Civil Aviation Authority of Nepal

FLIGHT SAFETY STANDARDS DEPARTMENT

Technical Onsite mission/Observation of Nepal Airlines Corporation by CAA Nepal

1. **POST HOLDER – CONTINUING AIRWORTHINESS MANAGER AND MAINTENANCE MANAGER (AOCR, Appendix 4, NCAR 145.A.30)**
   Key post holder CAMO Manager and Maintenance Manager Vacant since 5th Oct 2023. Organization's continuing airworthiness manager and maintenance manager was suspended -5th October 2023 due repetitive defect not carried out as per company's procedures. A 320 Aircraft released due continuous repetitive defect on TCAS, inspite of serious issue. This is serious if conducting international flight. (This may be due to management pressure). – No proper responsibility on airworthiness issue held
2. **Frequent Occurrences (NCAR M.A.202, NCAR 145.A.60, FOR)**
   Some Maintenance Requirement on aircraft not carried out on time as approved procedures. Frequent occurrences related to continuing airworthiness management organization like Job order for maintenance not issued on time, Job order for component change not issued on time, e.g. expired squib cartridge on 9N-ABU which caused the aircraft grounded at out station. Lack of monitoring function in CAMO. This is level 1 finding.
3. **Maintenance standard below average from NAC Maintenance Organization (NCAR 145)**
   Maintenance standard was found below average from NAC maintenance organization. Such as landing gear pins not removed after door closed 9N-ALZ, Oil pressure relief valve spacer installed inappropriate, TCAS fail repetitive defect not handled as per company's procedure leading to CA Manager, Maintenance Manager and Certifying staff suspension. Wheel shop, structure shop, NDT Shop not functioning well.
   (Being National Carrier, local maintenance being contracted to other organization like Buddha Air, Yeti airlines etc especially for wheel and NDT.)
4. **Long Term A320 Aircraft Grounded (Reliability)**
   The A320 aircraft 9N-AKX was grounded due engine spares and has been stationed at Israel Aerospace since last 4 months. Aircraft was being positioned in Israel without proper plan of acquisition of Engine. This might be causing poor dispatch reliability for scheduled Nepal Airlines Flight and extra financial burden to NAC.
5. Frequent premature engine failure of A320. Unable to plan for engine acquisition on time, Which led frequent AOG of NAC fleet.

6. **9N-ABX**

   9N-ABX has been grounded since long time and has not been maintained but its component are being robbed to service other twin otter aircraft. CAAN approval already granted for repair before 5 years. Still no any progress.

7. **VHF Intermittent in Twin Otter (NCAR M.A.202)**

   The VHF has been intermittent since long time. The company's has not incorporated the Service Bulletin to upgrade its VHF but few rectification are only carried out causing intermittent VHF. Lots of flight diverted due to this issue in the past

8. NAC Internal Audit (NCAR 145.A.65)

   NAC internal audit was found to be carried on time however it was found that the timely submission of corrective action plan for the internal audit to the Quality Department was not performed. The auditee were found irresponsible towards the organization quality management systems and CAAN approved procedures.

9. Poor Hangar Management (NCAR 145.A.25)

   The hangar of NAC located at TIA was found poorly managed. The floor, markings, emergency equipments, etc are not facilitated as per the standards. Hangar is being covered by unserviceable aircraft, components, etc.

10. No minimum airworthiness standard maintained and defined in case of international line station to conform the proper dispatch reliability of the aircraft.

11. Most of the time, the organization's CAMO and AMO postholders, i.e. CA Manager and Maintenance Manager, were concentrated on acquiring aircraft parts and equipment. The post holders did not actively participate in the CAMO's and AMO's airworthiness activities of the organization. It was discovered that the only people performing the postholder duties and obligations were the deputy of the postholders and other junior staff members. **Recommendations: So, the procurement, maintenance contract, purchase section functions need to be separated from CAMO department and NAC shall form separate technical department to perform these activities so that CAMO & AMO shall be fully dedicated on prime function of CAMO & AMO department on continuing airworthiness of the aircraft. NCAR 145.A.30**

