

ICAO Universal Safety Oversight Audit Programme

**AUDIT SUMMARY REPORT
OF THE
DIRECTORATE GENERAL
OF CIVIL AVIATION
OF
LEBANON**

(Beirut, 3 to 10 April 2000)



INTERNATIONAL CIVIL AVIATION ORGANIZATION



ICAO UNIVERSAL SAFETY OVERSIGHT AUDIT PROGRAMME

Audit Summary Report on the Safety Oversight Audit Mission to Lebanon

(Beirut, 3 to 10 April 2000)

1. BACKGROUND

1.1 The Directorate General of Civil Aviation (DGCA) of Lebanon was initially assessed under the voluntary ICAO Safety Oversight Assessment Programme from 10 to 13 March 1997 by an ICAO assessment team. This audit was carried out from 3 to 10 April 2000 pursuant to Assembly Resolution A32-11 and in accordance with the updated Memorandum of Understanding (MOU) agreed on 27 December 1999 between Lebanon and ICAO which is included in Attachment A to the audit interim report forwarded to Lebanon on 5 June 2000. The objectives of this audit were twofold. Primarily, its objective was to fulfill the mandate given to ICAO pursuant to the above-mentioned Assembly Resolution. Secondly, the audit was conducted with the objective of ascertaining the progress made in the implementation of the recommendations forwarded during the voluntary assessment conducted in 1997 and to re-ascertain the safety oversight capability of the DGCA of Lebanon. The audit also aimed to ensure that Lebanon is in conformity with ICAO Standards and Recommended Practices (SARPs), as contained in Annexes 1, 6 and 8 to the Chicago Convention, associated guidance material and good aeronautical practices.

1.2 On 6 July 2000, Lebanon submitted an action plan addressing all the findings and recommendations contained in the audit interim report and also containing comments and clarifications of some of the items contained in the audit interim report. The action plan submitted was reviewed by the Safety Oversight Audit (SOA) Section and was found to be satisfactory. The comments and clarifications provided have been taken into consideration in the preparation of this audit summary report.

1.3 On 7 October 2000, ICAO received further clarifications from Lebanon and these have been included as additional information on actions taken/proposed as appropriate.

2. CIVIL AVIATION ACTIVITIES IN LEBANON

At the time of the audit, the civil aviation activities in Lebanon included:

a)	number of technical staff employed by the organization at Headquarters	6
b)	number of active pilot licences	285
c)	number of active flight crew licences other than pilot licences	28
d)	number of active licences other than flight crew licences	168
e)	number of commercial air transport operators	4
f)	number of air operator certificates (AOCs) issued	2
g)	number of aircraft operations inspectors	1
h)	number of aircraft registered in Lebanon	9

i)	number of Certificates of Airworthiness (C of A) issued	7
j)	number of approved maintenance organizations (AMOs)	2
k)	number of aircraft maintenance workshops	3
l)	number of aircraft airworthiness inspectors	3

3. SUMMARY OF FINDINGS

3.1 General statement

3.1.1 None of the recommendations made in the ICAO assessment report of March 1997 concerning the primary aviation legislation and civil aviation regulations have been implemented to date. However, with the assistance of the ICAO TCB project, the DGCA has made significant efforts since the 1997 assessment in drafting a new Civil Aviation Safety Act and in codifying the existing system of decisions (*arrêtés*) and safety directives into consolidated draft regulations in the areas of personnel licensing, operations and airworthiness of aircraft. The Act and draft regulations, however, have yet to be promulgated or implemented; thus there remains, under the current legislative framework, deficiencies in areas such as the certification of air operators, powers of the Minister of Transport, delegation of authority to the DGCA, enforcement procedures and penalty provisions.

3.1.2 The DGCA was by law established as a Directorate of the Ministry of Transport with responsibility for all civil aviation activities in Lebanon. The Flight Safety Department (FSD) of the DGCA consists of three Sections — Personnel Licensing, Flight Operations and Airworthiness of Aircraft — and is responsible for the licensing, control and supervision of personnel licences and certification of air operators and maintenance organizations. The DGCA does not have adequate personnel to effectively undertake its safety oversight responsibilities. Only six of twenty-five technical positions in the FSD, including that of the Director of the Department, are currently filled. The existing recruitment policy does not allow the DGCA to be a competitive employer, thus hindering it from attracting and retaining appropriately qualified and experienced inspectorate staff. Although ad hoc training in foreign training institutes and OJT are provided to technical staff, no formal training programme or policy has been established for initial and recurrent training.

3.1.3 The DGCA issues student, private, commercial and airline transport pilot licences — aeroplane as well as flight engineer, aircraft maintenance engineer, air traffic controller and cabin crew licences. Private pilot licences are issued directly while commercial and airline pilot licences are mainly issued on equivalency basis to holders of licences and ratings issued by other Contracting States. The Personnel Licensing Section is staffed by one officer whose main responsibilities are the processing of licence applications and the preparation of licences for signature by the Director General (initial issuance) and the Chief of the FSD (renewals). In practice, the Chief of the FSD assumes the responsibility for personnel licensing-related issues. The DGCA has established requirements for the designation of practical test providers and for medical examiners. Designations are issued up to the end of the fiscal year and are renewable on a yearly basis. The DGCA is developing draft personnel licensing regulations to replace the various decisions and safety directives which are currently in force. The draft regulations still need to be reviewed and enacted by the appropriate authority.

