

ATC Interaction Program

On

‘ATS Procedure between TIA and Other Domestic Airports and Other Issues’

Date: 7th June 2016 (25th Jestha 2073), Tuesday.

Venue: Airport Hotel, Kalimatidole, Kathmandu

Organizer: Tribhuvan International Airport, Civil Aviation Office

Program Coordinator: Director, Mr Sudhir Kumar Chaudhary

MOC: Manager Pavan Kumar Gautam

Rapporteurs:

Manager Rita Shrestha, Dy. Manager Subash Khadka,

Dy. Manager Subash Deuja, Sr. Officer Om Thapa

Mr. Pavan KumarGautam, being the master of ceremony, commenced the program with a welcome note and also requested the participants to switch off their cell phones.

Distinguished guests were welcomed with “khada or shawl” by the FOD and Chief ATC.

1.1 At 11:45AM, FOD TIACAO Mr. Sudhir Kumar Choudhary was requested to deliver a welcome speech and highlight the needs for interaction among ATS personnel working at different aerodromes of the country. According to him, this annual program was characterized by dichotomy in structure; one being ATC-ATC interaction and the other being ATC-pilot interaction to be held on the 27th of Jestha. He believed regular interaction between concerned stakeholders, especially among ATCs and pilots, was instrumental in figuring out the deficiencies on prevalent ATS systems and hence, in introduction of suitable and effective improvement measures.

FOD Mr. Choudhary laid down the three main objectives of the program as mentioned below:

- a) To pave a way towards effective implementation of ICAO’s standards and recommended practices (SARPS) in Nepalese ATS system.
- b) To address various coordination issues between Kathmandu area control center and other domestic aerodromes to make the Nepalese sky safer and more efficient; including coordination enhancement among different ATS units operating in Kathmandu airport.
- c) Utilize this very program as a platform for preparing for the upcoming ATC-pilot interaction program on the 27th of the month.

According to him, presentations on ATS SMS in the past had pointed out six fundamental areas which needed serious attention as mentioned below:

1. Activation of TIA ATS Safety Office with dedicated and appropriately trained manpower facilitated with necessary equipment
2. Clear line of accountable executives
3. Resources to implement SMS
4. Formulation of Safety Policies and objectives
5. Development of Safety culture of Trust
6. Development of Safety culture of Respect

Despite identification of such areas, efforts to resolve the issues had not been initiated so far. Therefore, he focused vehemently on immediate implementation of ATS-SMS and activation of ATS safety department which were indispensable for achieving a safer sky along. Similarly, he argued that mutual trust and respect among concerned stakeholders was of utmost necessity in creating a conducive environment for the immediate and effective discharge responsibilities. Likewise, he informed the mass that MSSR (en-route radar control) and RCAG are about to be introduced under the aid of JICA in near future which would enhance the surveillance capacity and prompt delivery of ATS services in Nepalese airspace. In this regard ATS area of responsibility as mentioned in LOA with Biratnagar needs to be revised. Finally he left the podium with words of gratitude and thanks.

1.2 Paper Presentations (Two):

1.2.1 Paper presentation on “Challenges and problems in ATS operations at VNLK airport”

Presented by: Manager Bachchu Ram Shrestha

Mr. Bachhu Ram Shrestha, LK Manager, started his presentation (Refer Annex II) with a complaint on late information about the Program which left the presenter with very less time to prepare the paper.

After offering salutation to all distinguished personalities, he expressed his sincere gratitude for providing a suitable platform to introduce the challenges and constraints faced by ATS community at Lukla aerodrome. Besides being known to the world as a dangerous aerodrome, Lukla airport carried the honor of having sir. Edmund Hillary labor during its construction which conferred it historic significance. As an honor to Mr. Hillary and his companion Mr. Tenzing, the aerodrome was renamed Tenzing Hillary airport in 2008 AD. According to Mr. Shrestha, lack of parking space was a serious constraint in accommodating an influx of air traffics bound to Lukla during peak season when compared to 4 nonstandard parking bays available at present. Similarly, he suggested introducing the provision of landing restrictions to rotor wing aircrafts as in the case of fixed wing aircrafts after a certain number of landings. He warned of serious repercussions of influx of traffics which often posed the risk of near misses at LAMJURA between inbound and outbound traffics as they followed the same route. Thus, he suggested that the inbound and outbound tracks needed to be separated at the earliest.

As an airport manager, he expressed his dissatisfaction over the lack of ATS manpower Lukla airport had been facing which had precluded the aerodrome to operate two shifts a day. However, the same set of controllers were compelled to work on both shifts which added up to the stress and fatigue. Since weather information was based on visual observations, en-route meteorological conditions are unknown to the controllers which degrade the reliability of the information. Furthermore, as per the requirement of ICAO, wind sensors were required to be installed at runway thresholds. But, he grumbled that wind sensors were located at tower because of which the wind information provided by ATS personnel differed from the actual wind an aircraft experienced. This particular issue had been the topic of hot debate between the ATCs and pilots. In the same way, he complained that AMHS often remained intermittent hampering prompt delivery of the services and exchanges of information with Kathmandu. Too noisy HF facility had been rendering inter station voice communication unreliable.

As soon as Mr. Shrestha completes his presentation, the floor was declared open for an interactive discussion.

