Contact

Post:	Air Traffic Control the Netherlands
	Aeronautical Information Service
	P.O. Box 75200
	1117 ZT Schiphol
	The Netherlands
Tel:	+31 (0)20 406 3521
Fax:	+31 (0)20 406 3532
AFS:	EHAAYOYX

AIC-A
13/10
24 MAR 11
REVISED

AUTOMATED AERONAUTICAL MET OBSERVATIONS AT CIVIL AIRPORTS

1 — INTRODUCTION

The Royal Netherlands Meteorological Institute (KNMI) is responsible for all civil aeronautical meteorological information in the Netherlands. This document is intended to inform aeronautical users about the characteristics of automated aeronautical MET observations and where they are available. The MET observations are disseminated:

- locally via ATIS as local MET reports and local special MET reports;
- (inter)nationally in the AUTO METAR format; and
- through ATC via their respective frequencies.

1.1 GRONINGEN/Eelde and MAASTRICHT/Maastricht Aachen

For the aerodromes GRONINGEN/Eelde and MAASTRICHT/Maastricht Aachen, aeronautical MET observation reports are produced without a local observer (H24). Continuous monitoring is provided by the central forecast office of KNMI in De Bilt.

1.2 ROTTERDAM/Rotterdam

As of 15 March 2011 the aeronautical MET observation reports for the aerodrome ROTTERDAM/Rotterdam are produced without a local observer (H24). Continuous monitoring is provided by the central forecast office of KNMI in De Bilt.

2 — CHARACTERISTICS OF AUTOMATED REPORTS

2.1 Information in manually compiled and automated MET observation reports

The following values are measured automatically and reported identically in reports compiled by a human observer *and* in automated reports:

- Wind
- RVR
- Air temperature
- Dew point
- QNH.

Meteorologists of the central forecast office in De Bilt shall, when appropriate, add the following items to the automated reports:

- RSM: runway state message
- LLTI: low level temperature inversion
- Windshear report
- Windshear forecast
- TREND: a two hour forecast at the end of the observation report.

2.2 Differences between manual and automated MET observation reports

2.2.1 Visibility

- Reported visibility in AUTO METAR may occasionally vary compared to a manual observation in situations where visibility is rather inhomogeneous. This is due to the point measurement principle in AUTO METAR. For example, when fog is reported in AUTO METAR and no fog is present above the runway, visibility at the runway may be higher.

2.2.2 Clouds

- Cloud base height reports in automated reports are based on observations by laser ceilometers. Cloud cover (cloud amount) is derived by using a specific algorithm to cater for the fact that a ceilometer provides point measurements.
- Cloud type in the form of cumulonimbus (CB) or towering cumulus (TCU) will be included in automated reports based on an algorithm which uses weather radar-reflectivity and satellite data.
- Additional information about the convective characteristics of the clouds through (near) real time weather radar observations is available via MWO De Bilt, Meteorological Self Briefing units, ATC centres and via KNMI's aviation weather website www.aviationweather.nl.

2.3 Information not provided in automated MET observation reports

Automated MET observation reports are part of the meteorological service provision comprising of observations, forecasts, warnings and advices. If the automated MET observations are not fully able to determine all weather phenomena and descriptors, the meteorologists

located in De Bilt are available for briefing or consultation. Also, additional information is available at KNMI's aviation weather website www.aviationweather.nl.

2.3.1 Present weather

Automated MET reports contain a subset of present weather codes, not the complete set of METAR and local and special MET reports.

- Present weather in the vicinity of the aerodrome cannot be observed and therefore the code VC is not used in automated reports.
- If precipitation type can not be detected, the code UP (unknown precipitation) is reported.
- The following weather phenomena or descriptors are not reported: FC, SS, DS, PO, SA, DU, FU, VA, MI, BC, PR, DR and BL.
- Observations of present weather are carried out by a present weather sensor located on a fixed location. Only weather occurring at that specific location will be reported.
- Thunderstorms (TS) are reported when lightning is detected within a distance of 15 km from the aerodrome reference point (ARP) based on information gathered by the national lightning detection network.

3 — CODING PRACTISES IN AUTOMATED REPORTS

3.1 Codes not provided in automated observation reports

- FC, SS, DS, PO, SA, DU, FU, VA, MI, BC, PR, DR and BL.
- VC: vicinity.
- CAVOK: clouds and visibility OK.
- SKC: the term "sky clear" is no longer used in manual and automated MET observations.

3.2 Codes used in automated observation reports only

- AUTO: indicating an automated report.
- NCD: no clouds detected. When the sensor does not detect clouds and no CB/TCU are detected, the code NCD is reported due to the point measurement principle.
- UP: unknown precipitation. Not all types of precipitation are recognised by the present weather sensor, see paragraph 2.3.

3.3 Codes used in manual and automated MET observation reports

- NSC: no significant clouds. When no clouds of operational significance (cloud base 5000 ft or more and no CB/TCU) are observed, the abbreviation "NSC" is used.

3.4 Additional remarks in the REMARK section

AUTO METAR can contain up to three remarks in the REMARK section. The REMARK section is disseminated in the Netherlands only, in line with international data exchange rules.

- RMK TS INFO NOT AVBL: in situations where lightning data is not available.
- RMK CB INFO NOT AVBL: in situations where radar reflectivity data is not available.
- RMK WX INFO NOT AVBL: in situations where the local present weather sensor data is not available.

It is essential that the absence of weather or cloud information in an automated report is clearly identified as caused by the absence of the phenomena itself, or due to failure of the sensor. When cloud height sensor information is not available due to technical reasons, this will be reported in the cloud group using six slashes: "//////".

4 — CONTACT

For additional information contact KNMI Aviation Services in De Bilt by email: aviation@knmi.nl, or via the help pages of KNMI's aviation weather website www.aviationweather.nl.

5 — DOCUMENT CONTROL

This AIC replaces AIC-A 13/10 published 04 NOV 10.