3.1.4 The operations safety directives in Lebanon have not kept pace with the modern aviation environment and do not address all of the SARPs of ICAO Annex 6. This problem has been recognized by the DGCA which is currently in the process of developing new operations regulations to consolidate and supersede the current system of decisions and safety directives. Organizationally, the Operations Inspectorate suffers from a critical shortage of staff. Other than the Operations Chief, there are no operations inspectors or administrative personnel in the Flight Operations Section. There is no established system governing the certification of air operators. There are no inspector handbooks providing DGCA policy or guidance for inspectors. There is no established system for the ongoing supervision or regular inspection of air operators. There is no training program for inspector personnel. Given these circumstances, the DGCA has not been able to implement an adequate system of aviation safety oversight in Lebanon.

3.1.5 The Airworthiness Section staff is comprised of an Acting Chief of Section and two inspectors, one of whom was on training. There is no established system for safety oversight of operators, maintenance organizations or aircraft. Some training has been given to the airworthiness inspectors but there is no structured training programme. Where inspections had been carried out, records were not available, with the exception of two recent audits. The audits were conducted according to a set plan in accordance with draft procedures and check sheets but these have not yet been formally approved or implemented by the DGCA.

3.2 Primary aviation legislation and civil aviation regulations in Lebanon

3.2.1 Abstract of findings

3.2.1.1 The primary laws and decrees in force in Lebanon are:

- a) *Aviation Law in Lebanon*, dated 11 January 1949, as amended in 1955 (the *Aviation Law*);
- b) Presidential Decree No.1610, dated 26 July 1971, entitled *Organization of the General Directorate for Civil Aviation* (Decree No. 1610);
- c) Law No. 214, dated 2 March 1993, entitled *Formation of the Ministry of Transport*; and
- d) Presidential Decree No. 15648, dated 21 September 1970, entitled *Organization of Aerial Work and Air Transport in Lebanon*.

3.2.1.2 The laws and decrees are supported by a series of decisions and safety directives which specify mandatory requirements concerned with licensing, operational and airworthiness matters. However, the various decisions, decrees and safety directives have not been consolidated. The result is a widespread dispersal of rules and requirements in various documents which is not user-friendly and lends itself to difficulty with compliance. There is an ongoing project in the DGCA to consolidate and codify the decisions and safety directives into one comprehensive set of regulations.

3.2.1.3 The *Aviation Law* of 1949 is outdated and does not enable Lebanon to adequately implement and enforce the provisions of the Chicago Convention or SARPs of the Annexes. The *Aviation Law*, for example, provides for “certificates of serviceability” of aircraft (Article 50) and flight crew licences and permits (Article 55) to be issued “in accordance with Appendix E of the Chicago Convention” (the *Convention on International Civil Aviation*). However, no such Appendix to the Chicago Convention exists, leaving the issuance of such certificates and licences without any proper legal basis.

3.2.1.4 There is no provision in the *Aviation Law* setting forth the powers of the Minister and no clear delegation of authority or assignment of responsibility to the DGCA to develop, issue and amend regulations or directives. In addition, the *Aviation Law* does not require an international commercial air transport operator to hold an air operator certificate (AOC) nor require operations to be conducted in accordance with conditions the State may consider applicable in the interest of safety. These concerns have been addressed in the Draft Safety Act but this Act has not been brought into force.

3.2.1.5 The enforcement and penalty provisions in the *Aviation Law* are in need of amendment. The penalties range from 50 to 4 000 Lebanese pounds (approximately half a U.S. cent to three U.S. dollars). Contraventions are specified for a pilot or owner of an aircraft but there are no provisions allowing for enforcement action to be taken against an operator of an aircraft or operator of an aerodrome. There are also no provisions allowing for the suspension, cancellation or refusal of a Lebanese aviation document (licence, certificate, permit or other authorization). Detailed provisions on penalties and offences are found in the *Draft Safety Act* which has yet to be enacted.

3.2.1.6 Lebanon ratified Article 83 *bis*, an amendment to the *Chicago Convention*, on 14 April 1983 but the *Aviation Law* and regulations have not been amended to provide for its proper implementation.

3.2.1.7 The action plan submitted by Lebanon, addressing all the recommendations contained in the audit interim report and related to the primary aviation legislation and civil aviation regulations, is summarized in paragraph 3.2.2.

3.2.2 **Corrective action proposed/implemented by Lebanon**

3.2.2.1 *A recommendation was made that the DGCA give priority to accelerating its ongoing project to consolidate and codify the existing system of decisions and safety directives into one comprehensive set of regulations in the areas of personnel licensing, operations and airworthiness of aircraft, and that such regulations be reviewed to ensure compliance with the SARPs contained in Annexes 1, 6 and 8 to the Chicago Convention. The DGCA indicated in its action plan that it would accelerate and finish the writing of regulations in the areas of personnel licensing and airworthiness of aircraft and advised, in an update of 7 October 2000, that the drafting and review of these regulations for compliance with ICAO SARPs had been completed. In the area of operations of aircraft, the DGCA has indicated that it will accelerate and finish the writing of regulations before 31 December 2000 and review these regulations to ensure compliance with ICAO SARPs before 31 January 2001.*