Discussion session:

NOTE: A number of inquiries were made during the discussion session which is presented below along with respective responses for each inquiry. Rapporteurs have strived to maintain the originality of the queries and responses to the extent possible so that ambiguity and duality in meanings do not become an issue later. Therefore, the queries and responses are presented in “direct question-answer” form which includes mostly the words of the speakers, where possible.

Inquirer	Queries	Responses
FOD Mr Sudhir Kumar Choudhary	<ul style="list-style-type: none"> • IS there any LOA between Kathmandu ACC and Lukla Airport? • FOD recommends signing an LOA between Kathmandu ACC and Lukla airport which requires Lukla to procure release clearance from Kathmandu ACC prior to releasing traffics so that the traffic flow at Kathmandu becomes manageable. 	<ul style="list-style-type: none"> • NO LOA between Kathmandu ACC and Lukla Airport. Current operation is based on tacit understanding and devising solutions to the problems as they arise via immediate communication and coordination.
Er. Dhruva Bhuchhi	<ul style="list-style-type: none"> • Requests information on status of helipad. 	<ul style="list-style-type: none"> • No dedicated helipad or space for helipad in Lukla. However, at most 5 helicopters are accommodated in

vaya		whatever open space available.
Mr.Rajesh Dongol		<ul style="list-style-type: none"> • Recommend reinstating KT-LK track via Kattikewhich was introduced during tenure of Ex FOD Mr. Tri RatnaManandhar.

In response to the constraints faced by ATS personnel regarding technical aspects, **Mr. Hansaraj Pandey** explained that such problems were due to unreliable power supply which rendered intermittent operation of AMHS and difficult mountainous terrain because of which the instruments could not be installed where they should have been for more reliable results. He called upon the officials at higher hierarchy to deploy technicians at Lukla and such other airports so that the status of equipment and instruments could be monitored continuously. He further emphasized on boosted coordination with meteorology department which could facilitate procurement of more reliable meteorological data.

1.2.2 Paper Presentation on “ATC coordination procedure in Pokhara”

Jointly presented by: Sushila Wagle and Reeta Poudel (Refer on Annex II)

Both of the newly recruited ATCOs expressed gratefulness prior to plunging into the presentation. They emphasized on proper coordination among all stakeholders (intra, inter ATS units, airlines operators, pilots etc) not only between units at different aerodromes. On behalf of Pokhara CAO, they made the scenario of ATS manpower deployment at Pokhara airport known which was as follows:

- Training Officers (TO): 02, Rated controllers: 04, On Job Trainees (OJT): 04

All together 10 ATS personnel were working at Pokhara airport in two shifts each of 6 hours. According to them, absence of ATSRO unit is making it very difficult to delivery services. They opined Service to ultralights was not only a special feature of Pokhara civil aviation office but also a challenge. Currently following ultralight companies were in operation.

- Avia club Nepal
- Pokhara Ultralights
- Fishtail Ultralights

In order to accommodate a large number of ultralight flights, they were required to execute formation flights but “take off” and “landing” clearances were issued separately for each ultralight. During flight, communication was established with the leader only to avoid frequency jamming. Dissemination of information relayed by ATS tower was the responsibility of the leader. Besides ultralights, paragliding was another recreational air sports in Pokhara. At present 3 paragliding zones were in operation, namely,

1. Sarangkot paragliding zone
2. Torripani paragliding zone
3. Madredhunga paragliding zone

Paragliding traffics were provided to helicopters only as west bound helicopters were prone to conflict with paragliders.

They mentioned a silence zone of time span 4-5 minutes beginning from Ghodepani to Lete existed along Pokhara-Jomsom track, VHF communication between aircrafts and ATS unit (Pokhara or Jomsom tower) was impossible. This had raised serious issues in the past and recent tragic accident along the same route had further aggravated the situation. Hence, they were of the view that something appropriate had to be done without delay that would not only save the lives of commuters but also save the images of ATCs from getting tarnished. In order to organize, manage, and guide the spontaneous flow of traffics, ATSOM for PK CAO was being prepared. They also complained on wrong placement of wind sensors at tower because of which the wind experienced by

aircraft differed from the wind information provided by controllers. It had led to some verbal brawl between controllers and crew members. Likewise, they accused TIA of neither forwarding departure messages nor relaying frequency change messages to Pokhara because of which traffic management had become difficult. This ignited disputes among controllers deployed at the two stations. Release of traffics to Pokhara without prior coordination exerted enormous stress to controllers at PK, especially when traffics were beyond the holding capacity of the apron. According to them, same was the case with VIP NOTAMS.

Discussion Session:

NOTE: A number of inquiries were made during the discussion session which is presented below along with respective responses for each inquiry. Rapporteurs have strived to maintain the originality of the queries and responses to the extent possible so that ambiguity and duality in meanings do not become an issue later. Therefore, the queries and responses are presented in “direct question-answer” form which includes mostly the words of the speakers, where possible.

