One zero miles southwest of Appleton VOR; time 1516 UTC; altitude eight thousand five hundred; aircraft type BE200; bases of the broken cloud layer is six thousand five hundred; flight visibility 3 miles with haze and smoke; air temperature 20 degrees Celsius; light turbulence.*

EXAMPLE−
2. *KCRW UV /OV KBKW 360015−KCRW/TM 1815/FL120//TP BE99/SK IMC/WX RA/TA M08 /WV 290030/TB LGT−MDT/IC LGT RIME/RM MDT MXD ICG DURC KROA NWBND FL080−100 1750Z*

NOTE−
2. *From 15 miles north of Beckley VOR to Charleston VOR; time 1815 UTC; altitude 12,000 feet; type aircraft, BE−99; in clouds; rain; temperature minus 8 Celsius; wind 290 degrees magnetic at 30 knots; light to moderate turbulence; light rime icing during climb northwestbound from Roanoke, VA, between 8,000 and 10,000 feet at 1750 UTC.*

7−1−21. PIREPs Relating to Airframe Icing

a. The effects of ice on aircraft are cumulative-thrust is reduced, drag increases, lift lessens, and weight increases. The results are an increase in stall speed and a deterioration of aircraft performance. In extreme cases, 2 to 3 inches of ice can form on the leading edge of the airfoil in less than 5 minutes. It takes but $^1/_2$ inch of ice to reduce the lifting power of some aircraft by 50 percent and increases the frictional drag by an equal percentage.

b. A pilot can expect icing when flying in visible precipitation, such as rain or cloud droplets, and the temperature is between +02 and −10 degrees Celsius. When icing is detected, a pilot should do one of two things, particularly if the aircraft is not equipped with deicing equipment; get out of the area of precipitation; or go to an altitude where the temperature is above freezing. This “warmer” altitude may not always be a lower altitude. Proper preflight action includes obtaining information on the freezing level and the above freezing levels in precipitation areas. Report icing to ATC, and if operating IFR, request new routing or altitude if icing will be a hazard. Be sure to give the type of aircraft to ATC when reporting icing. The following describes how to report icing conditions.

1. Trace. Ice becomes perceptible. Rate of accumulation slightly greater than sublimation. Deicing/anti-icing equipment is not utilized unless encountered for an extended period of time (over 1 hour).

2. Light. The rate of accumulation may create a problem if flight is prolonged in this environment (over 1 hour). Occasional use of deicing/anti-icing equipment removes/prevents accumulation. It does not present a problem if the deicing/anti-icing equipment is used.

3. Moderate. The rate of accumulation is such that even short encounters become potentially hazardous and use of deicing/anti-icing equipment or flight diversion is necessary.

4. Severe. The rate of accumulation is such that deicing/anti-icing equipment fails to reduce or control the hazard. Immediate flight diversion is necessary.

EXAMPLE−

Pilot report: give aircraft identification, location, time (UTC), intensity of type, altitude/FL, aircraft type, indicated air speed (IAS), and outside air temperature (OAT).

NOTE−

1. *Rime ice. Rough, milky, opaque ice formed by the instantaneous freezing of small supercooled water droplets.*

2. *Clear ice. A glossy, clear, or translucent ice formed by the relatively slow freezing of large supercooled water droplets.*

3. *The OAT should be requested by the FSS or ATC if not included in the PIREP.*

7−1−22. Definitions of Inflight Icing Terms

See TBL 7−1−7, Icing Types, and TBL 7−1−8, Icing Conditions.

TBL 7−1−7

Icing Types

Clear Ice	See Glaze Ice.
Glaze Ice	Ice, sometimes clear and smooth, but usually containing some air pockets, which results in a lumpy translucent appearance. Glaze ice results from supercooled drops/droplets striking a surface but not freezing rapidly on contact. Glaze ice is denser, harder, and sometimes more transparent than rime ice. Factors, which favor glaze formation, are those that favor slow dissipation of the heat of fusion (i.e., slight supercooling and rapid accretion). With larger accretions, the ice shape typically includes “horns” protruding from unprotected leading edge surfaces. It is the ice shape, rather than the clarity or color of the ice, which is most likely to be accurately assessed from the cockpit. The terms “clear” and “glaze” have been used for essentially the same type of ice accretion, although some reserve “clear” for thinner accretions which lack horns and conform to the airfoil.
Intercycle Ice	Ice which accumulates on a protected surface between actuation cycles of a deicing system.
Known or Observed or Detected Ice Accretion	Actual ice observed visually to be on the aircraft by the flight crew or identified by on−board sensors.
Mixed Ice	Simultaneous appearance or a combination of rime and glaze ice characteristics. Since the clarity, color, and shape of the ice will be a mixture of rime and glaze characteristics, accurate identification of mixed ice from the cockpit may be difficult.
Residual Ice	Ice which remains on a protected surface immediately after the actuation of a deicing system.
Rime Ice	A rough, milky, opaque ice formed by the rapid freezing of supercooled drops/droplets after they strike the aircraft. The rapid freezing results in air being trapped, giving the ice its opaque appearance and making it porous and brittle. Rime ice typically accretes along the stagnation line of an airfoil and is more regular in shape and conformal to the airfoil than glaze ice. It is the ice shape, rather than the clarity or color of the ice, which is most likely to be accurately assessed from the cockpit.
Runback Ice	Ice which forms from the freezing or refreezing of water leaving protected surfaces and running back to unprotected surfaces.
Note− *Ice types are difficult for the pilot to discern and have uncertain effects on an airplane in flight. Ice type definitions will be included in the AIM for use in the “Remarks” section of the PIREP and for use in forecasting.*	