3.2.2.2 *With respect to the recommendation that the Government give priority to enacting the provisions of the Draft Act, which sets forth the powers of the Minister, and allow for a delegation of authority and assignment of responsibility to the DGCA, the DGCA has indicated that the Draft Act will be presented to Parliament before 31 December 2000 and the provisions enacted as of 1 July 2001. The same dates apply to the recommendation that priority be given to the provisions of the Draft Act requiring international commercial air transport operators to hold an AOC and to conduct operations in accordance with the conditions and laws in force in Lebanon.*

3.2.2.3 *With regard to the recommendation that the DGCA either repeal or amend Articles 50 and 55 of the Aviation Law to allow for the issuance of certificates of airworthiness and personnel licences as required under Articles 31 and 32 of the Chicago Convention, the DGCA indicated that the Draft Act already contains a provision to amend Article 50 of the Aviation Law. The DGCA clarified that the reference to Appendix E in Articles 50 and 55 was an error in the English translation of the Aviation Law provided to*

the audit team and that in the original Arabic version, the Law correctly states Annex 1 and not Appendix E. As such, Article 55 is not in need of amendment.

3.2.2.4 *Concerning the recommendation that the DGCA establish a system to ensure that the laws, decrees, decisions and safety directives in force in Lebanon are in conformance with ICAO SARPS, the DGCA indicated that starting 1 January 2001, the duties and responsibilities of the Chiefs of Airworthiness, Operations and Personnel Licensing will include the preparation and recommendation of regulatory changes and amendments to the national air law and regulations to ensure conformance with ICAO SARPs contained in Annexes 1, 6 and 8.*

3.2.2.5 *With regard to the recommendation that the Government give priority to enacting the enforcement and penalty provisions of the Draft Safety Act and implement a comprehensive compliance and enforcement programme, the DGCA indicated that the Draft Safety Act provides the Minister with the power to refuse to issue, suspend or revoke a Lebanese aviation document and that the Draft Act will be presented to Parliament before 31 December 2000 and the provisions enacted as of 1 July 2001. As of 1 January 2001, the Lebanese aviation regulations will contain additional compliance and enforcement provisions which will be the basis of the DGCA compliance programme. Three experienced qualified pilots and three experienced qualified technicians will be contracted before 31 December 2000 and, starting 1 January 2001, these persons will be given training to implement a comprehensive safety oversight system.*

3.2.2.6 *With respect to the recommendation that the DGCA review the Aviation Law and Draft Safety Act in order to provide for the proper implementation of Article 83 bis, the DGCA indicated that the Draft Safety Act will be amended and presented to Parliament before 31 December 2000 and enacted by 1 July 2001. The draft Lebanese aviation regulations contain provisions for the recognition of certificates of airworthiness and licences.*

3.3 Civil aviation organization system in Lebanon

3.3.1 Abstract of findings

3.3.1.1 The DGCA is the responsible Government agency for civil aviation activities in Lebanon. It has been established as one of the Directorates General of the Ministry and is comprised of eight departments. The Flight Safety Department has the responsibility for safety oversight in the areas which were audited by ICAO. There are three sections — Personnel Licensing, Airworthiness and Flight Operations — contained within the Flight Safety Department. The DGCA Headquarters is located in Beirut and there are no regional offices.

3.3.1.2 The functions of employees of the DGCA and terms of reference are set forth by way of Presidential Decree. Staff are recruited through the civil service upon request of the DGCA through the Minister of Transport. The organizational chart of the DGCA provides for twenty-five technical staff to be employed within the FSD. However, only six of these positions are filled, due to a lack of resources and inability to offer salaries and benefits competitive to those being offered by the industry. There is only one secretary in the FSD and the Sections do not have clerical or administrative support. Prior to the war in 1975, all of the positions in the FSD were filled, but by 1990, the majority of the posts had become vacant and the DGCA has since been unable to fill them. This problem is not particular to the FSD and is felt organization-wide. For example, although the staffing plan calls for a total of approximately 900 employees within the DGCA, the current staffing level is a little more than one-third of the total staff required. The DGCA is currently in the process of employing flight operations inspectors from among senior pilots who have retired

from active flying at age 60. However, the civil service system has a mandatory retirement age of 64 years old which limits the services of such pilots who have retired from the industry.

3.3.1.3 There is a need to improve the filing system for the records of technical personnel and air operators within the FSD. Aircraft maintenance organization and operator records are widely dispersed and not easily accessible to the airworthiness inspectors. In addition, there are no flight operations or airworthiness inspector handbooks to provide comprehensive guidance to inspectors.

3.3.1.4 The DGCA funding resources are based on a Government allotted budget. Finances generated through civil aviation activities in Lebanon are directly paid to Government Treasury and the DGCA has no control in this respect. The Council of Ministers has approved a proposal, which is currently under consideration by Parliament, to change the structure of the DGCA to an autonomous CAA under the Ministry of Transport. If approved by Parliament, the newly created CAA will be financially autonomous, having complete access to and control of the funds generated through civil aviation charges and thus enabled to recruit and retain the necessary number of experts at the required level of expertise.

3.3.1.5 Technical staff of the FSD receive ad hoc training in Canada, the United Kingdom and the United States but there is no structured training programme or policy for initial or recurrent training of the inspectorate staff. New recruits are provided with the relevant documentation and receive OJT. An indoctrination programme for new recruits is currently planned to be implemented as part of the remedial action Lebanon has taken on the basis of the recommendations of the ICAO safety oversight assessment conducted in 1997.