Inquirer	Queries	Responses
<p>DGCA Mr. SanjivGautam</p>	<p>After applauding the presentation by young recruits, DG expresses his serious concern on the issues raised during the presentation. He demands to know the reasons and or truth behind such poor coordination and poor cooperation, as claimed by PK CAO.</p>	<p>On behalf of TIACAO, Manager Devendra Prasad Shrestha points out some reasons and facts as mentioned below:</p> <ul style="list-style-type: none"> • Pokhara Tower doesn't respond on HF. (Pk CAO responded by saying that their HF is very noisy.) • Pokhara hasn't informed Kathmandu of their inability to accommodate traffics due to unavailability of parking bays and hasn't requested to release traffics by maintaining specified time separation between consecutive traffics. • Lack of hotline between Kathmandu and pokhara has further aggravated the scenario. • Telephone is the last resort for communication and sometimes, it is very difficult to establish communication via telephone due to various inevitable reasons. <p>Concerning response of PK CAO on the condition of HF facility, Dy. Manager Shabda Karna, shared his experience. According to him, despite his repeated calls on HF, Pokhara didn't respond at all. So, he inspected the facility report submitted by pokhara to ensure the condition of HF facility installed there. But, to his dismay, pokhara hadn't lodged any complaint regarding the performance of HF facility. He then called Pokhara tower to receive latest updates on HF equipment. After that the HF came into operation and the readability was 5 on 5. He argues that there existed no glitches on the HF facility. Further, he suspects Pokhara tower of either not maintaining a listening watch on the HF frequency or switching off the facility. Mr. ShabdaKarn was supported by Mr. Jeenesh Prasad Rajbhandari, RajanPrajapati and Bachchu Ram Shrestha as they were deployed at Pokhara station in the past.</p>
<p>DDG Mr. Devendra KC</p>	<p>After witnessing the discussion, he wonders how the situation at remote stations were and calls upon the entire ATS community, management and officials to ponder upon the constraints that aviation domain is facing due to lack of coordination. Moreover, he compares present day scenario with those in</p>	<p>Manager Bachchu Ram shrestha suggested two possibilities for HF not being readable:</p> <ul style="list-style-type: none"> • Placing VHF and HF facility together or in close proximity leads to electromagnetic interferences which attenuates

	the distant past and apprehends that with more technologies at our disposal, the coordination is getting poorer and poorer which should not have been the case.	the readability. • Ionospheric effects make complete elimination of noises impossible.
DDG Mr.Rajan Pokharel		DDG Rajan Pokharel brought into knowledge some aspects of civil aviation as listed below: <ul style="list-style-type: none"> • Nepal lacks structural framework to regulate and monitor paragliding activities. Having to monitor paragliding activities is an added responsibility of CAAN. Nowhere in the world is paragliding activities are monitored by civil aviation authority of the country. • According to him, the purpose of formation flight is different and hence, the practice of treating ultralight flights as formation flight contradicts. • As far as the silence zone of approximately 5 minutes is concerned along Pokhara- Jomsom track, he suggested the use of HF can resolve the problem to a greater extent.

1.3 Address by officiating GM TIACAO Mr. Bhola Guragain (Refer Annex I):

At 12:55, Mr. Bhola Guragain greeted everyone and appreciated the organizer for conducting interaction program. He briefly discussed about the introduction of air traffic services in Nepal which was offered by Indian nationals till 1972 AD. He opined that difficult terrain, topography, limited resources and technological backwardness keep on adding challenges to managing burgeoning air traffics in Nepal. Nevertheless, TIA had been endeavoring to manage ATS as per its capacity as effectively as possible despite various constraints. He assured that ATS issues would continue to be at the top priority as it related to the safety of human lives, property, and national dignity.

He mentioned that there had not been any evidence serious accidents due to ATC borne faults. So, He praised and thanked all ATCOs in maintaining impressive safety records. Further, he didn't miss the opportunity to mention that ATCS had been prominently involved in maintaining safe, orderly and expeditious flow of air traffics, adhering to provisions of ICAO SARPS. Mr. Guragain believed the interaction program was a perfect forum to raise ATS issues and encouraged participants to share their experiences, grievances and recommend possible solutions.

Finally, he wished for the successful completion of the program.

1.4 Address by DDG Mr. Raj Kumar Chettri,

DDG Mr. Raj Kumar Chettri considered that interaction was the initial step towards conflict resolution, following a precise identification of the same as established by past experiences. So, he hoped the intended interaction program would be fruitful and result oriented by active participation of all participants. He acknowledged that the job of an ATC had neither received the honor nor financial gains it deserved despite the numerous exigencies of the job. Mr. Chhetri advocated ATS as a challenging domain which demanded the highest level of dedication and honesty for the effective discharge of responsibilities. With the view to elucidate the mental stress ATCOs were subject to, he called upon the interested ones to visit and observe TIA ATS units (Tower, Area or Approach) for 30 minutes. He was pretty confident that an observation of 30 minutes would radically modify one's perception about ATS by ATCOs.

He believed the value system Nepalese society needed modification so that it could acknowledge the profession of ATCOs parallel to other highly regarded occupations like engineers and doctors. However, according to him positive atmosphere prevailed when compared to past and it definitely

required further incentives commensurate to changing times. He focused a lot on coordination as it was not a “one man army” job. It was a team work and if a member failed, the entire team failed. Therefore, he inspired the participants to reveal the difficulties they were facing, especially on coordination part with TIA CAO, so that a unanimous or a feasible resolution could be agreed upon. He recognized “lack of resources” as a grave hurdle to development in aviation. Mr. Chhetri Compared and contrasted present situations with those during the initial days of his career and concluded that a gradual improvement was there but expressed his dissatisfaction over the rate of development. And, he tried to assure the stations complaining lack of manpower by promising to deploy sufficient manpower as soon as possible.

