Volume 2, Issue 1-a
Supplemental

Apr 28, 2008

THE BRIEF

Summer PIREP Form

FAA - ARTCC
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This special edition of The Brief examines the new ZAB Pilot Report (PIREP) form, and a summer enhancement to the existing form. The new Summer PIREP form was created to enhance safety of flight and efficient flow of aircraft during the summer thunderstorm season. Pilot reports are crucial for filling in weather data gaps between radars and to supplement other forms of weather data. Limitations in Weather Radar coverage can be seen in following image.

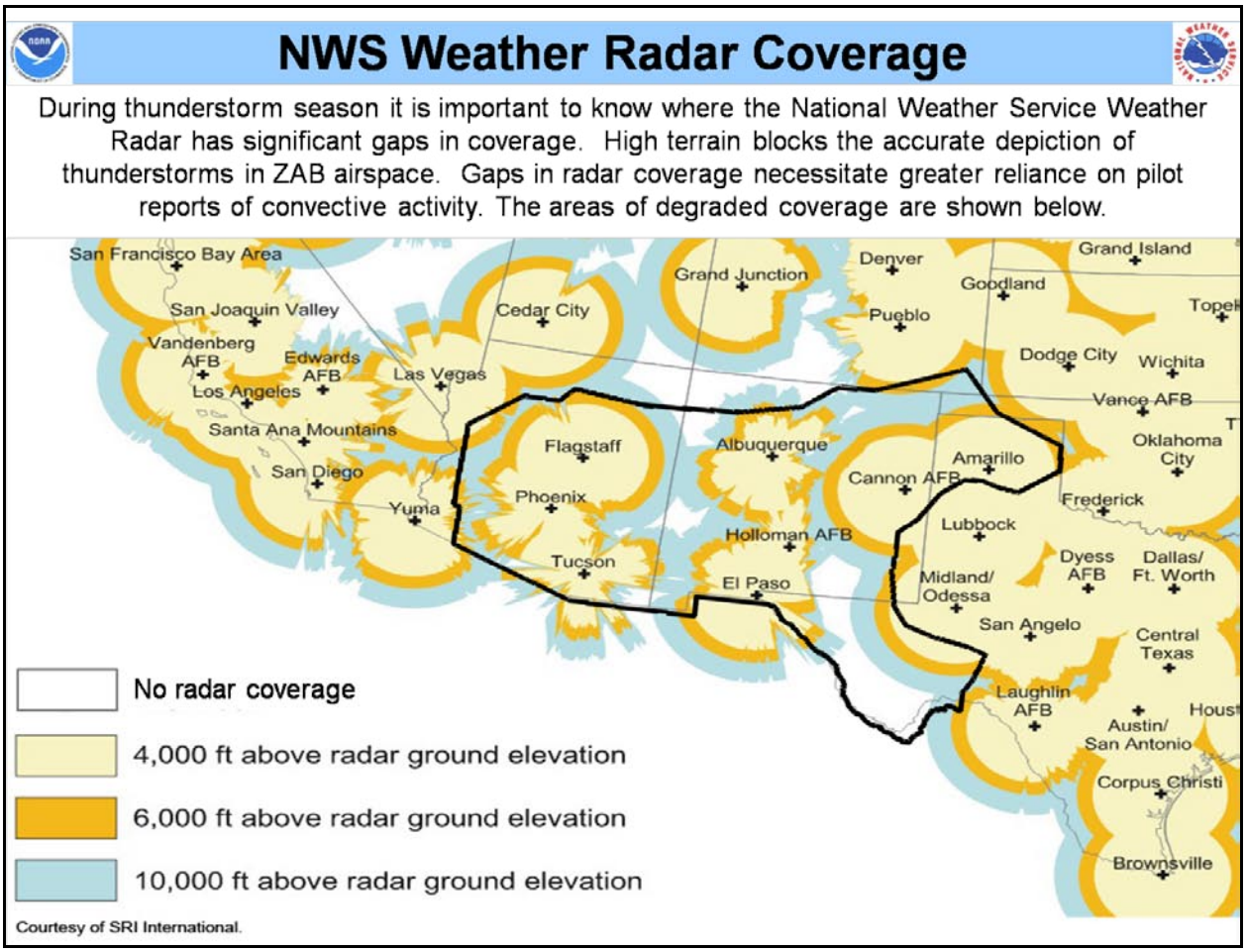


Figure 1. National Weather Service (NWS) Weather Radar Coverage Map with ZAB border, courtesy of SRI International.

