# CIVIL AVIATION AUTHORITY OF NEPAL

# NEPALGUNJ CIVIL AVIATION OFFICE



# UNIT TRAINING PLAN FOR STUDENT AIR TRAFFIC CONTROLLER

(UTP, NGCAO)

First Edition October, 2016

### FOREWORD

The Unit Training Plan (UTP) for Student Air Traffic Controller of Nepalgunj Civil Aviation Office (NGCAO) has been prepared by NGCAO pursuant to the Manual of Air Traffic Services Nepal (MATS Nepal), Second Edition 2014 para 13.5.1; which requires that every air traffic control unit must have a Unit Training Plan (UTP), approved by the Licensing Authority.

The UTP details the processes by which student air traffic controllers are trained. Student air traffic controllers will require specific unit training in addition to basic training before commencing OJT.

This plan incorporates the requirements of MATS Nepal, second edition 2014 and Manual of Standard Licensing and Rating of Air Traffic Controller, third edition 2015, and is subject to the amendment as necessary.

The procedure mention within this Unit Training Plan is also applicable for newly transferred air traffic controller.

This plan is approved by the Director General of Civil Aviation and issued under his authority which comes into effect from .....

Submitted by :

Approved by :

Director

Nepalgunj Civil Aviation Office Nepal **Director General** 

**Civil Aviation Authority of** 

### AMMENDMENT RECORD

Amendments and Corrigenda to this "Unit Training Plan of Nepalgunj Civil Aviation Office (UTP, NGCAO)" are regularly issued by Director General of CAAN, Nepal. The space below is provided to keep a record of such amendments.

### **RECORD OF AMENDMENTS AND CORRIGENDA**

	Amendment				Corrigenda			
No.	Date Applicable	Date Entered	Entered By		No	Date Applicable	Date Entered	Entered by
				-				
				-				
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Civil Aviation Authority of

### 1.1 GENERAL

#### 1.1.1 Background

This 'Unit Training Plan (UTP) for Student Air Traffic Controller, First Edition,2016' made under the provision of Manual of Air Traffic Services Nepal 2014 (MATS Nepal) Chapter 13, section refers to the training plan and procedures for student air traffic controller to be used by On-the-Job Training Instructor (OJTI) of ATS operation, Nepalgunj Civil Aviation Office (NGCAO).

The knowledge gained during basic initial training of air traffic services is generic to all units. But after the completion of basic training, controllers have to work in specific ATC unit/ Aerodrome control tower and each unit has different procedure, equipment and facilities, runway, topographical variation etc. So, to acquire knowledge on local procedures and familiar with local circumstances, they also require further training from OJTI before commencing OJT.

Where there is inconsistency between the provision of MATS Nepal and UTP, the MATS Nepal prevails.

#### 1.1.2 Purpose of UTP

To detail the training procedure for a student air traffic controller and prepare him/her to a level of operational proficiency such that he/she is able to provide an air traffic control service in an unsupervised capacity leading to the grant of air traffic control license/rating.

#### **1.1.3 Process for reviewing of UTP**

- a) Amendments in the provision of MATS Nepal related to UTP will be incorporated in the UTP.
- b) Any shortcomings in the student air traffic controllers' knowledge, understanding or application determined from the OJTI during transitional training can also be reviewed.
- c) Any other changes that would better prepare them for OJT will be incorporated in UTP.

### 1.1.4 Notification of change

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The NGCAO will notify Licensing Authority of any proposed changes and amendments to the approved UTP in order to obtain continued approval.

### DEFINITIONS

**Initial Training**. Training conducted by approved training organisations on courses approved by the Authority. Initial training comprises basic training and rating training. The object of initial training is to prepare a student for unit training.

**On-the-Job Training**. The integration in practice of previously acquired job related routines and skills under the supervision of a qualified On-the-Job Training Instructor in a live traffic situation.

**On-the-Job Training Instructor**. A rated air traffic controller with an air traffic control licence endorsed with a current qualification that permits the holder to carry out instruction in the operational environment for which the rating is issued.

**Pre On-the-Job-Training**. The phase of locally based training during which extensive use of simulation, using site specific facilities, will enhance the development of previously acquired routines and abilities to the required performance level.