DGCA Mr. Sanjiv Gautam rose to take a break due to prior commitment for a meeting and vowed he would rejoin at 14:30.

1.5 Paper Presentation (Two):

1.5.1 Paper Presentation on “ATS coordination procedure and its discrepancies in VNNG”

Presenter: Mahendra Singh (Refer annex II for presentation)

Representing Nepalgunj airport, senior officer Mr. Mahendra Singh offered words of sincere thanks to all for providing a platform for young professionals to sharpen themselves. He accentuated the eminence of Nepalgunj airport as a hub for Mansarobar pilgrimage, a popular religious and tourist destination at Tibet (China). During his presentation, he brought to surface a number of difficulties Nepalgunj airport is facing as mentioned below:

- Since LOA between Nepalgunj-surkhet and Nepalgunj-Kathmandu had resolved a number of practical issues, he felt the need of a similar LOA between Nepalgunj-Dhangadi airports so that traffics could be handled with ease. Similarly, Lack of LOA with operators, and MET department are causatives of undue delay, confusions and sometimes even conflict of authority.
- Mr. Singh complained that aircrafts often needed to hold to lose altitude after being released by Kathmandu area control remaining within a limited longitudinal span.
- According to him, VNKT-VNDH or VNDH –VNKT traffics between F165 to F185 often raised call to Nepalgunj, tended to remain with VNNG till Tikapur or north abeam VNNG and sometimes requested for ascend or descend clearances leading to conflict of airspace jurisdiction.
- Excessive disturbance on HF and interference with adjacent Indian FIRS on VHF made it difficult in delivering service.
- Since Nepalgunj had been facing acute problem of insufficient parking bays, he drew attention of concerned division towards the same. The parking capacity for 6 aircrafts was bound to accommodate many more aircrafts which made safe and prompt mobility of the aircrafts very difficult.
- Obscured approach path towards Runway 26 not only exerted stress on the duty officers but also posed grave threat to the safety of flights. Hence, he opted for clearing the approach path at the earliest.
- Close proximity of apron to control tower intensified noise pollution to the extent that sometimes it was practically impossible to hear and comprehend the aircrafts.
- Narrow connectivity of fire station with runway which constricted swift access of fire vehicles to runway. This could delay delivery of emergency services in times of acute needs.
- Non ergonomic design of tower console and lack of dedicated power supply augmented the stress and fatigue that duty officers are subject to.

Discussion Session:

During discussion session following inquiries, views and suggestions were put forth by participants. Rapporteurs have endeavored to maintain the originality and no duality in meanings of the views expressed to the extent possible. Hence, the words and language employed are expected to represent the orators with least distortion possible.

Inquirer	Responses
Mr. Devendra Prasad Shrestha	<ul style="list-style-type: none">• In response to the complaint that aircrafts requiring to hold to lose heights, Mr. Devendra Prasad Shrestha clarified that such situations usually arise due to estimation errors of pilots for descend.• Control services are not provided at uncontrolled airspace.• NG shall coordinate with KT ACC if an aircraft at F165/F185 intends to ascend or descend.• Suggested the presenter to enrich his knowledge on relevant LOAs and jurisdiction of NG aerodrome.
Mr. Teknath Sitoula	<ul style="list-style-type: none">• Advised Mr. Mahendra not to hold any confusion regarding jurisdictional airspace of NG tower.• Recommended to approach ATM department while formulating LOAs with various entities and ATM department is ready to assist in all possible ways.• For effective result, He recommended ATM department to be consulted on ATC and ATS related issues like: defining roles and responsibilities, designing coordination procedures, deputation of ATS manpower , rating and licensing etc.
Mr. Sitaram Bhandari	<ul style="list-style-type: none">• Expressed his view that prudent governance of jurisdictional airspace may preclude the need of LOA with VNDH.
Mr. MukeshDahal	<ul style="list-style-type: none">• Recommended prior coordination with Kathmandu for weather deviation which may compel Nepalese aircrafts to penetrate Indian airspace so that a timely coordination with India can be made through authentic channels.

At 13:45 FOD Mr. Sudhir Kumar Chaudhary made announcement for short Tea Break which seemed to relieve everyone a lot.

1.5.2 Presentation on “An overview of LOA between Biratnagar tower and Kathmandu area control center”, Presenter: Dy. Manager Mr. Bheshraj Adhikari(1400hr onwards see annex II):

Dy. Manager Adhikary Appreciated existing mode of coordination between TIA and Biratnagar tower and articulated that ATCOs at Biratnagar hadn't experienced serious difficulties in coordinating with TIA. At the same time he acknowledged the need for improvement in existing procedures so that quality could be enhanced. According to him, more coordination with TIA was required due to aircrafts flying at higher altitudes which could be substantially reduced if existing LOA was revised to include some tactical procedures. He entitled current coordination for traffics to and from Chandragadi as “hectic” as he believed a revision in LOA between Kathmandu and Biratnagar would put an end to such “hectic” coordination

According to the present LOA, sometimes an aircraft happened to be at two different frequencies within the same airspace which defied the universal practice and could potentially endanger the safety of the aircraft and people onboard. Therefore, he voiced for either confining the area of responsibility of VT TWR within its control zone or delegating the level up to F165 to Biratnagar so that the need for frequent and tedious coordination could be reduced significantly at one hand and safety of the aircraft and people onboard could be boosted on the other. Mr. Adhikary argued that

LOA was a dynamic document which could be rewritten as per the need of concerned stakeholders keeping in view the safe, orderly and expeditious flow of air traffics along with prompt and effective delivery of air traffic services.