12. The organization had a number of audit findings open past their closure due date. The audit findings were not closed as per the corrective action plan approved by the quality department. Respective AMO and CAMO does not seem serious in closing audit findings

before due date. In spite, Quality department is following to the auditee for the closure of the findings. Also, regarding open findings, a briefing was done to the Accountable Manager and auditee during the management review meeting, however, the proper decision was not made regarding the seriousness on the impact of non-closure of the findings by the auditee. NAC does not have proper policy as a commitment by accountable manager for taking appropriate action for non-closure of the audit findings by the auditee. This shows that the upper management of the organization were unaware of impact of these findings in the airworthiness aspects of the aircraft and validity on continued certification of respective organizations by CAAN. NCAR 145.A.65

13. The proper communication protocols between interdepartmental areas could not be found for the internal occurrence, mandatory occurrence reporting and defect of the aircraft. Most of the time, CAA Nepal has to communicate with the post holders regarding the defects and occurrence. (Ref: CA Manager and Maintenance Manager were unaware of the occurrence within the organization) NCAR 145.A.30

14. The hangar space is plagued by an assortment of debris, ranging from loose screws to unserviceable heavy aircraft parts and equipment. This scattered debris not only creates a hazardous working environment but also impedes the workflow, as technicians must navigate through the mess to perform their tasks.

15. It was observed that the organization does not follow the proper procedure in OCC, TIA as described in OCC operation Manual. Example: Appointed staff are unaware of the checklist included in the manual. The in-charge of the units are not defined. Qualification of staff available at units like dispatch, foreign handling not defined. The shortage of staff identified as different units handled by single person. (FOR 3.1.3 & 4.2.3)

16. Nepal airlines IOCC facilities, MCC & OCC is located at different location. OCC dispatch personnel have not received training as required on FDTL; ARMS as described on the latest approved OCC procedures. This shows that the organization is not focusing on familiarizing different responsible personnel in existing approved procedures. Thus, it can be said the responsible personnel are not up to date on the latest procedures. OCC staff were unaware of Flight delay reports and analysis described in IOCC manual/ FDM. (FOR 10.7,12.5,9.6.2).

17. Automated External Defibrillator(AED) was found not installed in A330 as per EU findings.

18. Upgrading of ARMS system not carried out(e.g. Duty roster of Pilot not being monitored)

19. Full training on ARMS software to dispatch staff for planning and rostering not carried out.

20. There is provision of allocation of resources in policy, there is planned budget of CSD **but the there is no defined and planned number of human resources in CSD**. (Reference: CAR -19, Appendix 2 Para 1.1.1 (b))

21. Safety accountability, responsibilities and authorities of all key safety personnel have been defined in SMS manual and accordingly JDs have been provided.
But the defined safety accountability, responsibilities and authorities have not been included in respective manuals (especially in OPS, CAMO and AMO). Also, the provided JDs have not been accepted by the respective personnel. (CAR -19, Appendix 2 Para 1.2 (b, c, d))

1. There are formats for SMS operational records in SMS manual but the records like hazard and occurrence logs have not been clearly documented in distinct formats by the relevant departments and thereafter analysed. (CAR-19, Appendix 2, Para. 1.5.2)

22. There is provision of internal investigation in manual but the provision **does not ensure the use of Root Cause Analysis (RCA) tools. All members involved in the investigations do not have investigation training as mandated by the organizational document. All the contributing factors/findings identified by the investigation have not been addressed by recommendations.** (CAR- 19, Appendix 2, Para. 2.2)

23. **The State operational safety risks included in NASP and its associated SEIs have been identified and working on it by Operation department. But the activities have not been integrated with safety division. The implementation status of all actions has not been monitored continuously**. (CAR- 19, Appendix 2, Para. 3.1.1)

24. **There is no organizational documentation system in corporate level, the documentation system in operational department but it does not cover all areas of the organization.** (CAR- 19, Appendix 2, para 2.1.1

25. **Organization has conducted safety audits in ATO and one of the contracted organizations but the audit does not ensure the continuous effectiveness of control measures, implementation of investigation recommendations and other safety critical aspects.** (CAR-19, Appendix 2, Para. 3.2)

26. **There are many directly contracted organizations for products and services but the NAC has not been able to ensure the organization's acceptable level of safety has been met by those contracted organizations to make sure that no safety hazard is transferred to NAC.** (ICAO Doc. 9859 Para. 4.1.6.1)

27. **There are two different standards for SMS instructor authorization in organization. Some of the practicing instructors' competencies have not been maintained and monitored according to the organizational standards.** (CAR- 19 Appendix 2, Para. 4.1)