3.3.1.6 The action plan submitted by Lebanon, addressing all the recommendations contained in the audit interim report and related to the civil aviation organization, is summarized in paragraph 3.3.2.

3.3.2 **Corrective action proposed/implemented by Lebanon**

3.3.2.1 *With respect to the recommendation that the Government establish appropriate levels of remuneration for technical staff within the DGCA, the DGCA has indicated that the Minister will hire three qualified experienced pilots and three qualified experienced technicians before 31 December 2000, with special remuneration competitive with that offered in the industry.*

3.3.2.2 *Concerning the recommendation that the DGCA establish a formal training policy and programme for technical staff, the DGCA indicated that, starting 1 January 2001, it will develop and issue a training policy which will require personnel licensing officers, flight operations and airworthiness inspectors to complete initial, technical, recurrent and supervisory training. A draft DGCA personnel training Act will be prepared and presented to Parliament before 31 December 2000 and promulgated before 30 June 2001. The DGCA further indicated that, as of 1 January 2002, funds will be allocated for training purposes in the Government budget and will be controlled by the Council of Ministers. Until that time, training will be undertaken through ICAO (TCB) Project LEB 95/001.*

3.3.2.3 *With respect to the recommendation that the DGCA improve its filing system for the records of technical personnel and air operators, the DGCA indicated that, starting 1 January 2001, the ongoing ICAO (TCB) Project will engage the services of a professional to establish a filing system for the records of technical personnel and air operators and to develop a system for the review of these files. The DGCA indicated that, in accordance with the ICAO recommendation, it has allowed the Airworthiness Section direct access to records of aircraft, operators maintenance organizations and approvals and has ensured that*

records of inspections contain all relevant information pertaining to initial certifications, ongoing surveillance, additional approvals, modifications and incidents.

3.3.2.4 *With regard to the recommendation that the DGCA establish a comprehensive system of inspector handbooks, the DGCA indicated that the Airworthiness Handbook and Licensing Procedures Manual have now been completed and the Flight Operations Inspector Handbook will be completed by 31 December 2001.*

3.4 Personnel licensing and training system in Lebanon

3.4.1 Abstract of findings

3.4.1.1 The DGCA does not have comprehensive personnel licensing regulations. Instead, it has a series of decisions, approved by the Minister, which attempt to fill the gap by providing requirements and procedures for the issuance of the various licences and ratings. Following the assessment of the DGCA conducted in 1997, and in line with the recommendations forwarded, the DGCA has developed draft personnel licensing regulations which, following a review by the DGCA, will be presented to the Minister for approval and further presentation to a higher Government body for promulgation.

3.4.1.2 The Personnel Licensing Section is staffed by one officer whose main responsibilities are the processing of licence applications and the preparation of licences for signature by the Director General (initial issuance) and the Chief of the FSD (renewals). The DGCA establishment indicates that there should be three personnel licensing officers, including the Chief. In practice, the Chief of the FSD assumes the responsibilities of the Chief of Personnel Licensing. This acute shortage of technical expertise is expected to be resolved as soon as an autonomous CAA, which has been presented to Parliament, is created and the new regulations are promulgated.

3.4.1.3 The DGCA issues student, private, commercial and airline transport pilot licences — aeroplane as well as flight engineer, aircraft maintenance engineer, air traffic controller and cabin crew licences. Requirements for flight operations officers have been developed, however, no licence in this category is issued. The DGCA issues private pilot licences directly and mainly issues licences on equivalency basis to holders of commercial and airline pilot licences issued by other Contracting States. Requirements and procedures for the issuance of licences on equivalency have been established. The DGCA also validates licences for private pilot licence holders and occasionally for commercial and airline transport licence holders. Validations are valid for only two months and are not renewable. The DGCA contacts the licence-issuing State to ascertain authenticity of information and documentation presented by applicants for a validation or an issuance of a licence.

3.4.1.4 The DGCA has established requirements for the designation of practical test providers and for medical examiners. In both cases, there is a minimum requirement for qualification and experience. Designations are issued up to the end of the fiscal year and are renewable. There are eight medical examiners, fifteen air transport flight examiners, two general aviation flight examiners and four flight engineer examiners designated by the DGCA. The DGCA utilizes the services of a committee of medical examiners, established on a case-by-case basis, for the evaluation of medical reports when the need arises. The DGCA has not established a system of control and supervision of its designated practical test providers although it was in the process of recruiting retired airline pilots to remedy this lack of qualified personnel.

3.4.1.5 A single type AME licence is issued in Lebanon. Knowledge and experience requirements have been established and the applicants for the licence must satisfactorily complete an examination prepared

in the same manner as that for other licences. There are no requirements for practical examinations, however, such requirements (demonstration of skills) are included in the new draft regulations.

3.4.1.6 Air traffic controller licences are no longer issued by the Licensing Section although this was the practice before 1975. Knowledge and experience requirements, established in 1965, are still in force although they are outdated and, in practice, the DGCA indicated that the current requirements of Annex 1 are implemented. Issues relating to training and certification, including medical certification of air traffic controllers, are the responsibility of the Air Navigation Department.