In his own words, although it didn't appear pertinent to the issue selected for interaction, he believed disparity in rating allowances eventually demoralized controllers stationed at various aerodromes other than TIA. Thus, he pressed much on abolishing such discrimination on allowances based on stations and demanded the concerned authority to take immediate actions. Presenting the evidence of same allowance for engineers at different stations, he reasoned that every ATC must be entitled to the same amount of allowances irrespective of the stations. Furthermore, Mr. Adhikary recommended CAAN to take necessary initiation to end such discrepancies through official channels, for the initiations from unions or welfare groups possessed the risks of political coloration of the situations which might jeopardize the harmony and contaminate professionalism.

Finally, on behalf of Chandragadi airport, as it lacked its representative, he requested for the timely maintenance of AMHS system installed there and concluded his energetic and comprehensive presentation with some words of thanks and gratitude.

Discussion session:

During discussion session following inquiries, views and suggestions were put forth by participants. Rapporteurs have endeavored to maintain the originality and precision in meanings of the views expressed to the extent possible. Hence, the words and language employed are expected to represent the orators with least distortion possible.

Inquirer	Queries /suggestions	Responses
Mr. MukeshDahal	<ul style="list-style-type: none"> • Inquired if RCAG east had been brought into operation or not. • Informed that sectorization of Kathmandu area is about to be implemented in near future. • Opined that delegation of airspace up to F165 to Biratnagar tower seems possible. • Supported the presenter on reviewing existing LOA to address the issues raised during presentation. • Mr. Dahal considered that every aerodrome is connected to all other aerodromes inside Nepalese territory like threads in a complex tapestry and the linkage is so important for the mutual existence that if a link malfunctions, all other units suffer substantially. Therefore, indifference and nonchalance shall not be allowed within and among aerodromes operating in Nepal. 	<ul style="list-style-type: none"> • Installation would be completed in 15-20 days' time.
Mr. Basudev Bhattarai	<ul style="list-style-type: none"> • Being a former ATC at Biratnagar Mr. Bhattarai felt the need of prior coordination with VT TWR for assigning F165 as the traffic from and to Lamidada tend to conflict and there have been some reported instances of near misses. 	<ul style="list-style-type: none"> • Dy. Manager Bhesh Adhikary agreed with Mr. Bhattarai and requests for consistency in allotment of F165.
Mrs. Nabina Karmach	<ul style="list-style-type: none"> • MEA of airway R344 to be considered well before delegating F165 and below to Biratnagar tower and marks the proposal as impracticable. Rather, considered confining Biratnagar 	

arya	within its control zone is the best possible solution at the time. • Vowed to take initiation on ending disparity in allowances.	
Mr. Suwarn Raj Upadhya	• Inquired how an aircraft happens to be at two different frequencies at the same time.	• Mr. Adhkary tried to clarify the scenario but Mr.Uapadhya appears unconvinced. Mr. Upadhya asserted that it should not make coordination part difficult as LOA has clearly mentioned everything and aircrafts can be separated.

1.6 Address by CAA Chief Mr. Narendra Bahadur Thapa (1425 hr onwards):

Chief of Civil Aviation Academy appreciated the efforts of all and Suggested presenters to be more precise and specific; leaving intra aerodrome matters to the management of respective aerodrome. He commented that the presenters should have focused sufficiently on ATS procedures, the crux of the interaction program rather than on other peripheral issues. However, he believed the interaction to be instrumental in identification of constraints in coordination among different aerodromes and in discovering new frontiers in aviation. Academy chief Emphasized on uniformity in theory and practice which would lead to consistency during service delivery and suggests ATS personnel not to assume things rather he encouraged them to convey all relevant information available to flight crews. Being chief of civil aviation academy, he focused on appropriate trainings in order to keep up with tremendous growth aviation domain is experiencing. As a senior level manager, he also felt the need of orientation of newly recruited controller prior to their deployment which could assist in effective management of the station and enrich service delivery.

Mr. Thapa acknowledged that due to topography and meteorological factors KT-DH sector had been experiencing difficulties regarding communication coverage which made absolute application of LOA impracticable. Therefore, he advised Kathmandu area control center to release traffics directly to VNDH when they were about to leave the jurisdiction of KT ACC. He further advised that consulting for PIC's intention could also be of some assistance during critical situation on choice of frequencies (Kathmandu or Dhangadi or Nepalgunj).

