GEN 3.5 METEOROLOGICAL SERVICES

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.

Director General,
Department of Hydrology and Meteorology
P.O.Box. 406, Naxal, Nagapokhari, Kathmandu
TEL: 977-1-4429919, 4426136
Email: dg@dhm.gov.np
AFS: VNKTYMYX

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

Annex 3 - *Meteorological Services for International Air Navigation*

Doc 7030 - *Regional Supplementary Procedures*

Doc 9673 - *Air Navigation Plan-Asia and the Pacific*

Differences to these provisions are detailed in subsection GEN 1.7.

2. Area of Responsibility

Meteorological service is provided within the Kathmandu FIR.

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 & supplement a-ry information on included	Observation System & Site (S)	Hours of Operation	Climato-logical informa-tion
TRIBHUVAN INTL AIRPORT/VNKT	HALF HOURLY	METAR SPECI Trend TAF	a) SFC Wind sensor 81.5 m of C/L of RWY, 300m from end of 02 RWY. Temperature and Pressure sensor 81.5 m of C/L of 02 RWY. b) SFC Wind sensor 82.0 m, of C/L of RWY, 300m from end of 20 RWY. Temperature and Pressure sensor 82.0 m of C/L of 20 RWY.	24 hours.	Monthly
POKHARA /VNPK	HOURLY	METAR SPECI	SFC Wind sensor 30 m of C/L of RWY, Temperature and Pressure sensor 30m of C/L of RWY.	0015-1845 (NST)	NIL
BHAIRAHAWA/ VNBW	HOURLY	METAR SPECI	SFC Wind sensor 30m of C/L of RWY, Temperature and Pressure 30 m of C/L of RWY	0015-1845 (NST)	NIL
NEPALGUNJ/ VNNG	HOURLY	METAR SPECI	SFC Wind sensor 40m of C/L of RWY, Temperature and Pressure 40 m of C/L of RWY	0015-1845 (NST)	NIL
SIMARA/VNSI	HOURLY	METAR SPECI	SFC Wind sensor 35m of C/L of RWY, Temperature and Pressure 35m of C/L of RWY	0015-1845 (NST)	NIL
BIRATNAGAR/ VNVT	HOURLY	METAR SPECI	SFC Wind sensor 30m of C/L of RWY, Temperature and Pressure 30m of C/L of RWY	0015-1845 (NST)	NIL

Table GEN 3.5.4 Weather observation at station other than 3.5.3 above. The information provided may not meet the operationally desirable accuracy of measurement of observation as specified in attachment A of annex – 3

Meteorological Observation and Reports on Different Domestic Airports:

Name of Station/ Location Indicator	Type and frequency of observation/ automatic observing equipment	Type of MET Reports and Supplementary Information Included	Observation System and Site (s)	Hours of Operation	Climatological Information:
Bajhang (VNBG)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **06**	Operation Hours	Nil
Bajura (VNBR)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **27**	Operation Hours	Nil
Bhojpur (VNBJ)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **17**	Operation Hours	Nil
Bhairahawa (VNBW)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **28**	Operation Hours	Nil
Bharatpur (VNBP)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **33**	Operation Hours	Nil
Biratnagar (VNVT)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **09**	Operation Hours	Nil
Chandragadhi (VNCG)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **10**	Operation Hours	Nil
Chaurjahari (VNCJ)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **03**	Operation Hours	Nil

Dang (VNDG)	Automatic	-	WS, WD, Temperature, QNH Tower Roof Top	Operation Hours	Nil
Dhangadhi (VNDH)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **27**	Operation Hours	Nil
Dolpa (VNDP)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **15**	Operation Hours	Nil
Doti (VNDT)	Automatic	-	WS, WD Tower Roof Top	Operation Hours	Nil
Janakpur (VNJP)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **09**	Operation Hours	Nil
Jomsom (VNJS)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **06**	Operation Hours	Nil
Jumla (VNJL)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **27**	Operation Hours	Nil
Kangeldanda (VNKL)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **11**	Operation Hours	Nil
Khanidanda (VNKD)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **08**	Operation Hours	Nil
Lamidanda (VNLD)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **26**	Operation Hours	Nil
Lukla (VNLK)	Automatic	-	WS, WD, Temperature, QNH Tower Roof Top	Operation Hours	Nil