As noted in **Figure 1**, significant radar coverage gaps in ZAB's area necessitate greater reliance on pilot reports. To facilitate a record of thunderstorm information, the PIREP form data blocks have been adjusted to create more room for remarks. **Figure 2** on the next page shows a comparison of the old and new PIREP forms. Form elements have not changed per se; the new layout is merely designed to take advantage of unused space on the old PIREP form.

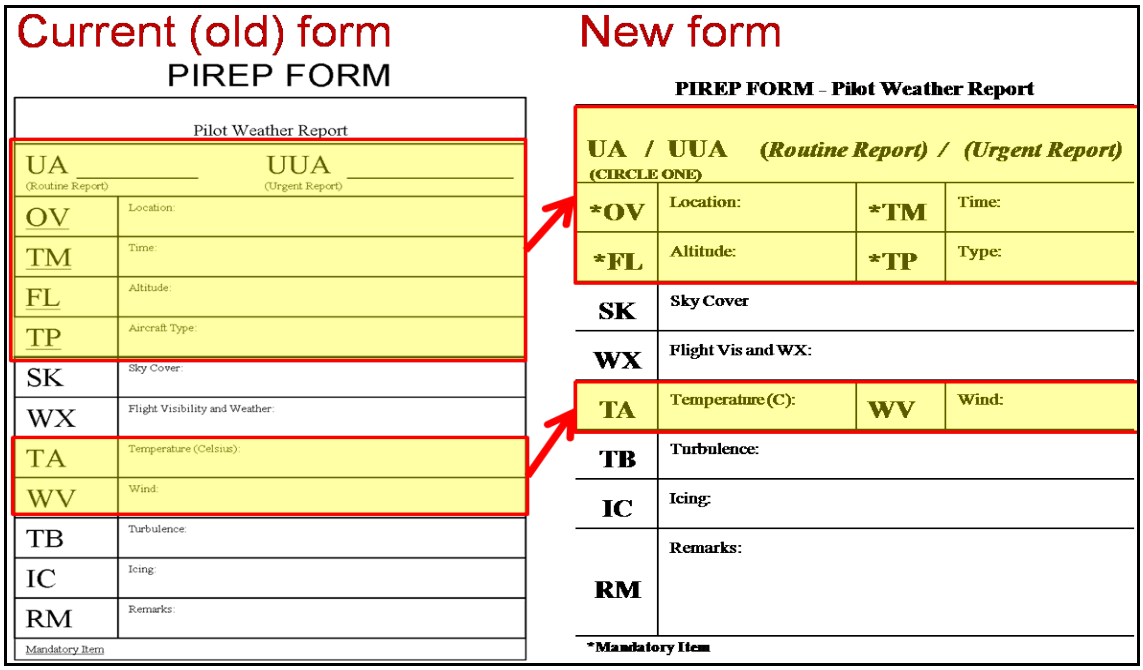


Figure 2. Comparison of Old and New PIREP forms.

A different version of the new PIREP form has been created for summer thunderstorm season. It contains a modified remarks section that describes specific information about thunderstorm weather hazards that are useful for controllers, pilots, and meteorologists alike. The following image shows how the remarks section of the new PIREP form was modified for summer season.