He denounced complete reliance of ATCS on new technologies like telephone and AMHS. He asserted that during natural disasters like recent earthquake, floods, rescue operations, HUDHUD etc, HF operation could prove to be a boon. Therefore, prudent use of communication facilities was highly recommended and therefore, an ATC should resort to the best alternative available depending upon situation. He added that changed should not be feared, rather changes that encompassed variety of our needs should be incorporated in ATS systems and systematically documented so that stringent adherence to the documented procedures could benefit all.

1.7 Address by DDG Mr. Rajan Pokharel(1445 hr onwards):

DDG Mr. Rajan Pokharel broadly classified aviation safety into general safety and ANS safety. ATS coordination was meant to ensure acceptable level of general as well as ANS safety during operation hours. He believed that glitches in CNS equipment accounted for not only inferior and delayed services but also lapses in safety issues. As he proceeded, he argued that Dual role of CAAN as a service provider and regulator had geared lots of conflicts on authority and confusions on areas of responsibilities. Such conflicts and confusions materialized as some mishaps which ranged from minor incidents to accidents and SSC, not to forget about. "Protocol issues" had also hindered spontaneous development leading to conflicts in the structural arrangements of the organization itself. Cooperation, coordination and accountability were instrumental in settling the conflicts, confusions and maintaining a higher grade of service and professionalism. The task of restructuring

ANS department as in Thailand or Australia hadn't gained momentum which had raised many issues unresolved and might even lead to an impasse. At this juncture, he felt dejected to mention that the organizational goal of complete implementation of SMS by 2018AD seemed unrealizable due to various reasons.

Like all other orators, he also beckoned towards severe lack of basic infrastructures Nepalese aviation was struggling resolve. According to him, lack of proper trainings and timely refresher courses caused gradually degradation in proficiency of ATS personnel. Nepal had been facing SSC which transcended the aviation domain and reflected the quality of national diplomacy. Therefore, "black Listing" by EU not only indicated poor performance of CAAN but also the impotence of Nepalese diplomacy in global frontiers. He opined that aviation sector of other countries were even poorer than ours but SSC was not imposed on them as they were diplomatic giants in world politics. He cited neighboring India as an example. He indicated the role of media as a very sensible and sensitive one and thus requested media personnel to be very astute while dealing with aviation related topics and at the same time demanded accountability from the 4th organ of the state.

Besides frustrating news, he also had an achievement to share with Nepalese aviation community. He informed the mass about an impending change in Doc4444 which was entirely the result of a paper presented by Nepal, a triumph for all Nepalese to cherish. He was of the opinion that regulations should ensure systematic and proper functioning of ANS. He encouraged the professionals to adhere to documented procedures and strongly denounced any deviations from documented procedures. Grieving on having to face SSC for not being able to meet the global average compliance rate of 60% by a scanty 2%, he asked entire CAAN employees to be responsible, accountable and cooperative so that the nation could fully trust CAAN on aviation domain and didn't consider for an alternative of CAAN. He believed that each one of the CAAN employee was somehow liable to present situation and therefore it was our combined duty to cooperate, coordinate and consolidate for the achievement of organizational goals that would not only mark the growth of Nepalese aviation but also the professional growth of each individual. With such a discourse intended to stimulate all employees, he tried to instill and enhance the sense of responsibility and accountability, an adorable attempt to modify our value system for betterment.

1.8 Paper Presentation on "Air traffic services coordination procedure and its discrepancies at Gautam Buddha Airport" Presenter: Mr. Niranjana Acharya (refer annex II):

Words of gratitude and thankfulness were preceded by a complaint on delayed correspondence concerning the program. However, Mr. Acharya, representing Gautam Buddha airport, did prepare for the interaction program and came up with the issues mentioned below

- Mr. Acharya drew attention towards the provision of same route for arrival and departure which could potentially disrupt safety of aircrafts, especially during ascend and descend phases of reciprocal traffics. However, there had been no records of conflicts despite having the same route for exactly reciprocal traffics due to very few traffic which were well separated in time. He rightly opined that such ominous possibilities should not be connived as conflicts might not be prevented if the number of traffic rose significantly.
- Lack of STAR and incomplete SID departures augmented stress on controller and may even compromise safety. It had increased average delay between consecutive SID departures and would definitely rise with increment in traffics volume in days to come.
- Northern airspace lacked SID. SIDs on northern airspace 'C' could be a boon for traffic management at Bhairahawa airport.
- Absence of VFR holdings made it difficult when a number of aircrafts tended to approach for landing

- Management of Special VFR was tough due to larger control zone of 30 nautical mile extending vertically to 10500ft.
- VHF interference with Lucknow control.
- Limited parking space
- Final was obscured by fire watch tower and existing water tank.
- Close proximity of Indian airspace deterred aircrafts from utilizing southern part of the airspace.
- No ergonomic orientation of tower.
- Frequent runway incursion and bird hazards.
- LOA with Kathmandu ACC and operators were only in effect. LOAs with other stakeholders were required too.
- According to the Quadrantal system departing aircrafts should maintain odd thousand till NARAN and arriving aircraft should maintain even thousand after NARAN. But, for the sake of convenience for both ATCs and pilots, odd +500 and even+500 was maintained but the reason for this understanding was not mentioned in LOA. This created confusions among new ATCs.
- Recommended Kathmandu ACC to transfer traffics at A125.
- Recommended Kathmandu ACC to instruct aircrafts to descend to A085 by 30DME BWA if feasible.