**Rating**. An authorisation entered on or associated with a license and forming part thereof, stating specific conditions, privileges or limitations pertaining to such license.

**Rated Air Traffic Controller.** An Air Traffic Controller holding a licence and valid rating appropriate to the privileges to be exercised

**Student Air Traffic Controller:** Selected individuals who have successfully completed approved Initial ATC Training to enable them to obtain qualifications prior to commencement of Unit Training.

**Transitional Training Phase**. The stage following initial training during which site specific theoretical knowledge and understanding will be transferred to the student air traffic

controller using a variety of methods and during which skills will be developed through the use of site specific simulations

**Training.** The entirety of theoretical courses, practical exercises, including simulation, and on-the-job training required in order to acquire and maintain the skills to deliver safe, high quality air traffic control services

**Unit Training Plan**. An approved plan detailing the processes and timing required to allow the unit procedures to be applied to the local area under the supervision of an on-the-job training instructor.

### **ABBEREVIATION**

ADC	Aerodrome Control
APP	Approach Control
ATM	Air Traffic Management
CAAN	Civil Aviation Authority of Nepal
MATS	Manual of Air Traffic Services
MOS	Manual of Standard
NGCAO	Nepalgunj Civil Aviation Office
OJT	On-the-Job Training/ On-the-Job Trainee
OJTI	On-the-Job Training Instructor
SID	Standard Instrument Departure
L/R	License and Rating
UTP	Unit Training Plan

#### 4.1 TRAINING PROCEDURES

### 4.1.1 PHASES OF TRAINING

NGCAO has adopted three phases of unit training as mentioned hereunder.

#### 4.1.1.1 Transitional Training

#### 4.1.1.1.1 Objective

The objective of transitional training is to prepare trainee for the pre-OJT. Following the basic training, this phase of training imparts site-specific theoretical knowledge and understanding which is transferred to the student air traffic controller by the OJTI using variety of methods.

#### 4.1.1.1.2 Rating endorsement/ unit endorsement covered

The UTP of NGCAO covers the syllabus and the rating endorsement of Aerodrome Control and Approach Control Rating/Unit.

#### 4.1.1.1.3 Syllabus and duration

The syllabus and duration for transitional training is further divided into four phases so as to develop trainee knowledge and skill progressively.

#### a) First phase

#### Syllabus:

Duty and responsibility, office/tower discipline, administrative procedure, duty roster, Familiarization of Control tower equipment and facilities, display system monitoring, Communication technique as per Annex 10 vol.2, AMHS and Light gun, crash alarm, frequency selection, operation of light switching system, writing of log book, flight movement data recording, VHF voice log recording, Aerodrome layout, dimensions, directions of runways, details of obstructions, taxi routes and parking areas ; knowledge of runway designation and visit to communication, navigation, firefighting site, periphery road, runway and associated light ,apron, hanger and all airside access points; use of flight progress strips, understanding of NOTAM format and content, , flight planning, aircraft type and performance, filing and record keeping.

Duration : minimum 2 week to maximum 3 weeks

#### b) Second phase

#### Syllabus:

Handling VFR Traffic, Phraseology, Function of Aerodrome Control, Jurisdiction of Nepalgunj aerodrome traffic zone, control zone and Terminal control area and other delegated airspace, Priority landing, Meteorological conditions and knowledge of local weather pattern, visibility check points, topographical condition, runway selection, closure of aerodrome, Transfer of control and coordination and coordination procedure; LoA with other units and agency; Regulation of circuit traffic, Visual separation and control of traffic duty handover/take over, briefing, ATC clearance, SVFR operation, sector visibility, knowledge of wake turbulence standards..other relevant knowledge laid down in ATSOM NGCAO.

Duration : minimum 3 weeks to maximum 4 weeks

#### c) Third phase

#### Syllabus:

Function of Approach Control Unit, SIDS and Standard Instrument Approach Procedures, Missed Approach Procedure, holding ,separation points, separation methods... and other relevant knowledge laid down in ATSOM NGCAO.

Duration : minimum 3 weeks to maximum 4 weeks

#### d) Fourth phase

#### Syllabus:

Airport Emergency Plan and procedure

Handling of emergency aircraft (Engine failure, pressurization failure, landing gear problem, hijack),

Aircraft unusual situation (local go round procedure, fuel dumping,

Removal of disable Aircraft (RODA),

Failure/degraded equipment and navigation aids

Operation unit evacuation (Fire, Earthquake..)

