

CHAPTER 8

PILOT REPORTS

PIREPS

PILOT REPORTS

1. Pilot reports (PIREPS) should be passed to ATC, Flight Service Stations, FICs, METRO, or given as a post flight report. PIREPS are ***invaluable***. Forecasts are improved as a result of PIREPS being made available to forecasters.
2. The following is the standard PIREP format used in Canada. In the US the format is similar. The only addition is the "WX" group (flight visibility and weather).
3. Message Header: UACN10 CYMM 261929
EG WG

UACN10 or (01) Canadian (CN) PIREP message header:
(UACN10 means routine message while **UACN01 means urgent message**)

261929 - Day and time message was sent in UTC.

EG is the 2-letter identifier for Flight Information Region (FIR) that the PIREP is for. In this case there are two FIR's given EG (Edmonton) and WG (Winnipeg) because the report is near the FIR's border.

4. Message text:

(U)UA /OV __ /TM __ /FL __ /TP __ /SK __ /TA __ / WV __ /TB __ /IC __ /RM __

UA - Identifies the message as a PIREP. **UUA indicates an urgent PIREP.**

Reasons for an Urgent PIREP:

- (a) Volcanic ash
- (b) Tornado, funnel cloud, waterspout
- (c) Severe turbulence
- (d) Severe icing
- (e) Hail
- (f) Low-level wind shear below 500 m (1600 ft) AGL
- (g) Any other reported phenomena considered to be hazardous or potentially hazardous to flight operations.

/OV - (Amended 2006) -Location of the PIREP.

A direction and distance from a Canadian navigation radio aid (NAVAID)
Or as a direction and distance from a Canadian aerodrome
Or as a geographic coordinate (latitude/longitude) without direction and distance.

Please note: the direction is **magnetic** in the southern domestic airspace
true in the northern domestic airspace

/TM - Time of the PIREP in UTC.

- /FL - Altitude is given in hundreds of feet above sea level based on the reading from the aircraft altimeter. e.g. FL090 = 9,000 ft. or one of the following:
UNKN = unknown;
DURC = during climb/after take off;
DURD = during decent/on approach.
- /TP - Aircraft type.
- /SK - Sky cover (ASL), e.g. /SK 020 BKN 060 / 100 SCT 120 indicates two layers of cloud, one broken between 2,000 and 6,000 feet (ASL) and one scattered between 10,000 and 12,000 feet (ASL). AGL will be indicated if used.
- /TA - Ambient temperature in degrees Celsius.
- /WV - Wind information is given in whole degrees true (3 digits) and knots (3 digits). If the pilot reports the wind direction in magnetic degrees this will be converted to true by the specialist before transmission of the report.
- /TB - Turbulence. It is reported by giving first the intensity, followed by the term "CAT" (in the case of Clear Air Turbulence) or "MECH" (in the case of mechanical turbulence) and the layer where turbulence is occurring. The contractions used for turbulence intensity are: LGT (light), MDT (moderate), SVR (severe) and XTRM (extreme).
- Example: /TB LGT-MDT BLO 50 indicates light to moderate turbulence below 5,000 feet (ASL).
- Example: /TB LGT-MDT CAT 230-270 indicates light to moderate clear air turbulence between 23,000 feet and 27,000 feet (ASL).
- /IC - Icing. It is reported according to type and intensity or rate of accumulation. Abbreviations are used for intensity and type of icing. Icing intensity may be described as TR (trace), LGT (light), MDT (moderate) and SVR (severe). Types of icing are: RIME, MXD (mixed) and CLR (clear).
- Example: /IC MDT CLR 020-080 / LGT RIME 080-100. The icing reported is moderate clear between 2,000-8,000 feet (ASL) and light rime between 8,000 to 10,000 feet (ASL).
- /RM - Remarks. Remarks are used to report any weather conditions not previously reported in the PIREP or to clarify information reported in one of the previous elements. Wording may be a combination of plain language and abbreviations. Some events that may be reported: Thunderstorms, LLWS (Low Level Wind Shear), frontal conditions, St Elmo's fire, icing in precipitation are but a few. Pilots are encouraged to report any phenomenon that may be of interest to other pilots, weather briefers and forecasters.

5. Examples of PIREPS:

UACN10 CYMM 261929

EG

UA /OV YMM 250030 /TM 1929 /FL UNKN /TP C185 /SK 018OVC020 /RM

VSBY 4-SHRASN, 1/2 INCH OF SNOW ON GROUND

-VIA YMM FSS-

This is a regular PIREP, 30 miles west southwest of Fort McMurray at 1929Z. This flight was at an unspecified flight level. The aircraft is a C185 (Cessna). The base of the overcast layer is between 1,800 feet and 2,000 feet ASL. In remarks, the visibility is 4SM in light showers of rain and snow mixed and there is half an inch of snow on the ground.

UACN10 CYQB 201540

UL

UA /OV CYGV 035040 /TM 1540 /FL015 /TP B06 /TB MDT-SVR MECH

This PIREP was taken 40 miles north northeast of Havre St-Pierre at 1540Z, at flight level 1,500 feet, by a B06 aircraft (Jet Ranger type helicopter). It reports moderate to severe mechanical turbulence.

UACN01 CYEG 281351

EG

UUA /OV CYSM /TM 1330 /FL340 /TP B737 /TB MDT-SVR

This is an urgent PIREP. At 1330Z, at flight level 34,000 feet over Fort Smith, this Boeing 737 reported moderate to severe turbulence.