3.4.1.7 Licences issued by the DGCA are of the expiring type. Regardless of age, private pilot licences are valid for only one year and commercial and airline transport pilot licences are valid for six months. Licences are renewed on the presentation of proof of a proficiency or flight check and successful completion of a medical assessment at the required class. Airline transport and commercial pilot licence holders as well as flight engineer licence holders are required to hold a Class 1 Medical Assessment while private pilot licence holders and student pilots are required to hold a Class 2 Medical Assessment. Air traffic controllers and cabin crew are required to hold a Class 3 Medical Assessment. The Personnel Licensing Section maintains up-to-date records in orderly and secured files for each licence holder.

3.4.1.8 There are no aviation training schools in Lebanon. However, two aero-clubs have been certified to provide pilot training up to the private pilot licence — aeroplane. The aero-clubs provide a non-approved course. Trainees of the aero-clubs are required to satisfactorily pass examinations and flight tests organized and conducted by the DGCA in order to be issued a private pilot licence. The Licensing Section does not exercise any control and supervision over the aero-clubs or the training provided; however, the Flight Operations and Airworthiness Sections are mandated to conduct inspections and surveillance of the aero-clubs.

3.4.1.9 The action plan submitted by Lebanon, addressing all the recommendations contained in the audit interim report and related to personnel licensing and training, is summarized in paragraph 3.4.2.

3.4.2 **Corrective action plan proposed/implemented by Lebanon**

3.4.2.1 *With respect to the recommendation that the Government provide appropriate resources to enable the DGCA to fill the established personnel licensing positions, the DGCA indicated that two licensing technical persons will be hired before 1 January 2001. Training is to be established according to the corrective action proposed in paragraph 3.3.2.2 above.*

3.4.2.2 *Concerning the recommendation that the Government provide the necessary resources to enable the DGCA to recruit personnel to control and supervise the activities of designated flight test providers and to ensure standardization and quality of inspections, the DGCA indicated that qualified and experienced pilots will be hired by the Minister for this purpose before 31 December 2000.*

3.5 **Aircraft operations certification and supervision in Lebanon**

3.5.1 **Abstract of findings**

3.5.1.1 The DGCA has promulgated twenty-six safety directives to serve as the primary rules and regulations governing aircraft operations in Lebanon. Due to a lack of resources, the existing rules have not kept pace with the modern aviation environment and do not address all of the SARPs of ICAO Annex 6, such as aircraft icing, extended range operations by twin-engined aeroplanes (ETOPS), carry-on baggage,

composition of flight crew, crew resource management (CRM), human factors, flight operations officers and ground proximity warning system (GPWS). The DGCA is currently in the process of developing a new system of aviation regulations entitled the *Lebanese Air Regulations (LARs)* which will consolidate and supersede all previous directives and address many of the deficiencies found in the present system.

3.5.1.2 The Flight Operations Section is responsible for the certification and supervision of air operators in Lebanon. The section is organized under the direction of a Chief who reports directly to the Chief of the FSD. There is a total staffing allocation of five operations inspectors and one clerical employee. Presently, the only position filled is the Chief's position. There is one clerical employee whose services are shared amongst the entire FSD. All other positions are vacant. There is no established training programme for operations personnel.

3.5.1.3 All inspectors at the DGCA have access to modern office equipment and most have desktop computers with Internet access. One exception is there are no microfiche and microfilm readers, notwithstanding that the DGCA has microfiche and microfilm documentation for several of their transport aircraft which cannot be accessed. In addition, the DGCA has only one long distance telephone line for the entire office. The Flight Operations Section has access to a technical library but it contains only a limited complement of resource materials, such as aircraft flight manuals, air operator manuals and ICAO documentation. Technical documents shipped by mail are sent from the customs office to the Development and Studies Department and aviation safety documents are not routinely forwarded to the DGCA.

3.5.1.4 There is no established system to govern the certification process for new air operators in Lebanon. There is an unwritten policy requiring an applicant to begin the certification process by obtaining a licence from the Ministry of Transport which is valid for one year. Some operator facilities, equipment or personnel may be inspected prior to certification but there is no established policy in this regard. Certification is completed with the issuance of a letter signed by the Director General which serves as the AOC. Associated technical instructions and specific approvals are also conveyed by letter. There is no standardized format for the AOC nor any standardized system of operations specifications. AOCs are issued without an expiration date, remaining valid as long as the company remains in compliance with the regulations.

3.5.1.5 The ongoing supervision of air operators in Lebanon is the responsibility of the Flight Operations Section under the direction of the FSD. In addition, contract inspectors from Euro-Safe travel to Lebanon to conduct limited oversight inspections of *Middle East Airlines* on a brief and irregular basis, two or three times per year. DGCA inspectors are provided with specially marked Beirut airport identification badges which allow unrestricted access to all areas of the airport.

3.5.1.6 There is no comprehensive system to govern the control or ongoing supervision of air operators in Lebanon. In the last twelve months, there have been only four or five inspections of the industry which consisted of ramp checks and en-route flight inspections only. Inspections are further restrained by current DGCA policy which requires that an inspector obtain a written authorization as an extra crew permit, signed by the Chief of the FSD, prior to conducting any en-route inspection. Certification and inspection activities of the Flight Operations Section are also hampered by a lack of a comprehensive system of inspector handbooks.

3.5.1.7 Deficiencies identified by the Flight Operations Section during inspections are handled administratively. With the assistance of the TCB project, the DGCA has recently developed a comprehensive document concerning enforcement, but it has not yet been implemented in practice.