Search and Rescue

And other contingency procedures

Handling of VVIP aircraft,

Incident reporting

General knowledge on : Crew Resource Management, Human Factor, Safety Management System..and other relevant knowledge laid down in ATSOM NGCAO.

**Duration**; minimum 3 weeks

*Note* : Minimum period relates to student air traffic controllers who are training towards the particular rating for the first time. Air traffic controllers who had previously held training in question or acquired rating of same position form other controlled airport may, however be accelerated through UTP provided they meet the training objectives.

'maximum period would be the time at which the student air traffic controllers can be withdrawn from OJTI as having failed to meet the objectives, and a major review of his/her progress conducted. The outcome can be either a structured plan of re-training, with a time limit for satisfying the objectives, or termination of training.

#### 4.1.1.1.4 Methodology

Guided self-study, classroom instruction, formal written and oral assessments ,

#### 4.1.1.2 Pre-OJT Training

#### 4.1.1.2.1 **Objective**

Objective of Pre on-the-job training is to make student air traffic controllers to be able to control live traffic in a normal unit condition under the supervision of OJTI and to prepare them for OJT.

#### 4.1.1.2.2 Syllabus and duration for the Pre-OJT Training

#### Syllabus

During pre-OJT, trainee will integrate all procedure and routines learned previously, including ATC procedures, into the decision making process and learn to manage traffic.

After getting through transitional training, if needed, trainee has to practice on simulator or in table top exercise before handling the live traffic.

All activities of simulation exercise will be documented.

**Duration**: minimum 1 week (if necessary)

**Methodology** : work in normal live traffic condition under supervision of OJTI, simulation on locally created traffic environment (if necessary) or table top exercise.

#### 4.1.1.3 OJT Training

#### 4.1.1.3.1 Objective

The objective of OJT is to prepare a student air traffic controller to a level of operational proficiency such that he/she is able to provide an air traffic control service in an unsupervised capacity.

#### 4.1.1.3.2 Syllabus and duration for the OJT Training

#### Syllabus

Previously acquired knowledge and skill from Transitional training and Pre-OJT to provide air traffic control service.

**Duration** : At least 180 hours duty on control position.

This period can be reduced for applicant holding the valid rating of same position of another airport as per the provision of MOS-L/R of ATC para 4.3.2.2.5 provided the trainee meets the OJT objective.

#### 4.1.1.3.3 Methodology

Practice in live traffic environment under the supervision of an OJTI/Rated Controller.

If required trainee has to undergo further simulation by introducing additional unusual situation in a real local traffic environment such as : emergencies, complex traffic conditions ...etc, till trainee has been achieved required knowledge.

#### 4.1.2 ASSESSMENT PROCEDURE

#### 4.1.2.1 Assessment of Transitional phase and Pre-OJT phase

- 4.1.2.1.1 Student air traffic controllers will be assessed at the end of transitional training and pre-OJT. Failure to reach a satisfactory standard will preclude progression to the next stage of training.
- 4.1.2.1.2. Assessment at these phases may include written, verbal and practical assessments using simulation.

#### 4.1.2.2 Assessment of OJT phase

- 4.1.2.2.1 Student air traffic controllers will be assessed at the end of OJT for which training objectives have been identified.
- 4.1.2.2.2 Assessment of this phase consists of observation of practical work and reference to training reports from other OJTIs for supporting evidence.
- 4.1.2.2.3 Supplementary oral questioning can also be used to ensure understanding of the applicable techniques and rules governing them. It can be tested orally during pre-briefing and de-briefing of practical training sessions.
- 4.1.2.2.4 Table-top exercises (analytical simulations) can be used as a means of practically testing scenarios instead of simulation.
- 4.1.2.2.5 Care will be taken to avoid unnecessary intimidating oral questions, as this could be counterproductive.
- 4.1.2.2.6 Record of OJT progress reports will be maintained after the end of training session so as enable other OJTIs to determine his/her strengths, weaknesses and level of competence.
- 4.1.2.2.7 After the completion of OJT, If OJTI's OJT report shows that OJT has met the OJT objectives, then, OJTI will put forward his/her recommendation of trainee rating process to the Director, NGCAO. NGCAO will then forward OJTI report (refer :Appendix A of this plan) to ANS Safety Standards Department through ATM Department, CAAN for the initiation of rating process.

