Updated: Change in the METAR code for the United States regarding hail reporting effective September 13, 2018

Updated to change moderate ice pellets from (IP) to (PL)

Effective September 13, 2018, GR will represent all sizes of hail, and GS will only represent snow pellets.

Per Federal Aviation Administration (FAA) Notice 8900.275 from winter 2014-2015, small hail (GS) was determined to be meteorologically equivalent to moderate ice pellets (PL) for anti-/de-icing purposes. This change meant new de-icing tables for the airlines and necessitated a change to the METAR code in the United States. Currently, GS is defined as small hail or snow pellets.

Following a safety risk assessment, the FAA decided the best course of action was to change the coding of the GS (small hail and snow pellets) and GR (large hail to greater than or equal to 1/4 inch) to the following:

- GR refers to all hail
- All reports of hail must include hailstone size diameter in the Remarks (RMK) section of the METAR/SPECI in increments of 1/4 inch
- If no hail size is reported it will be assumed to be small hail
- Small hail will result in the issuance of a SPECI
- GS is used only when snow pellets are observed

A requirements letter was sent to Office of Federal Coordinator for Meteorology (OFCM) requesting change to Federal Meteorological Handbook-1 (FMH-1). (Apr 27, 2016). The new FMH-1, with the code change, went into effect November 2017, but the actual implementation has been delayed until September 13, 2018. See:


For questions regarding the METAR coding change, please contact:

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