3.5.1.8 Presently, the DGCA does not have any capability to conduct flight checks for initial certifications, type ratings or proficiency checks. All flight checks of any kind are accomplished by a system of designated examiners who are provided with check airman training at one of the contract airline training schools. This training is accepted in lieu of an examination or flight test by the DGCA. Appointments must be renewed annually.

3.5.1.9 The action plan submitted by Lebanon, addressing all the recommendations contained in the audit interim report and related to aircraft operations certification and supervision, is summarized in paragraph 3.5.2.

3.5.2 **Corrective action plan proposed/implemented by Lebanon**

3.5.2.1 *With respect to the recommendation that the DGCA ensure that the draft aircraft operations regulations being developed are comprehensive and comply with ICAO SARPs, the DGCA indicated that the regulations will be reviewed before 31 December 2000 to ensure their comprehensiveness and compliance with ICAO SARPs.*

3.5.2.2 *Concerning the recommendation that the DGCA fill the vacancies in the Flight Operations Section, the DGCA indicated that three qualified and experienced pilots will be recruited by the Minister before 31 December 2000 at acceptable remuneration. ICAO (TCB) Project LEB 95/001 will provide a flight operations inspector before 31 December 2000 to assist in implementing the safety oversight system and training the recruited pilots.*

3.5.2.3 *With regard to the recommendation that the DGCA establish a formal and comprehensive system for the certification of new air operators, the DGCA indicated that the ICAO (TCB) Project is in the process of writing operations regulations which will include provisions for the certification of new air operators and which conform to the requirements of Annex 6 and related guidance material. This is expected to be completed by 1 January 2001.*

3.5.2.4 *With respect to the recommendations regarding the acquisition of necessary office equipment and expansion of the technical library, the DGCA indicated that a microfiche reader was ordered and delivered and that technical staff now have access to international telephone lines. The DGCA indicated that it will expand and update its technical library to include relevant aviation safety documents by 1 October 2000. A person has now been designated to receive and catalogue new materials and to make them available to all concerned personnel.*

3.5.2.5 *Concerning the recommendation regarding the establishment of a comprehensive system of ongoing surveillance for certificated air operators, the DGCA indicated that a national Safety Oversight Programme has been formulated by the TCB Project Team and will be reviewed by the DGCA before 31 December 2000. The three pilots which will be hired before 31 December 2000 will be trained to become inspectors. A budgetary allotment has been provided for travel. The DGCA further indicated that approvals for conducting en-route inspections are done by the Director General and can be effected in a matter of minutes.*

3.6 **Airworthiness of aircraft in Lebanon**

3.6.1 **Abstract of findings**

3.6.1.1 Regulations and requirements concerning airworthiness in Lebanon are based on a series of decisions (*arrêtés*) and safety directives which are enforced by the *Aviation Law* of 1949. The safety directives and decisions are out of date and not in accordance with the current issue of relevant ICAO SARPs. However, with the assistance of the TCB project, the DGCA is in the process of updating their legislation, which has already been formulated and codified and was reported to be ready for Parliamentary enactment

3.6.1.2 The Airworthiness Section is managed by the Acting Chief of the Airworthiness Section who reports to the Chief of the FSD. The Section is responsible for the issue and renewal of Certificates of Airworthiness, the certification and renewal of maintenance organization approvals, the maintenance part of operator certification, the continued surveillance and renewal of AOCs, the approval of modifications and the assessment and implementation of technical data received from manufacturers and other airworthiness authorities. In addition to the Acting Chief, there are two airframe/engine inspectors. The inspectors are issued with credentials giving them the right of access to aircraft and aviation-related facilities while performing their inspection duties.

3.6.1.3 The inspectors are provided with some training but it is not structured in accordance with a formal training programme. The training is not comprehensive but, where it has been provided, it has been made possible through the ongoing TCB project established to assist Lebanon in improving its safety oversight capability. The required minimum qualifications and experience for entry level employment of technical staff are too vague for the specific technical personnel required.

3.6.1.4 The Airworthiness Section does not have support staff of its own and must share the services of the only secretary available to the entire FSD. One desktop computer is available to the Airworthiness Section. The section is understaffed and does not possess a level of technical competence commensurate with the level of complexity of the aircraft types operated in Lebanon.

3.6.1.5 Presidential decrees and safety directives require the Airworthiness Section to certify and carry out continued surveillance of operator maintenance systems, operator maintenance arrangements and maintenance organizations to approve modifications and maintenance programmes. However, the DGCA has not established an operator audit plan, maintenance organization audit plan or an aircraft continued airworthiness surveillance plan. There is no inspector handbook or established formal procedures to guide the inspectors in conducting certification or surveillance. The Airworthiness Section does not participate in ETOPS, CAT II OPS or required navigation performance (RNP) certifications. Files and records reviewed were not complete and were not easily accessible to the airworthiness inspectors. New procedures have been prepared for most functions and an inspector handbook has been partially completed; however, none of the draft procedures have been formally adopted.

3.6.1.6 The airworthiness section does not have a system to receive, analyse or manage continuing airworthiness information. Furthermore, there is no method of ensuring that operators are complying with, or continuing to comply with, airworthiness directives (ADs).

3.6.1.7 There are no design or manufacturing activities currently taking place in Lebanon; therefore design and/or manufacturing standards have not been developed. However, the audit team noted that procedures have not been developed by the State to enable the validation of a type certificate issued by another State.