General discussion:

During discussion session following inquiries, views and suggestions were put forth by participants. Rapporteurs have endeavored to maintain the originality and precision in meanings of the views expressed to the extent possible. Hence, the words and language employed are expected to represent the orators with least distortion possible.

Personalities	Responses
Mr. Teknath Sitoula	<ul style="list-style-type: none"> • Mr. Sitoula advised that ATM department was at the final stages of reviewing STAR/SIDs and the revised SIDS would be dispatched soon. • LOA could be revised if it is not compatible.
Mr. Sudhir Kumar Choudhary	<ul style="list-style-type: none"> • Mr. Chaudhary opined Quadrantal system can be introduced for easy traffic management and practical purpose. So, it should be mentioned in LOA notifying the differences. • Suggested employing Semicircular in place of Quadrantal system.
Mr. Swarn Raj Upadhyaya	<ul style="list-style-type: none"> • Informed about ongoing discussions among experts on introducing Semicircular system.
Mrs. Nabina Karmacharya	<ul style="list-style-type: none"> • Mentioeds that level A090 or A095 should not be an issue as the MEA for airway B345 is A105 at KT-BW sector.

1.9 Address by DDG Mr. Devendra KC: (1530 hr onward)

Elucidating literary passion, DDG Mr. Devendra KC commenced his oration with a poetic sarcasm that an old man needed spectacles with a pair of glasses in his hands. At the beginning, Mr. KC recollected two decade old memories when interactions of this sort used to be held at Himalaya hotel with an objective of APT enhancement. According to him the gathering was meant to discuss on ATC coordination. "Coordination", he believed was not only important in ATS sector but equally significant in all spheres of life. Nations, homes and families all could ruin due to the lack of proper coordination. Coordination was a vital prerequisite for success and it could be developed through gradual process of trust building which in turn depended on a person's demeanor. Sharing experience with juniors, caring for them, showing proper respect to seniors and actively participating on matters of mutual concern play significant roles in developing coordination.

According to him, job of an ATC was not only stressful and tedious but also a blessed one as it allowed deployment to different nooks and corners of beautiful Nepal. Therefore, he called upon all ATCs to enjoy every moment and broaden the horizon of one’s knowledge which, he thought, were indispensable for motivation and professionalism along with honesty. He believed proper reporting culture (voluntary) should be encouraged.

He was sarcastic to CAAN’s performance by citing to the issues of lack of parking bays at different aerodromes in the nation but CAAN spent millions on blacktopping runways where seldom did any flights operate. He emphasized on unity among all ATCs and called upon all to be more responsible. He vowed that CAAN head office was ready to assist in all possible ways. Finally, he concluded the oration wishing a successful completion of forthcoming ATC-Pilot interaction.

1.10 Paper Presentation (two):

1.10.1 Paper Presentation On “Simara Airport: Brief introduction”

Presenter: ATC Mr. SurendraKushwaha, SI TWR

Mr. Kushwahastated that there had been no significant issues of coordination with KT APP which needed to be discussed thoroughly. However, he put forth some issues which if taken well care of could enhance the already existing congenial environment as mentioned below:

1. In spite of prior coordination with approach for release of an aircraft following sufficient ground delay, the same aircraft sometimes needed to hold in the air. This resulted in PICs insisting for immediate departure.
2. Malfunctioning AMHS made it difficult to coordinate and exchange information with Kathmandu.
3. There had been instances of aircrafts entering SI CTZ at lower levels (A040 and A050 feet) without any prior coordination.
4. Ground delays, coordinated by PICS were observed to be lesser than those coordinated by ATCs. So, he requested the seniors to maintain consistency.

General discussion:

Inquirer	Responses
Mr. Sitaram Bhandari	<ul style="list-style-type: none"> • Usually an aircrafts that doesn’t need to hold in air following an imposed ground delay. • Even if such cases prevail, it’s only to shorten excessive delays. • Stations like RC, BP, PK, JP lack hot line and often release traffics without prior coordination because of which sometimes SI traffics get penalized unnecessarily. • Penetration to lower level as mentioned earlier is strictly discouraged and LOA is followed. • An ATC is more reliable and preferable to another ATC. So, coordination made by PIC yields lesser ground delay is not convincing. However, due to time difference of coordination, it may give imbue that feeling.
Mr. SurajBisankha	<ul style="list-style-type: none"> • Recommended that use of proper channel for release coordination shall be made mandatory in all conditions.

1.10.2 Paper Presentation on “LOA with Domestic Aerodromes”

Presenter: ATC Mr. RabindraMaharjan, Manager TIA: (refer annex II)

Mr. RabindraMaharjan TIA, through his presentation adorned with animations and colorful display of facts and figures, persuaded to establish synonymous relationship between “coordination” and

“Teamwork”. He opined that “teamwork” was a win-win game where both the parties would not lose. And the overall efficiency would be optimized. Usually, LOA were formulated to encompass entire coordination procedure but with the passage of time, the relevance and or effectiveness of LOA degraded for aviation sector is a dynamic domain. So, newer issues sprang up like parking problem raised by almost all participating aerodromes. According to him, TIA was the hardest hit station by parking bay problem issue which had compelled it to impose the provision of procuring release clearance by other stations mandatory. If by any reasons, time spacing could not be maintained, excessive delays, diversions and VHF congestion would be inevitable.