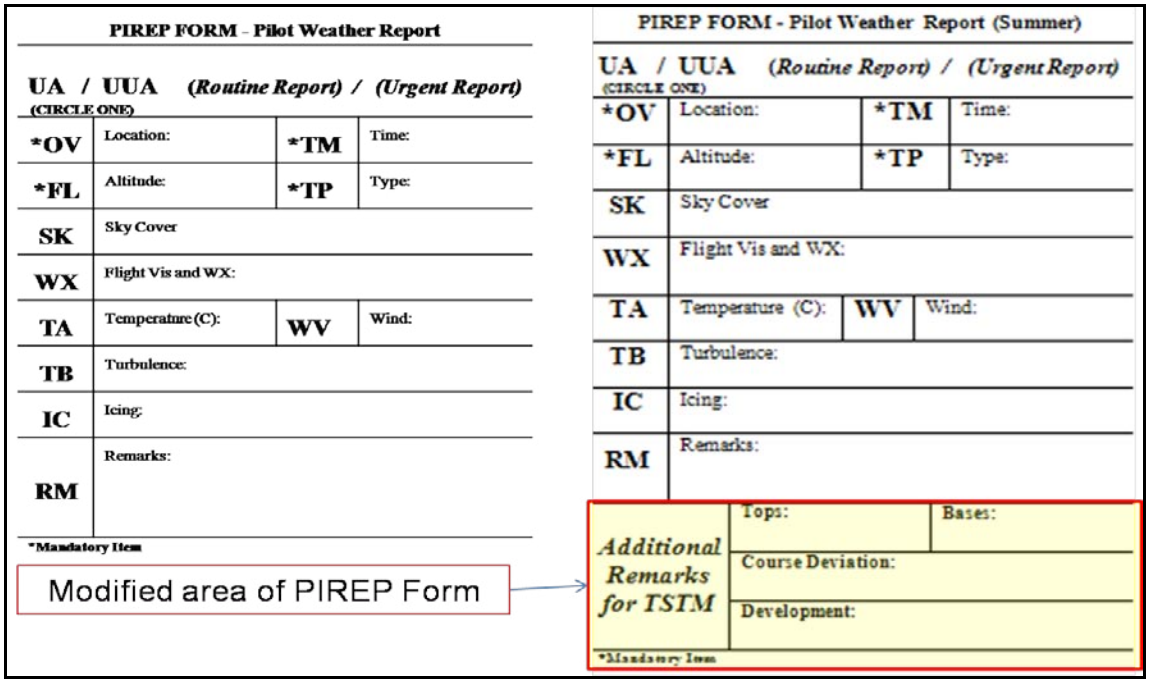
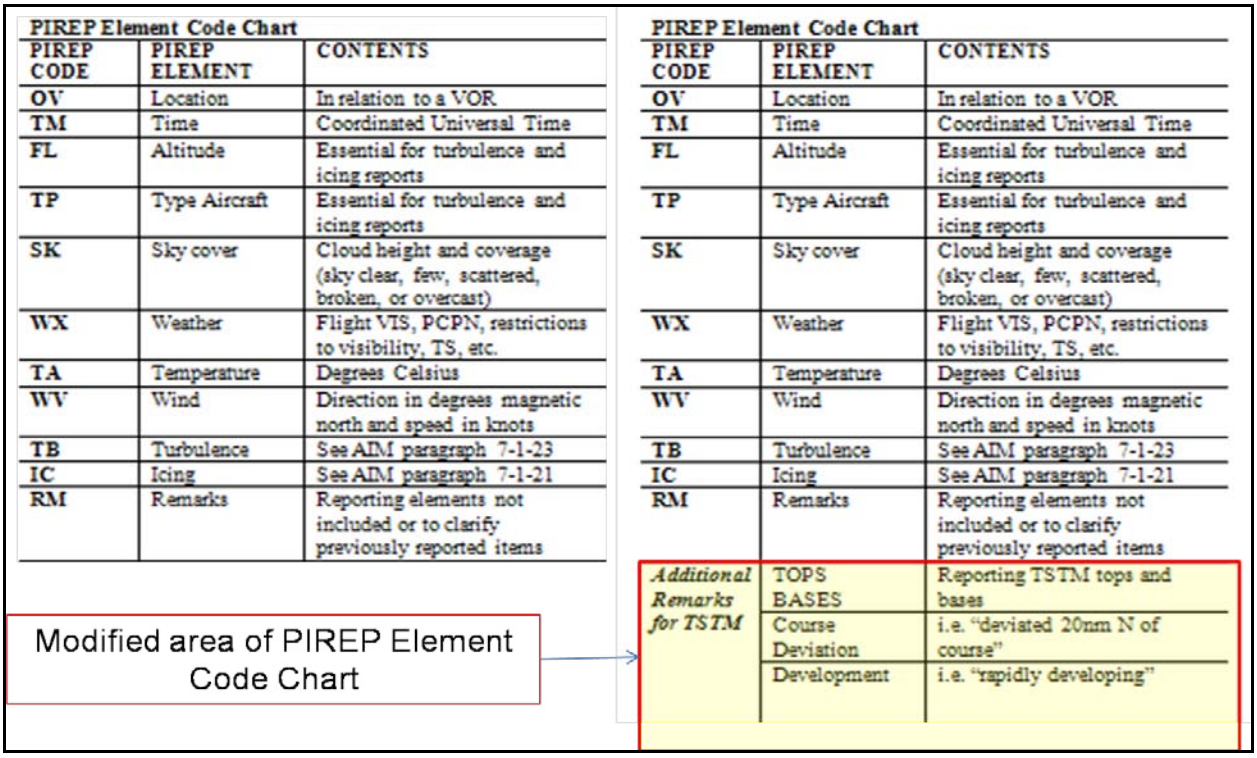


Figure 3. Comparison of the two new PIREP forms for winter and summer seasons.

For aid in coding, a PIREP Element Code Chart (PECC) has been added to the back of the form for quick reference. The two PECC's, and highlights of the modifications added for the summer season, can be seen in **Figure 3**.