3.6.1.8 The action plan submitted by Lebanon, addressing all the recommendations contained in the audit interim report and related to airworthiness of aircraft, is summarized in paragraph 3.6.2.

3.6.2 **Corrective action plan proposed/implemented by Lebanon**

3.6.2.1 *With respect to the recommendation that the DGCA maintain an Airworthiness Section which is properly organized and staffed with appropriately qualified and experienced personnel, the DGCA indicated that three technicians will be hired before 31 December 2000 to effectively fulfill safety oversight responsibilities. In accordance with the ICAO recommendation, the DGCA will review, before 30 June 2001, the entry level qualifications for airworthiness inspectors set forth in Presidential Decree No. 1610 to ensure that the inspectors are experienced and trained to have at least the same technical qualifications as those of the personnel they are inspecting. In an update of 7 October 2000, the DGCA advised that the entry level qualifications have now been reviewed to ensure that inspectors are appropriately experienced and trained and that Presidential Decree No. 1610 is now being prepared for amendment.*

3.6.2.2 *With regard to the recommendation that the DGCA adopt or recognize an Airworthiness Code, the DGCA indicated that a Lebanese Airworthiness Code has been prepared by the TCB Project and is now being reviewed to ensure compliance with Annex 8. This is expected to be completed before 31 December 2000.*

3.6.2.3 *Concerning the recommendation that the DGCA develop a system to adopt and manage continued airworthiness information such as ADs and service bulletins (SBs), for aircraft registered and supervised under lease agreements within the State, the DGCA indicated that the system and procedures for managing continuing airworthiness information are contained in Part VI of the draft Lebanese Air Regulations which have been written by the TCB Project. The regulations are now being reviewed to ensure compliance with ICAO-related documentation. The DGCA further indicated that a documentation centre has been established and a system for review and management of continued airworthiness information will be developed before 31 December 2000. This will include a procedure which ensures that operators are receiving and complying with continuing airworthiness information.*

3.6.2.4 *With respect to the recommendation that the DGCA ensure that all aspects of operator certification, continued surveillance, changes to operations specifications and contracted arrangements be the joint responsibility of the Flight Operations and Airworthiness Sections, the DGCA indicated that the draft regulations and procedures have been formulated to address these matters. The planned work procedures and record system being developed by the DGCA will facilitate joint activities.*

3.6.2.5 *Concerning the recommendation that the DGCA update its requirements and procedures on aircraft maintenance organization certification and surveillance, the DGCA indicated that the TCB Project has written a Manual of Regulatory Oversight which lays down the requirements and procedures to ensure that aircraft maintenance organization certification and surveillance are implemented and conducted according to ICAO requirements. This manual is currently under review, which should be completed before 31 December 2000.*

3.6.2.6 *With regard to the recommendation that the DGCA develop guidance material describing methods of investigation and the composition, formation, qualifications and training requirements of the investigating team, the DGCA indicated that it is in contact with the French Bureau Enquête Accident (BEA) to arrange for the BEA assistance in developing such a document. This is to be completed before 31 December 2000. The BEA will also provide training for the Lebanese staff.*

4. **COMMENTS**

As indicated above, Lebanon submitted an action plan on 6 July 2000, addressing all the findings and recommendations that were forwarded, including its comments and feedback on the interim report sent on 5 June 2000. An attempt has been made in this report to reflect the action plan proposed by Lebanon along with the comments and feedback which were provided on the interim report. On 7 October 2000, ICAO received further clarifications from Lebanon and these have been included as additional information on actions taken/proposed as appropriate.

5. **STATUS OF IMPLEMENTATION AND LIST OF DIFFERENCES FROM THE ICAO SARPs**

Differences identified during the audit are found in Appendices A and B to this summary report and differences *vis-à-vis* Standards will be included in the relevant Annex Supplement in line with Article 17 of the MOU signed between Lebanon and ICAO.

APPENDIX A

**STATUS OF IMPLEMENTATION AND LIST OF DIFFERENCES
FROM THE ICAO STANDARDS**

(ANNEX 1 — PERSONNEL LICENSING)

ICAO Standard reference	Lebanon's regulations reference	Differences between the national regulations of Lebanon and ICAO Standards
		<p>Lebanon does not issue any helicopter-related licences or glider, free balloon, flight navigator and aeronautical station operator licences.</p> <p>Lebanon is in the process of developing newly drafted personnel licensing regulations and is urged to review these regulations <i>vis-à-vis</i> Annex 1 provisions to ensure full compliance.</p>

**STATUS OF IMPLEMENTATION AND LIST OF DIFFERENCES
FROM THE ICAO STANDARDS**

(ANNEX 6 — OPERATION OF AIRCRAFT)

(PART I — International Commercial Air Transport — Aeroplanes)

ICAO Standard reference	Lebanon's regulations reference	Differences between the national regulations of Lebanon and ICAO Standards
		Lebanon is in the process of developing new aircraft operations regulations and is urged to review the draft regulations to ensure full conformance with the provisions of Annex 6 before they are finalized and promulgated.

**STATUS OF IMPLEMENTATION AND LIST OF DIFFERENCES
FROM THE ICAO STANDARDS**

**(ANNEX 6 — OPERATION OF AIRCRAFT)
(PART II — International General Aviation — Aeroplanes)**

ICAO Standard reference	Lebanon's regulations reference	Differences between the national regulations of Lebanon and ICAO Standards
		Lebanon is in the process of developing new aircraft operations regulations and is urged to review the draft regulations to ensure full conformance with the provisions of Annex 6 before they are finalized and promulgated.