Discussion session:

During this session Mr. Umesh Panthi inquired the number of traffics that could be handled at a time. As a response to Mr. Panthi’s curiosity, Mr. Devendra Prasad Shrestha replied that TIA had been handling all the traffics that established contact.

1.11 Address by DGCA Mr. Sanjiv Gautam:

Respected **DGCA Mr. Sanjeev Gautam** in his address mentioned that LOAs with less effective coordination procedures would delay the timely coordination. He emphasized that it was high time we learnt a lesson from past bitter experiences of serious incidents, near misses and accidents. According to him he had anticipated the interaction program to be interactive in real sense, not just a question answer session. The interaction program, indeed, was interactive although it required a stimulus from DGCA. The interaction should be focused on up gradation and refinement of existing systems so that stringent requirements of ICAO could be met. DGCA focused a lot on maintaining at least minimum standard separation between traffics so that safety could be assured.

Enthralled by the presentations of new recruits, DGCA whole heartedly praised their confidence and persuaded that the future was bright although the system required a “Push”. “Morning shows the day”. DGCA believed that the new ATCS possessed the caliber to push the system so that it would gain the momentum. Mr. Gautam urged ATCS to maintain professionalism and discipline. According to him, CAAN was about to overcome the hurdle of man power crisis because of series of batches of ATS trainees.

He argued that success or failure depended on how well a system functioned. He urged everyone to let the system function the way it was supposed to. DGCA emphasized that until our value system could integrate “trust” in system, we would continue to exert pressure on the system via whatever channels we had access to. Such undue pressure would lead nowhere. He opted on designing such coordination procedure which would resolve the issues at lower levels. According to him, CAAN was team where different individual assumed different roles but the ultimate objective of each individual should be attainment of organizational goal. Thus, it was teamwork.

Flight permission should be granted based on available parking space, resources, ATC capacity and workload factors. All ATC must be accountable to their Duty and Responsibilities. He supported DDG Devendra KC on discouraging wrong reporting culture and encouraging the use of proper channel for issues resolution. He considered assessment of previous strategies and recommendations and suggestions of programs like this could guide a way. It would help in identifying factors congenial to implementation or factors discouraging implementation. Once such factors were identified, effective strategies could be devised. As ATS is a team work, he urged everyone to give enough importance to briefing and debriefing. Moreover, he instructed ATCs to maintain uniformity and consistency in the job and to strictly follow the documents.

Finally, he revealed his anticipation for the upcoming session of ATC-Pilot interaction program which was a unified, unanimous and consolidated voice and views. He hoped this would convey the message that ATCS were one, an apt of professionalism and fraternity. Lastly, to solve the lack of coordination, he instructed to form a four member body including TIA ATC chief, two TIA ATCs and an expert from ATM department to visit all airports with two days stay on each station within a month or two.

1.12 Vote of Thanks by Chief ATC TIACAO Mrs. GrihaLaxmiGuragain:

At 16:35 ATC Chief ATC Mrs.GrihaLaxmiGuragain declared the completion of the program with her Vote of Thanks at 1635 hrs. She thanked respected Chief Guest DGCA for accepting the invitation and for inspiring the mass to strive together for a common goal. Mrs. Guragain also thanked respectiveDDGs, GM TIACAO and all other subordinates for supporting the interaction program and making it a success.

1.13 Recommendations:

1.13.1 Recommendation for TIA / CAAN:

1. Activation of TIA ATS Safety Office with dedicated and trained manpower equipped with necessary resources.
2. LOA between different units and stations should be formulated with direct involvement of ATM department. For effective result, ATM department should be consulted on ATC and ATS related issues like: defining roles and responsibilities, designing coordination procedures, deputation of ATS manpower, rating and licensing etc.
3. Use of semi-circular system rather than Quadrantal level system should be encouraged.
4. Declaration of the ATC capacity and workload restrictions should be made.
5. Assessment of previous interactions, its recommendations and implementations of the same should be made.
6. Ultralights in Pokhara should not be allowed to operate as formation flights.
7. To solve the problem of ACC coordination between different stations, a four member team consisting of Chief ATC TIA, two senior ATCs from TIA and an expert from ATM department shall be formed.

1.13.2 Recommendation for ATC:

1. Domestic airports should obtain the Release clearances for an departing ACFT with the ACC and APP units.
2. Every ATC should restrain from offering unsolicited information to media concerning aviation mishaps. It's the job of a dedicated spokesperson.
3. All the stations and units should be well clear of their Roles, Responsibility and Jurisdiction mentioned in LOA.
4. Review and revision of LOA with VT and KT ACC in the context of establishment of MSSR and RCAG East.
5. Offer priority to arriving aircrafts which were imposed ground delay.
6. Reinstatement of KT-LK track via KARTI.
7. Use of all available means of communication should be used along Pokhara- Jomsom track.
8. Concerned TWR should mandatorily coordinate with Kathmandu ACC for weather deviation which may compel Nepalese aircrafts to penetrate Indian airspace so that a timely coordination with India can be made through authentic channels.

*The program was followed by **High Tea**.*