PIREP Element Code Chart

PIREP CODE	PIREP ELEMENT	CONTENTS
OV	Location	In relation to a VOR
TM	Time	Coordinated Universal Time
FL	Altitude	Essential for turbulence and icing reports
TP	Type Aircraft	Essential for turbulence and icing reports
SK	Sky cover	Cloud height and coverage (sky clear, few, scattered, broken, or overcast)
WX	Weather	Flight VIS, PCPN, restrictions to visibility, TS, etc.
TA	Temperature	Degrees Celsius
WV	Wind	Direction in degrees magnetic north and speed in knots
TB	Turbulence	See AIM paragraph 7-1-23
IC	Icing	See AIM paragraph 7-1-21
RM	Remarks	Reporting elements not included or to clarify previously reported items

Modified area of PIREP Element Code Chart

PIREP Element Code Chart

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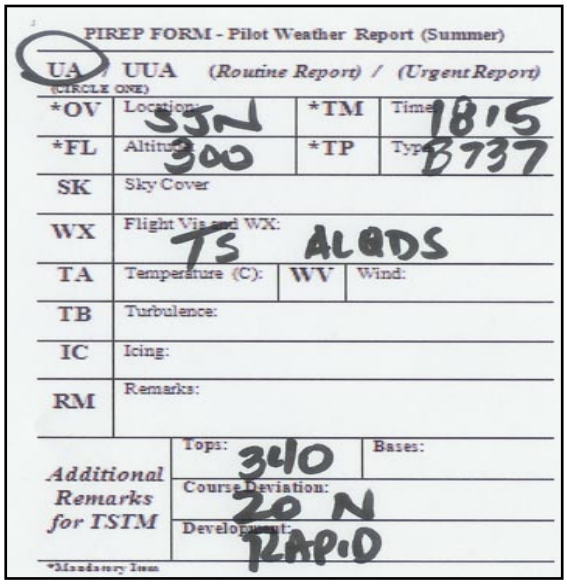
TB	Turbulence	See AIM paragraph 7-1-23
IC	Icing	See AIM paragraph 7-1-21
RM	Remarks	Reporting elements not included or to clarify previously reported items
Additional Remarks for TSTM	TOPS BASES	Reporting TSTM tops and bases
	Course Deviation	i.e. "deviated 20nm N of course"
	Development	i.e. "rapidly developing"

Figure 4. Back side of new PIREP forms - PECC Comparison

The following are examples for Summer PIREPs with thunderstorm/convective activity:

Example 1:



PIREP FORM - Pilot Weather Report (Summer)

UA / UUA (Routine Report) / (Urgent Report)
(CIRCLE ONE)

*OV	Location: SJN	*TM	Time: 1815
*FL	Altitude: 300	*TP	Type: B737
SK	Sky Cover		
WX	Flight Vis and WX: TS ALQDS		
TA	Temperature (C):	WV	Wind:
TB	Turbulence:		
IC	Icing:		
RM	Remarks:		

Additional Remarks for TSTM	Tops: 340	Bases:
	Course Deviation: 20 N	
	Development: RAPID	

*Mandatory Item

PIREP CODE:

UA OV SJN/TM 1815/FL300/TP B737/WX TS ALQDS/RM TS TOPS FL340..DEV 20 MI N OF CRS..RAPID DVLPMT

Example 2:

PIREP FORM - Pilot Weather Report (Summer)

UA / UUA (Routine Report) / (Urgent Report)

*OV	Location: FTI	*TM	Time: 2110
*FL	Altitude: 180	*TP	Type: E 145
SK	Sky Cover		
WX	Flight Vis and WX: 1 INCH HAIL		
TA	Temperature (C):	WV	Wind:
TB	Turbulence:		
IC	Icing:		
RM	Remarks: TS OVMTN		
Additional Remarks for TSTM	Tops: UNK	Bases: 080	
	Course Deviation:		
	Development:		

*Mandatory Item

PIREP CODE:

UUA OV FTI/TM 2110/FL180/TP E145/WX 1 INCH HAIL/RM TS OVR MOUNTAINS..TOPS UNKN..BASES 080

Remember that Urgent PIREPs differ from Routine PIREPs in the following ways :

UA and UUA Classification

FAA Order 7110.10S; Pilot Weather Report (UA/UUA) 9-2-3

URGENT (UUA) PIREP:

1. Tornadoes, funnel clouds, or waterspouts.
2. Severe or extreme turbulence (including clear air turbulence).
3. Severe icing.
4. Hail.
5. Low level wind shear. UUA if speed fluctuations are 10 knots or more. If air speed fluctuation is not reported, classify PIREP as UUA.

NOTE- LLWS defined as wind shear within 2,000 feet of the surface.

6. Volcanic ash clouds.
7. Any other weather phenomena reported which are considered by the specialist as being hazardous, or potentially hazardous, to flight operations.

ROUTINE.

Classify as ROUTINE (UA) all PIREPs received except those listed above.