**STATUS OF IMPLEMENTATION AND LIST OF DIFFERENCES
FROM THE ICAO STANDARDS**

**(ANNEX 6 — OPERATION OF AIRCRAFT)
(PART III — International Operations — Helicopters)**

ICAO Standard reference	Lebanon's regulations reference	Differences between the national regulations of Lebanon and ICAO Standards
		Part III in its entirety is not implemented.

**STATUS OF IMPLEMENTATION AND LIST OF DIFFERENCES
FROM THE ICAO STANDARDS**

(ANNEX 8 — AIRWORTHINESS OF AIRCRAFT)

ICAO Standard reference	Lebanon's regulations reference	Differences between the national regulations of Lebanon and ICAO Standards
		<p>Parts II, III and IV of Annex 8, except for Chapter 5, paragraph 5.1 and Chapter 7 of Part II, are not implemented.</p> <p>Lebanon is in the process of developing new airworthiness regulations and is urged to review the draft regulations to ensure full conformance with the provisions of Annex 8 and Chapters 8 and 11 of Annex 6, Part I, before they are finalized and promulgated.</p>

APPENDIX B

STATUS OF IMPLEMENTATION AND LIST OF DIFFERENCES FROM THE ICAO RECOMMENDED PRACTICES

(ANNEX 1 — PERSONNEL LICENSING)

Note: — The Chicago Convention requires that a Contracting State files differences existing between its regulations and ICAO Annex Standards. However, due to the specific mandate given to ICAO for the implementation of the ICAO universal safety oversight audit programme, it is necessary to include differences existing between the National Regulations and ICAO Annex Recommendations, including definitions to encourage implementation and for inclusion in the summary report. Differences with Annex Recommended Practices will not be included in the Supplement to the relevant Annex if they should remain unimplemented by the time the final report is published.

ICAO RPs reference	Lebanon's regulations reference	Differences between the national regulations of Lebanon and ICAO Recommended Practices
		Lebanon does not issue any helicopter-related licences or glider, free balloon, flight navigator and aeronautical station operator licences. Lebanon is in the process of approving newly drafted personnel licensing regulations and is urged to review these regulations <i>vis-à-vis</i> Annex 1 provisions to ensure full compliance.

**STATUS OF IMPLEMENTATION AND LIST OF DIFFERENCES
FROM THE ICAO RECOMMENDED PRACTICES**

(ANNEX 6 — OPERATION OF AIRCRAFT)

(PART I — International Commercial Air Transport — Aeroplanes)

Note: — The Chicago Convention requires that a Contracting State files differences existing between its regulations and ICAO Annex Standards. However, due to the specific mandate given to ICAO for the implementation of the ICAO universal safety oversight audit programme, it is necessary to include differences existing between the National Regulations and ICAO Annex Recommendations, including definitions to encourage implementation and for inclusion in the summary report. Differences with Annex Recommended Practices will not be included in the Supplement to the relevant Annex if they should remain unimplemented by the time the final report is published.

ICAO RPs reference	Lebanon's regulations reference	Differences between the national regulations of Lebanon and ICAO Recommended Practices
		Lebanon is in the process of developing new aircraft operations regulations and is urged to review the draft regulations to ensure full conformance with the provisions of Annex 6 before they are finalized and promulgated.

**STATUS OF IMPLEMENTATION AND LIST OF DIFFERENCES
FROM THE ICAO RECOMMENDED PRACTICES**

**(ANNEX 6 — OPERATION OF AIRCRAFT)
(PART II — International General Aviation — Aeroplanes)**

Note: — The Chicago Convention requires that a Contracting State files differences existing between its regulations and ICAO Annex Standards. However, due to the specific mandate given to ICAO for the implementation of the ICAO universal safety oversight audit programme, it is necessary to include differences existing between the National Regulations and ICAO Annex Recommendations, including definitions to encourage implementation and for inclusion in the summary report. Differences with Annex Recommended Practices will not be included in the Supplement to the relevant Annex if they should remain unimplemented by the time the final report is published.

ICAO RPs reference	Lebanon's regulations reference	Differences between the national regulations of Lebanon and ICAO Recommended Practices
		Lebanon is in the process of developing new aircraft operations regulations and is urged to review the draft regulations to ensure full conformance with the provisions of Annex 6 before they are finalized and promulgated.

**STATUS OF IMPLEMENTATION AND LIST OF DIFFERENCES
FROM THE ICAO RECOMMENDED PRACTICES**

**(ANNEX 6 — OPERATION OF AIRCRAFT)
(PART III — International Operations — Helicopters)**

Note: — The Chicago Convention requires that a Contracting State files differences existing between its regulations and ICAO Annex Standards. However, due to the specific mandate given to ICAO for the implementation of the ICAO universal safety oversight audit programme, it is necessary to include differences existing between the National Regulations and ICAO Annex Recommendations, including definitions to encourage implementation and for inclusion in the summary report. Differences with Annex Recommended Practices will not be included in the Supplement to the relevant Annex if they should remain unimplemented by the time the final report is published.

ICAO RPs reference	Lebanon's regulations reference	Differences between the national regulations of Lebanon and ICAO Recommended Practices
		Part III in its entirety is not implemented.

— END —