

# Terminal Aerodrome Forecast

In meteorology and aviation, **TAF** ( **terminal aerodrome forecast**<sup>[1]</sup> or **terminal area forecast**) is a format for reporting weather forecast information, particularly as it relates to aviation. TAFs are issued every 6 hours: 0000,0600,1200,1800 UTC,<sup>[2]</sup> and generally apply to a 24 or 30-hour period, and an area within approximately five statute miles from the center of an airport runway complex.

TAFs complement and use similar encoding to METAR reports. They are produced by a human forecaster based on the ground. For this reason there are considerably fewer TAF locations than there are airports for which METARs are available. TAFs can be more accurate than Numerical Weather Forecasts, since they take into account local, small-scale, geographic effects.

Different countries use different change criteria for their weather groups. In the United Kingdom, TAFs for military airfields use Colour States as one of the change criteria. Civil airfields in the UK use slightly different criteria.

## TAF Code

This TAF example of a 30-hour TAF, released on November 5, 2008 at 1730 UTC:

```
TAF
KXYZ 051730Z 0518/0624 31008KT 3SM -SHRA BKN020
    FM052300 30006KT 5SM -SHRA OVC030
    PROB30 0604/0606 VRB20G35KT 1SM TSRA BKN015CB
    FM060600 25010KT 4SM -SHRA OVC050
    TEMPO 0608/0611 2SM -SHRA OVC030
    RMK NXT FCST BY 00Z=
```

The first line contains identification and validity times.

- **TAF** indicates that the following is a terminal area forecast.
- **KXYZ** indicates the airport to which the forecast applies (ICAO airport code).
- **051730Z** indicates that the report was issued on the 5th of the month at 1730 UTC (also known as Zulu, thus the "Z").
- **0518/0624** indicates that the report is valid from the 5th at 1800 UTC until the 6th at 2400 UTC.

The remainder of the first line contain the initial forecast conditions. Variations of the codes used for various weather conditions are many.<sup>[3]</sup>

- **31008KT** indicates that the wind will be from 310 degrees true at 8 knots.
- **3SM -SHRA BKN020** indicates that visibility will be 3 statute miles in light (-) rain (RA) showers (SH), with a broken ceiling (between 5/8 and 7/8 of the sky covered) at 2,000 feet AGL.

Each line beginning with **FM** indicates a rapid change in the weather over a period of less than an hour.

- **FM052300** indicates the next period lasts from (FM) the 5th at 2300 UTC to the 6th at 0600 UTC (the effective time on the next "FM" line). The remainder of the line has similar formatting to the other forecast lines.

The final line is for errata, comments, and remarks.

- **RMK NXT FCST BY 00Z** indicates a remark that the next forecast will be issued by 0000 UTC.

## TAF rules

TAFs must follow a set of rules that define what must be placed in each line and what criteria require a new line. There are four different lines in a TAF. The first one gives location, valid time and given weather for that time until the next line of the forecast. A BECMG (becoming) line (not used in TAFs issued in the United States, except for military uses) indicates that in the period given, the weather will start to change from the previous line to the next line; an FM (from) line indicates that after the given time, the weather will be what the line states. The change-indicator group TEMPO is used to indicate temporary fluctuations to forecast meteorological conditions which are expected to have a high percentage (greater than 50%) probability of occurrence, last for one hour or less in each instance and, in the aggregate, cover less than half of the period.

## Trend

A trend forecast is a truncated version of a TAF giving the expected conditions in a two-hour period following the issue of an observation. This short period forecast is appended to the end of a METAR.

METAR EGYM 291350Z 29010KT 8000 -RADZ FEW010 SCT037 OVC043  
10/07 Q1008 BLU TEMPO 7000 -RADZ SCT020 WHT=

In this example the METAR indicates it is from **EGYM** (RAF Marham) at 1350 UTC on Day 29. The observation follows (see METAR for explanation), with the Trend added to the end of the observation.

The Trend reads **TEMPO 7000 -RADZ SCT020 WHT** i.e. Temporary deterioration to 7 km visibility in slight rain or drizzle with scattered at 2000 ft, colour state White.

Trends are not used in the United States.

**Source: [www.wikipedia.org](http://www.wikipedia.org)**