

GEN 3.5 METEOROLOGICAL SERVICES

3.5.1 Responsible Service

The meteorological services for Civil Aviation Authority of Nepal are provided by the associated meteorological watch offices of Department of Hydrology and Meteorology by which meteorological watch is provided within Kathmandu FIR.

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The service is provided in accordance with the provisions contained in the following ICAO and CAAN documents:

Annex 3 - Meteorological Services for International Air Navigation

CAR 3 - Civil Aviation Requirement for Meteorological Services for International Air Navigation

Doc 7030 - Regional Supplementary Procedures

Doc 9673 - Air Navigation Plan-Asia and the Pacific

3.5.2 Area of Responsibility

Meteorological service is provided within the Kathmandu FIR.

3.5.3 Meteorological Observation and Reports

Table GEN 3.5.3 Meteorological Observations and reports

Name of station/ Location Indicator	Type & frequency of observation / automatic observing equipment	Type of MET reports & supplementary information included	Observation System & Site (S) Auto/Manual Observation System	Hours of Operation	Climatological information
TRIBHUVAN INTL AIRPORT/VNKT	HALF HOURLY	METAR	Ultrasonic wind sensors located at 270m N from RWY 02 and 245m S from 20 also contains air temp., pressure, present weather sensors and ceilometer	H24	Monthly
	AS PER NEED	SPECI			
	SIX HOURLY	TAF			
	AS PER NEED	TREND FORECAST			
	AS PER NEED	TAKE OFF /LANDING			
GAUTAM BUDDHA INTL AIRPORT/VNBW	HALF HOURLY	METAR	Ultrasonic Wind sensor, pressure sensor and ceilometer on both AWOS and temp sensor on only R10 (100m south of RWY10 and 120m south of RWY28)	As ATS	Monthly
	AS PER NEED	SPECI			
	AS PER NEED	TREND FORECAST			
	AS PER NEED	TAKE OFF /LANDING			
	SIX HOURLY	TAF (06, 12 & 18 Z)			
POKHARA INTL AIRPORT/VNPR	HALF HOURLY	METAR	Ultrasonic wind sensors - WMT 70 and other sensors located at 120m S from RWY 30 and 120m S from RWY 12 (installed & operated by CAAN)	As ATS	Monthly
	AS PER NEED	SPECI			
	AS PER NEED	TREND FORECAST			
	AS PER NEED	TAKEOFF /LANDING			
	SIX HOURLY	TAF (06 & 12Z)			
NEPALGUNJ AIRPORT/VNNG	HALF HOURLY	METAR	Ultrasonic wind sensors and other sensors located at 250m W from RWY 26.	As ATS	NIL
	AS PER NEED	SPECI			
SIMARA AIRPORT/VNSI	HALF HOURLY	METAR	Ultrasonic wind sensors and other sensors located at 110m S from RWY 19.	As ATS	NIL
	AS PER NEED	SPECI			
BIRATNAGAR AIRPORT/VNVT	HALF HOURLY	METAR	Ultrasonic wind sensors, air temp., pressure, radiation, present weather, sensors and ceilometer located at 130m from center.	As ATS	NIL
	AS PER NEED	SPECI			
JANAKPUR AIRPORT/VNJP	HALF HOURLY	METAR	Ultrasonic wind sensors and other sensors located at 130m E from RWY 09.	As ATS	NIL
	AS PER NEED	SPECI			
CHANDRAGADHI AIRPORT/VNCG	HALF HOURLY	METAR	Ultrasonic wind sensors and other sensors located at 105m from center	As ATS	NIL
	AS PER NEED	SPECI			

Note 1: METAR will be provided on Half an Hourly basis starting from 0000 UTC.

Note 2: TAF, Met reports and supplementary information issued from VNBW and VNPR are disseminated through AMHS locally.

3.5.4 Types of Services

1 *Observational Data and Forecasts*

Routine and selected special reports on current weather, terminal aerodrome and landing/ take off forecasts with trend for Tribhuvan International Airport, Gautam Buddha International Airport and Pokhara International Airport are provided from TIA Met Office, GBIA Met Office and PRIA Met Office respectively. For every domestic flight from TIA, latest weather observation, TAF, three days weather bulletin, high altitude forecast and wind-temp chart from FL050 to FL180 is provided.

2 *Met Briefing*

Oral briefing for current flight operation and for advance operational planning of international flights as well as for domestic flights is provided in person using displayed weather charts and satellite cloud pictures and other meteorological aids to the pilot-in-command or his representative prior to departure (in the TIA, GBIA, PRIA Met offices).

3 *Flight Documentation*

Flight documentation is provided for domestic flights and international flights from TIA, GBIA and PRIA Met offices. The flight documentation comprises significant weather charts, upper wind & air temperature charts and the latest available observation reports and aerodrome forecasts for the destination / alternative and enroute aerodromes. Whenever possible the pilot-in-command or his representative is given personal briefing by a forecaster at the Aerodrome Meteorological Office, otherwise briefing may be carried out by telephone;

4 *Relaying of Sigmet*

All Sigmet information received from terminals outside Nepal are relayed to the outgoing aircraft in flight through ATS radio Channels.

3.5.5 Notification Required from Operators

Notification from operators in respect of briefing, consultation, flight documentation and other meteorological information needed by them (ref Annex 3, 2.3) is normally required sufficiently in advance for scheduled flights. However, no such notification is required subject to the provision of bi-lateral agreement. For non-scheduled flights a prior notification should be made at least 24 hours before.

3.5.6 Aircraft Reports

1. Air reports at major ATS routes and aerodromes shall be made by all aircraft.
2. Special observations shall be made whenever the following weather phenomenon are encountered or observed-
 - a) severe turbulence; or
 - b) severer icing; or
 - c) severe mountain wave; or
 - d) thunderstorm without hail, that are obscured, embedded, widespread or in squall lines; or
 - e) thunderstorm with hail, that are obscured, embedded, widespread or in squall lines; or
 - f) heavy dust storm ; or
 - g) volcanic ash cloud; or
 - h) pre-eruption activity or a volcanic eruption

3. ***Reporting of Low-Level Wind Shear***

3.1. Pilots encountering wind shear shall report to ATC as soon as possible, when reporting it on radio telephony, the information should be transmitted in the following order

- a) Aircraft Call Sign;
- b) WIND SHEAR Report;
- c) Time (occurrence);
- d) Position (of wind shear);
- e) Intensity (moderate, strong or severe); and
- f) Average Height of Wind Shear Layer.

3.2. On receipt of wind- shear report from a pilot, ATC will pass it to other aircraft in the vicinity and Aerodrome Met Offices.

3.5.7 VOLMET service

VOLMET Service is not provided.

3.5.8 SIGMET, AIRMET Service

Location Indicators	Hours	FIR of CTA served	Types of SIGMET/ validity	Specific procedures	ATS unit served	Additional information
1	2	3	4	5	6	7
KATHMANDU / VNKT	H24	KATHMANDU FIR	OBS SIGMET / up to 4 hours		KATHMANDU ACC	NIL

3.5.9. Other Automated Meteorological Services

Online Aviation Meteorological Briefing System (OLBS) is functioning from GBIA and PRIA met office. It provides through google meet to the airlines operators with all types of briefing material, including current weather reports, SIGMET warnings, other special bulletin issued by the designated centers (of ICAO) for international /domestic flight planning purposes.

Note .– Details of meteorological briefing at aerodromes are given in the individual aerodrome sections, i.e. AD2.