Note: trainee's application received as per the requirement of MOS- L/R of ATC (Refer: Appendix E of MOS L/R of ATC personnel ) will also be submitted along with the OJTI's report.

#### 4.1.3 DOCUMENTS AND RECORDS

The OJTI, NGCAO will retain the complete training records for all student air traffic controllers which include records of:

- a) Initial training
- b) Student license
- c) Transitional training,
- d) Pre-OJT,
- e) OJT training and
- f) Validation examination.
- g) Other trainings

### 5.1 Staff and Organization

- 5.1.1 The responsibility to ensure the level of ATS standards provided within the jurisdiction of Nepalgunj Tower, in accordance with CAR lies with the Chief of NGCAO/ Airport Director NGCAO. (Refer: rule 57 (a) of Civil Aviation regulation 2002, Second Amendment)
- 5.1.2 The number of ATS personnel and their level in ATS Operation is shown in NGCAO organization chart. (Refer: organization Chart related to ATS operation in Appendix B)
- 5.1.2 ATS Manager (Chief of ATS Operation) will be among the senior person from ATS.
- 5.1.3 OJTI is solely responsible for the training of Student ATC .
- 5.1.4 Rated ATC who met the criteria of MOS-L/R of ATC third edition 2015 para 5.1.3.4 and passed the exam according to the procedure laid down in ATSOM NGCAO will be selected as an OJTI.

#### 5.2 **Responsibilities of OJTI:**

The OJTI is responsible:

- a) To prepare and implement detail training plan for each trainee air traffic controller as mention in MATS.
- b) To train and supervise student air traffic controller or trainee to the position for which they are to be rated.
- c) Conduct training on the basis of syllabus set out in para 4.1.1 of this plan.
- d) To ensure that trainee air traffic controllers are competent in the use of new standards, procedures, techniques, facilities and equipment identified as essential to task performance
- e) Make frequent inspection of ATC unit to check the performance of the trainees on OJT
- f) Maintain a register of Trainee's roster and period of duty performed on job training for the position

- g) To identify any deficiencies in knowledge or skill and recommending remedial training\*
- h) To prepare ATC OJT report in the attached form (refer Appendix -A) and recommend the Licensing/ rating Division, ANSSSD, the trainee air traffic controller as being at an appropriate level of competence where he/she should be successful at a rating or validation assessment
- i) To supervise air traffic controllers who have had their rating(s) suspended; and
- j) To review, monitor and propose changes to the training

\* Note : Remedial training will be given only to personnel who have shown that they are no longer qualified to perform satisfactorily in a control position at which they previously qualified. This training is given to correct a demonstrated weakness and consists of classroom instruction or additional time on the position under direct supervision, or both.

#### APPENDIX – A

# Civil Aviation Authority of Nepal Air Traffic Controller Training Report

(to be filled by the OJTI)

### A. Position -ADC/ APP

Full Name :-	Date of attachment :-	
	From -	To-
Minimum hours required -	Hours completed -	

#### C. PROGRESS REPORT (ADC, APP,)

Knowledge On		
CONFLICT RECOGNITION		
CONFLICT RESOLUTION		
TFC. PLANNING.		
TFC. HANDLING		
COORDINATION		
AIRSPACE/ PROCEDURES.		
PHRASEOLOGY/ COM. TECHNIQUES		
STRIP WORK		
FACILITIES		
LETTER OF AGREEMENT BETWEEN		
ADJACENT ACC'S/ UNITS		
SAR & EMERGENCY		
HUMAN FACTORS & LIMITATIONS		

#### E. OJTI'S EVALUATION

#### F. OJTI'S COMMENTS/RECOMMENDATIONS, IF ANY

OJTI's NAME -

SIGNATURE -

DATE

Note: -The trainee has been appraisal of the contents of this report.

# **APPENDIX B**

### ATS OPERATION IN NGCAO ORGANISATION STRUCTURE