Mahendranagar (VNMN)	Automatic	-	WS, WD, Tower Roof Top	-	-
Manang (VNMA)	Automatic	-	WS, WD Tower Roof Top	Operation Hours	Nil
Meghauli (VNMG)	Automatic	-	WS, WD Tower Roof Top	-	-
Nepalgunj (VNNG)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **26**	Operation Hours	Nil
Phaplu (VNPL)	Automatic	-	WS, WD Towards RWY Threshold: **20**	Operation Hours	Nil
Pokhara (VNPK)	Automatic	-	WS, WD, Temperature, QNH Tower Roof Top	Operation Hours	Nil
Rara (VNRR)	Automatic	-	WS, WD Tower Roof Top	Operation Hours	Nil
Ramechhap (VNRC)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **21**	Operation Hours	Nil
Rumjatar (VNRT)	Automatic	-	WS, WD Tower Roof Top	Operation Hours	Nil
Rukum Salle (VNSL)	Automatic	-	WS, WD Towards RWY Threshold: **34**	Operation Hours	Nil
Simara (VNSI)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **19**	Operation Hours	Nil

Simikot (VNST)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **28**	Operation Hours	Nil
Surkhet (VNSK)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **02**	Operation Hours	Nil
Taplejung (VNTJ)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold: **07**	Operation Hours	Nil
Tumlingtar (VNTR)	Automatic	-	WS, WD, Temperature, QNH Towards RWY Threshold:**34**	Operation Hours	Nil

4. Types of Services

4.1. *Observational Data and Forecasts*

Routine and selected special observation reports on current weather, terminal aerodrome and landing forecasts with trend for Tribhuvan International Airport, forecasts for en-route weather condition and special weather warning for Kathmandu valley are issued.

4.2. *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 Met. Forecasting Division O/A building, TIA).

4.3. *Flight Documentation*

Flight documentation consisting of Kathmandu aerodrome forecast and terminal forecasts for destination and alternate aerodromes in abbreviated tabular form together with tabular forecasts of en-route weather are issued.

4.4. *Relaying of Sigmet*

All Sigmet informations received from terminals outside Nepal are relayed to the out going aircraft in flight by the Met. office through ATS radio Channels.

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.

6. Aircraft Reports

6.1. Air reports at major ATS routes and aerodromes shall be made by all aircraft.

6.2. 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 heavy sandstorm; or
g) volcanic ash cloud; or
h) pre-eruption activity or a volcanic eruption

6.3. ***Reporting of Low Level Wind Shear***

6.3.1. 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.

6.3.2. On receipt of wind- shear report from a pilot, ATC will pass it to other aircraft in the vicinity. This will also be broadcasted in the ATIS for the next half an hour unless subsequent report indicates that wind shear no longer exists.

7. **VOLMET service**

Table GEN 3.5 - 7 VOLMET service

Name of station	CALL SIGN Identification (EM)	Frequency	Broadcast Period	Hours of service	Aerodrome/ Heliports included	REP, SIGMET INFO, FCST & Remarks
1	2	3	4	5	6	7

8. **SIGMET, AIRMET Service**

Location Indicators	Hours	FIR of CTA served	Types of SIGMENT/ validity	Specific procedures	ATS unit served	Additional information
1	2	3	4	5	6	7

9. **Other Automated Meteorological Services**

Table 3.5.9 other automated meteorological services

Service Name	Information available	Area, route and aerodrome coverage	Telephone, and Fax number Remarks
1	2	3	4
Meteorological Forecasting Division	METAR TAF	Kathmandu FIR	Telephone: 977-1-4473382 977-1-4473268 AFS: VNKTYPYX
ATIS Broadcast	METAR	Kathmandu TMA	Telephone: 977-1-4113160 Fax: 977-1-4113296 AFS: VNKTYPYX
Real Time Weather Information (AWOS)	QNH, Temperature/Dew Point	Kathmandu TMA	Telephone: 977-1-4113258 977-1-4113259 Fax: 977-1-4113296

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