

METEOROLOGY

PIREP



Overview

01

Weather Conditions Reported by Pilots

A pilot weather report (PIREP) is a report pertaining to current weather conditions encountered by aircraft in flight.

02

Can be Used to Confirm Forecasts

A PIREP is an invaluable data source for aviation meteorologists because it either confirms an existing forecast or highlights the requirement for an amendment.

03

Sometimes the Only Source of Weather Reports

A PIREP may also be the only information available regarding areas between reporting stations, particularly those areas whose topography may produce localized weather phenomena

Example

UACN10 CYXU 032133 YZ UA
/OV YXU 090010 /TM 2120
/FL080 /TP PA31 /SK 020BKN040
110OVC /TA -12 /WV 030045
/TB MDT BLO 040 /IC LGT RIME
020-040 /RM NIL TURB
CYYZ-CYHM



Report Type

Regular PIREP.

Urgent PIREPs are encoded as UACN01 or UUA.

Example

UACN10 CYXU 032133 YZ UA
/OV YXU 090010 /TM 2120
/FL080 /TP PA31 /SK 020BKN040
110OVC /TA -12 /WV 030045
/TB MDT BLO 040 /IC LGT RIME
020-040 /RM NIL TURB
CYYZ-CYHM



Issuing Office

London FIC.

Example

UACN10 CYXU 032133 YZ UA
/OV YXU 090010 /TM 2120
/FL080 /TP PA31 /SK 020BKN040
110OVC /TA -12 /WV 030045
/TB MDT BLO 040 /IC LGT RIME
020-040 /RM NIL TURB
CYYZ-CYHM



Date and Time of Issue

3rd day of the month, at 2133Z.

Example

UACN10 CYXU 032133 YZ UA
/OV YXU 090010 /TM 2120
/FL080 /TP PA31 /SK 020BKN040
110OVC /TA -12 /VV 030045
/TB MDT BLO 040 /IC LGT RIME
020-040 /RM NIL TURB
CYYZ-CYHM



PIREPs Covering Multiple FIRs

FIR: Toronto.

If the PIREP extends into an adjacent FIR, both FIRs will be indicated.

Example

UACN10 CYXU 032133 YZ UA
/OV YXU 090010 /TM 2120
/FL080 /TP PA31 /SK 020BKN040
110OVC /TA -12 /WV 030045
/TB MDT BLO 040 /IC LGT RIME
020-040 /RM NIL TURB
CYYZ-CYHM



Location

London VOR 090° radial, 10 NM.

PIREP location will be reported with reference to a NAVAID, airport or geographic coordinates (latitude/ longitude).

Example

UACN10 CYXU 032133 YZ UA
/OV YXU 090010 /TM 2120
/FL080 /TP PA31 /SK 020BKN040
110OVC /TA -12 /VV 030045
/TB MDT BLO 040 /IC LGT RIME
020-040 /RM NIL TURB
CYYZ-CYHM



Time of PIREP

2120Z

Example

UACN10 CYXU 032133 YZ UA
/OV YXU 090010 /TM 2120
/FL080 /TP PA31 /SK 020BKN040
110OVC /TA -12 /WV 030045
/TB MDT BLO 040 /IC LGT RIME
020-040 /RM NIL TURB
CYYZ-CYHM



Altitude

8,000 ft ASL.

Altitude may also be reported as “DURD” (during descent), “DURC” (during climb) or “UNKN” (unknown).

Example

UACN10 CYXU 032133 YZ UA
/OV YXU 090010 /TM 2120
/FL080 /TP PA31 /SK 020BKN040
110OVC /TA -12 /WV 030045
/TB MDT BLO 040 /IC LGT RIME
020-040 /RM NIL TURB
CYYZ-CYHM



Type of Aircraft

Piper Navajo (PA31).

Example

UACN10 CYXU 032133 YZ UA
/OV YXU 090010 /TM 2120
/FL080 /TP PA31 /SK 020BKN040
110OVC /TA -12 /WV 030045
/TB MDT BLO 040 /IC LGT RIME
020-040 /RM NIL TURB
CYYZ-CYHM



Sky Cover

First layer of cloud based at 2,000 ft with tops at 4,000 ft ASL.
Second layer of cloud based at 11,000 ft ASL.

Example

UACN10 CYXU 032133 YZ UA
/OV YXU 090010 /TM 2120
/FL080 /TP PA31 /SK 020BKN040
110OVC /TA -12 /WV 030045
/TB MDT BLO 040 /IC LGT RIME
020-040 /RM NIL TURB
CYYZ-CYHM



Air Temperature

-12°C.

Example

UACN10 CYXU 032133 YZ UA
/OV YXU 090010 /TM 2120
/FL080 /TP PA31 /SK 020BKN040
110OVC /TA -12 /WV 030045
/TB MDT BLO 040 /IC LGT RIME
020-040 /RM NIL TURB
CYYZ-CYHM



Wind Velocity

Wind direction 030° true, wind speed 45 kt.

Wind direction reported by pilots in degrees magnetic will subsequently be converted to degrees true for inclusion in PIREP.

Example

UACN10 CYXU 032133 YZ UA
/OV YXU 090010 /TM 2120
/FL080 /TP PA31 /SK 020BKN040
110OVC /TA -12 /WV 030045
/TB MDT BLO 040 /IC LGT RIME
020-040 /RM NIL TURB
CYYZ-CYHM



Turbulence

Moderate turbulence below 4,000 ft ASL.

Example

UACN10 CYXU 032133 YZ UA
/OV YXU 090010 /TM 2120
/FL080 /TP PA31 /SK 020BKN040
110OVC /TA -12 /WV 030045
/TB MDT BLO 040 /IC LGT RIME
020-040 /RM NIL TURB
CYYZ-CYHM

Icing

Light rime icing (in cloud) between 2,000 ft ASL and 4,000 ft ASL.

Example

UACN10 CYXU 032133 YZ UA
/OV YXU 090010 /TM 2120
/FL080 /TP PA31 /SK 020BKN040
110OVC /TA -12 /WV 030045
/TB MDT BLO 040 /IC LGT RIME
020-040 /RM NIL TURB
CYYZ-CYHM



Remarks

No turbulence encountered between Toronto and Hamilton.